AGENDA
SCHOOL DISTRICT OF MANAWA
CURRICULUM COMMITTEE MEETING

Date: October 9, 2019 **Time: 4:00 p.m.** Place: Board Room, MES, 800 Beech Street, Manawa

Board Committee Members: Scheller (C), Pohl, Hollman

In Attendance:

Timer: _____ Recorder: _____

1. Phoenix (At-Risk) Program Presentation Overview & Handbook Review (Information / Action)
2. Consider Employability & Financial Skills Curriculum Map (Information / Action)
3. Consider K-6 Math Curriculum Maps (Information / Action)
4. Curriculum Committee Planning Guide (Information / Action)
5. Next Meeting Date _____
6. Next Meeting Items:
    a.
    b.
7. Adjourn

School District of Manawa

Memo

To:
Manawa Board of Education, Dr. Oppor

From:
Mary Eck, At-Risk Coordinator

cc:
Mr. Wolfgram, Ms. Brauer

Date:
October 7, 2019

Re:
At Risk Data

General note about the data: The 2018-2019 school year was the second year under the At-Risk Handbook. This memo will outline any changes or impacts that the program had on certain aspects of student success.

Graduation rate: Last year's graduation rate was 86%. This year, the program had nine students who began the year as seniors. One student was expelled. Another transferred out before the end of the year. Of the seven remaining students, six graduated on time. The seventh student is scheduled to take his last GED test this month, to complete his GEDO #2 program. That is an 86% graduation rate for the students who were eligible. It is tricky to compare the rates as the numbers of seniors have been so small the past few years, which means that a one or two student swing will cause the rate to change by a relatively large amount.

Dropout rate: No students would be considered dropouts this past year, as the student who did not graduate will be completing his work this fall.

Attendance rate: Attendance rate was calculated by averaging each student's attendance rate. Calculating this way allows for slight differences in expected days of attendance (i.e. seniors and those who transferred in or out during the school year). Not including the student who was expelled and the student who transferred before the end of the first semester, the students averaged an attendance rate of 86 %. The range was from a low of 58% to a high of 98%. If the average is calculated without that outlier, the average goes up to 88%.

Legal Referrals: One of the at-risk students was referred for a truancy ticket. Another student was expelled. The expulsion of that student was related to a deferred expulsion agreement that the student had entered into last school year.

Disciplinary Referrals: This past year, there was one student who was expelled. The other students were referred for Out of School Suspensions a total of ten times. That piece of data is a bit skewed because five of those suspensions were one student. The bulk of the suspension were because of vaping in school.

Course Failures: Looking at the semester grades for the students enrolled in the At-Risk program, the failure rate was calculated by taking the courses failed divided by the courses attempted. There were some exemptions: two students who had started the GEDO #2 program (which does not follow a traditional schedule), and one student who was expelled. The failure rate for the students was 20%. There were a few outliers in that one student had a failure rate of 60 % for one semester and another had a failure rate of 43 %.

Students Choosing to Excel, Realizing their Strengths
School District of Manawa
Home of the Wolves

At-Risk Handbook
Gr. 6-12
Phoenix Program

Approved by Manawa Board of Education on

School District of Manawa
800 Beech Street Manawa, WI 54949
920-596-2525
www.manawaschools.org

School District of Manawa

Mission Statement:

The School District of Manawa is the place where students choose to excel academically and realize their strengths.

Vision Statement:

The School District of Manawa engages students to reach their full potential in a changing global society through highly effective instruction and leadership.

Wisconsin statute 118.153 requires every school board to identify the children at risk of not graduating from high school who are enrolled in the school district, and annually develop or update a plan describing how the school board will meet their needs.

Contact Person:

At Risk Coordinator

Mary Eck

(920) 596-5804

meck@manawaschools.org

STUDENTS AT-RISK PROGRAM GOALS:

- To increase school success and graduation rate for students identified as at-risk.
- To provide opportunities for all students to feel a sense of belonging to the school community.
- To reduce student failure and potential dropouts.
- To provide early intervention for students identified as being at-risk.
- To involve parents and community resources in meeting the needs of students identified as at-risk.
- To enhance students' achievement and self-worth

CRITERIA USED TO IDENTIFY STUDENTS AT RISK:

Students in grades 6 through 12 who are at risk of not graduating from high school because they are dropouts or are two or more of the following:

- One or more years behind their age group in the number of high school credits attained
- Two or more years behind their age group in basic skill levels
- Habitual truants as defined by §118.16(1)(a)
- Parents
- Adjudicated delinquents
- Eighth grade pupils whose score in each subject area on the examination administered under §118.30(1m)(am) was below the basic level
- Eighth grade pupils who failed the examination administered under §118.30(1m)(am)
- Eighth grade pupils who failed to be promoted to the ninth grade
- Students with AODA use/ abuse
- Students with documented mental health issues

IMPLEMENTATION OF AT-RISK PROGRAMMING

Each summer, the principals will provide a list of students considered to be at risk of not graduating, based on the criteria listed above. These students will be discussed at the Building Consultation Team meetings early in the school year, by September 1. The building principals, as a part of the Building Consultation Team, are responsible for activating and implementing the district's intervention systems of support that will best fit the students' needs. When additional interventions, programs and services are needed, these teams will also take responsibility for assessment, identification, development of an action plan or program and progress monitoring. Students new to the district will be assessed and evaluated by the Building Consultation Team within four weeks of arrival.

DISTRICT INSTRUCTIONAL AND BEHAVIORAL SERVICES

To advance achievement for all students, the School District of Manawa has established a multilevel Response to Intervention (RtI) process for the early identification and support of students with learning and behavior needs. The RtI process begins with high-quality instruction and universal screening of all children in the general education classrooms. Struggling learners are provided with interventions at increasing levels of intensity to accelerate their rate of learning. These services may be provided by a variety of personnel. Progress is closely monitored to assess both the learning rate and level of performance of individual students. Educational decisions about the intensity and duration of interventions are based on individual student response to the instruction. RtI is designed for use when making decisions about student needs, creating a well-integrated system of instruction and intervention guided by child outcome data. In this District, educational decisions are made within the Building Consultation Team (BCT) process. An overview of this process follows:

Tier I: General instructional and behavioral services/programs are the universal services and programming that provide a quality educational program for all students. These services and programs are also considered to be preventative and generally meet the needs of 80%- 90% of the district's students. They include:

Instructional Services:

- Standards-based instructional design
- Frequent classroom formative assessments
- Classroom intervention and progress monitoring
- Universal screening
- Parent access to Skyward database and district website
- Progress and Grade Reports
- School nursing services
- Curriculum adaptations/modifications
- Enrichment programs
- Summer School
- Career Counseling Conferences

Behavioral Services:

- Positive Behavior Interventions and Support (PBIS)
- Annual transition activities
- Training for teachers
- Anti-bullying initiatives
- Suicide Prevention Activities
- Parent/Teacher conferences
- Guidance and counseling programs
- Staff de-escalation training (Non-Violent Crisis Intervention)
- Focus on attendance

Tier II: Supplemental school instructional and behavioral programs/services are supplemental services and research-based interventions provided to some students (5-15%) when the students meet criteria established in the RtI process. Grade-level teams or building resource staff work together to systematically implement and establish supports where student progress is monitored at least bi-weekly. These include:

Instructional Services

- Universal Screening and Tier II interventions in addition to classroom instruction
- Classroom and curricular modifications/accommodations
- Teacher training specific to at-risk students
- Online classes/credit recovery
- Title I reading support
- Section 504 Accommodations Plans
- Supplemental curriculum resource materials/ academic support
- Personalized Education Plans
- Health protocols and other individual (504) accommodation plans
- Assistive Technology
- English Language Learning program/support
- Enrichment programs

Behavioral Services:

- Truancy plan
- Positive Behavior Interventions and Support (PBIS)
- School counseling or psychology services
- Anti-bullying initiatives
- Small group and individual support; check-in and check-out

Tier III. Intensive Interventions are research-based interventions used with small groups of students whose deficiencies are so unique they require individualized and intensive instructional approaches. Students qualifying for Tier III will receive Tier I and Tier II services in addition to those listed here. These include:

- Skill specific Intensive/Individualized Interventions
    - Outlined by the Building Consultation Team and developed with input from teaching staff, parents, and student
- Alternate program
    - Personalized Education Plans
    - GEDO #2 program to earn a high school diploma
        - A program in which students take the four GED tests, complete health, civics, and other requirements
        - Students must be 17 years old
        - Students must be in the 4th year of high school
        - Students must be able to demonstrate a 9th grade level of reading
        - Students participate in 15 hours per week of small group instruction

PARENT NOTIFICATION

According to § PI 25.04 (5). the district must notify each pupil and his or her parent/guardian in writing whenever the pupil has been identified as a child at risk of not graduating. The Building Consultation Team will send notification before the school year begins. The notice shall include the following:

- The name and telephone number/email of a person the parent/guardian or pupil can contact regarding the school district's at-risk plan or program
- A description of the at-risk plan
- A statement that the pupil is eligible to be enrolled under the district's plan to serve children at-risk
- A description of the at-risk programs available and how the pupil may participate in a specific program if more than one program is offered
- A statement to inform the parent/guardian that he or she may select one or more programs in which the pupil may participate
- Description of the enrollment process
- Process for the parent/guardian if he or she disagrees with the planned services

- Assurance that the special education and related services needs of a pupil with a disability, as defined in § 115.76 (3)(5) are first addressed in the pupil's individualized education program developed pursuant to §115.787, whenever that pupil is also eligible to be served in an at-risk program

EVALUATION

The Building Consultation Team will evaluate and report to the school board annually, in July, the success of the services provided under the at-risk plan by:

- Increase in graduation rates
- Decrease in dropout rates
- Improved school attendance
- Decrease in legal referrals
- Decrease in disciplinary referrals
- Decrease in course failures

COMMUNICATION

The staff and community partners will be informed about the at-risk plan and available services through:

- District web page - under the Programs and Services tab
- Course of Study catalog (posted on the district website - Jr./Sr. H.S. page)
- Committee reports
- In-service time
- Involvement in the process of student identification
- Curriculum collaboration
- Staff meetings
- School board meetings

REFERRAL PROCESS

Students who meet the criteria for being a student at-risk can be brought to the attention of the school principals by the teaching staff, administration team, parents, or social service personnel. Once the list of students is compiled by the principals, the Building Consultation Team (BCT) reviews it and ensures that the students meet either the state, district, or discretionary criteria. Next, parents of students identified are notified of their eligibility for at-risk programming. A Personalized Education Plan (PEP) meeting is then scheduled. Then the PEP meeting takes place where parents, student, at-risk coordinator, and counselor discuss options for the student. At this point the parent and/or the student can decide to accept or reject the offer of programming by indicating their choice on the placement offer letter (addendum B) If the offer is rejected, the student is then placed in the traditional classroom for educational services. At the meeting, a Personalized Education Plan (addendum A) is developed and a monitoring system is put in place for any educational or behavioral goals laid out in the plan. The at-risk coordinator

and the BCT will monitor the goals every four weeks or more often as needed. If sufficient progress is not being made, the parents are notified, and modifications are made to the PEP at a meeting attended by the parents, student, at-risk coordinator, and counselor. Once the goals of the PEP are achieved, the student may be released from at-risk programming and will then receive educational services in the traditional classroom.

ADDENDUM A

Personalized Education Plan
Phoenix Program
School District of Manawa

Student Name: _____Grade: _____Date of Birth: _____

Parent/Guardian: _____ Phone: _____(h)_____(w)

School Attendance for Previous School Year (number of days present) _____

Student Retained in Grade(s) (Circle Appropriate): K 1 2 3 4 5 6 7 8

Date PEP Developed _____ Date PEP Completed_____

Strengths		**Areas Needing Improvement**	
Instructional Goal (1st Semester)	**Resources**	**Strategies**	**Beginning/Ending Dates**
Behavioral Goal (1st Semester)	**Resources**	**Strategies**	**Beginning/Ending Dates**

_____ _____

Student Signature/Date Parent/Guardian Signature/Date

_____ _____

Teacher Signature/Date Principal Signature/Date

Instructional Goal (2nd Semester)	Resources	Strategies	Beginning/Ending Dates
Behavioral Goal (2nd Semester)	**Resources**	**Strategies**	**Beginning/Ending Dates**

_____ _____
Student Signature/Date Parent/Guardian Signature/Date

_____ _____
Teacher Signature/Date Principal Signature/Date

Comments (Teacher/Parent):

Building Consultation Team Review
Name:_____**Title:**_____**Date:**_____
Name:_____**Title:**_____**Date:**_____
Name:_____**Title:**_____**Date:**_____
Name:_____**Title:**_____**Date:**_____
Principal:_____**Date:**_____

ADDENDUM B (Which will be on District Letterhead)

Placement Offer

Date: _____

Student: _____ Grade: _____

Parent/Guardian: _____

Address: _____

Phone: _____ Email: _____

Dear Parent/Guardian,

This is to inform you that the At-Risk Coordinator, acting on behalf of the School District of Manawa, has offered to place your child in the Phoenix Program at Little Wolf High School. Your son/ daughter will be in the GEDO #2 Program /Credit Phoenix Recovery Program as explained in the enclosed brochure. We encourage you to take advantage of these valuable services.

Your son/daughter has met one of the criteria outlined on the next page: the state, district, or discretionary criteria.

Involvement in this program is voluntary. If you believe that the Phoenix Program will not meet the needs of your son/daughter, you may decline placement in this educational program. Please return this signed form to me at the high school. Please call or email with questions and/or concerns.

Mary Eck
At-Risk Coordinator
Little Wolf High School
(920) 596-5804
meck@manawaschools.org

Parent Consent

I hereby give my consent for the placement of my child in the Phoenix Program.

_____

Parent (or Student) Signature/Date

Parent Rejection

I do not give my consent for the placement of my child in the program offered above.

_____

Parent (or Student) Signature/Date

I am unsure at this time and would like more information.
Please contact me to schedule a meeting to discuss my child's educational options.
The best time/ day to get a hold of me is: _____

_____

Parent (or Student) Signature/ Date

Original to cumulative file

Student has met the criteria checked:

____State Criteria for Credit Recovery

- **One or more years behind in high school credits**
- **Two or more years behind in basic skills**
- **Habitual Truant**
- **Parent**
- **Adjudicated Delinquent**
- **Student with AODA use/abuse**
- **Student with documented mental health issues**
- **Student who failed to be promoted to the ninth grade**
- **Student who failed the standardized test in eighth grade**
- **Student whose score in each subject area of the standardized test was below the basic level**

___District Criteria for Credit Recovery

- **Potential Dropout**
- **Student who failed at least two core classes**

___Discretionary Criteria for Credit Recovery

As determined by Building Consultation Team

____State Criteria for GEDO #2

- **At least 17 years old**
- **At least one year behind in high school credits**
- **Able to demonstrate the ability to read at the 9th grade level**

Course:	Employability/Financial Skills		
Credits:	0.5		
Prerequisites:	Senior Status (or junior if approved)		
Description:	This class provides an opportunity to develop positive attitudes, knowledge, skills and linkages that will empower the successful transition from high school to postsecondary options. Curriculum study units will include: assessment, transition, Covey's 7 Habits of Highly Effective People, core abilities, job writing, college survival, etc. Additionally, this course will help prepare students for planning and managing their personal finances. Students will be introduced to budgeting, saving, credit and debt, taxes, and other financial matters.		
Academic Standards:	Wisconsin Standards for Agriculture, Food and Natural Resources and Next Gen Personal Finance standards adapted by Jump$tart National Standards.		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Career Readiness Checklist	6 Days	CD1 CD2 CD3	Students will review the top 20 career readiness skills and establish a plan to incorporate these lessons in their school and work plans.
7 Habits of Highly Effective Students	15 days	CD1 CD4 IMT1 LE1	Implement leadership skills to accomplish team goals and objectives. Identify strengths and weaknesses and develop a plan for success. Creation of a personal plan for employability skills.
Personal Career Prep	15 days	CD4.b	Identify the qualities employers may seek in a candidate. Use technology to assist in career exploration and job-seeking activities. Compare and contrast personal attributes with employment needs and trends. Complete required employment forms and documentation.
Communication Skills	6 days	4C3 CD4	Communicate thoughts and feelings with others using verbal and non-verbal language. Demonstrate skills related to seeking and applying for employment to find and obtain a desired job. Identify and exhibit traits for retaining employment.
Interview Skills	12 days	CD2 CD4 LE1	Evaluate how performance and connections within the learning community enhance future opportunities. Apply academic information from a variety of sources to enhance career preparedness and lifelong learning. Participate in civic and community leadership and teamwork opportunities to enhance skills to develop leadership potential.

Workplace Ethics & Security	3 days	4C2 4C3 IMT1	Develop effective resolutions for a given problem, decision or opportunity using available information. Predict how an action could result in unintended consequences, both positive and negative. Choose appropriate sources of data and information for a given purpose.
Goal Setting & Goal Burning	4 days	CD1 CD3	Identify personal strengths, aptitudes and passions. Demonstrate effective decision-making, problem solving and goal setting. Investigate the world of work in order to gain knowledge of self in order to make informed career decisions. Examine and evaluate opportunities that could enhance life and career plans and articulate plan to guide decisions and actions.
Taxes	4 days	3c, 3b, 3b, 3c, 3d	Students will examine how a career impacts their taxes, how to file taxes and employment forms.
Banking	4 days	2a, 2d, 2e, 2f, 2a, 3a, 3b; Spending & Saving:1a,1d; Investing: 1d, 1e; Financial Decision Making: 4d, 8c	Investigation into banking, researching about checking accounts and the banking industry.This unit will help students to understand how vital it is to our economy to save and how they can start saving.
Credits/Loans	6 days	Spending & Saving: 4c, 1a; Financial Decision Making: 2a; Credit & Debt: 1f; Financial Decision Making: 2a, 1c, 8b, 1g, 3d; Credit & Debt: 1c, 1d, 1b, 6b, 1e, 1h; Credit and Debt: 2a, 2b, 2c, 2d, 2e, 2f, 2g, 2i, 2j, 3b, 3c, 3d, 3e, 4f, 4a; Risk Management & Insurance: 7a, 7c	An in-depth look into personal expenses, savings, and spending. This unit will also cover borrowing money and how to pay it back. Students will be looking at how they can also raise their credit score.
Insurance	3 days	Risk Management & Insurance; 3a, 1c, 3b, 3e, 2a, 2b, 2c, 2d; Financial Decision Making: 6c, 6d	Students will understand the importance of having the law required insurance to protect themselves monetarily as well as risk management strategies.

Unit Name: **Career Readiness**	**Length:** 6 days
Standards: CD1: Students will consider, analyze and apply an awareness of self, identity and culture to identify skills and talents. CD2: Students will identify the connection between educational achievement and work opportunities in order to reach personal and career goals. CD3: Students will create and manage a flexible and responsive individualized learning plan to meet their career goals.	**Outcomes:** Students will review the top 20 career readiness skills and establish a plan to incorporate these lessons in their school and work plans.
Essential Questions: What are essential 21st century (and beyond!) skills? How can we prepare you, as seniors, for the world of work? What are transferable skills for the world of work?	**Learning Targets**: Identify individual likes and dislikes related to utilizing skills and abilities. Assess personal strengths, aptitudes and passions related to potential future careers. Use a decision-making and problem-solving model. Apply academic experiences to the world of work, inter-relationships and the community. Assess attitudes and skills that contribute to successful learning in school and across the life span.
Topic 1: **Career Clusters & Perceptions**	**Length:** 3 days
Standard(s): CD1, CD2, CD3	**Academic Vocabulary:** skills gap, career clusters, readiness, entrepreneurship, punctuality, ethics, active listening, non verbal communication, analytical skills, quantitative skills
Lesson Frame: Personal Traits Inventory	We will: discuss 21st century skills and identify strengths, passions & aptitude.
	I will: assess current standing in each of the discussed skill areas.
Lesson Frame: Connection of educational achievement and work opportunities.	We will: brainstorm transferable skills from education to work.
	I will: determine individual skills.
Lesson Frame: Attitudes and Perceptions of Career Clusters	We will: review each of the career clusters.
	I will: denote individual pros and cons for each of the cluster areas.
Performance Tasks: perceptions survey, self-assessment of strengths/aptitudes/passions, career cluster wheel	Notes:
Topic 2: **Career Readiness**	**Length:** 3 days
Lesson Frame: Personal Path/Where am I headed?	We will: explore options for continuing education and the world of work.
	I will: identify educational and work options beyond high school.
Lesson Frame: What is career readiness?	We will: examine the top of career readiness.
	I will: complete exit ticket on 20 top traits.

Performance Tasks: survey on career readiness, video of personal traits, and group work on 21st century skills	Notes:

Unit Name: **7 Habits of Highly Effective Students**	**Length:**15 days
Standards: CD1: Students will consider, analyze and apply an awareness of self, identity and culture to identify skills and talents. CD4: Students will identify and apply employability skills. IMT1: Students will access, interpret and evaluate information from a variety of sources in order to inform and support premises, arguments, decisions, ideas and initiatives. LE1: Students will apply leadership skills in real-world, family, community and business and industry applications.	**Outcomes:** Implement leadership skills to accomplish team goals and objectives. Identify strengths and weaknesses and develop a plan for success. Creation of a personal plan for employability skills using Covey's 7 Habits of Highly Effective Students.
Essential Questions: How can Steven Covey's 7 principles be incorporated into your life as a student and employee? How does Maslow's hierarchy of needs change at different points in life?	Learning Targets: Identify behaviors that demonstrate self-discipline, self-worth, positive attitude and integrity. Describe positive work-qualities typically desired in each of the career cluster pathway. Select relevant information necessary for making decisions and solving problems. Demonstrate skills such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living and change when interacting with others in general. Assess personal strengths, aptitudes and passions related to potential future careers.
Topic 1: Seven Habits	**Length:** 13 Days
Standard(s): CD7, IMT1, LE1	**Academic Vocabulary:** habit, personal bank account, self-paradigm, principle centered
Lesson Frame: Overview of habits	We will: take notes on each habit.
	I will: use evidence from the text to determine the important traits of each habit.
Lesson Frame: 7 Habits Self-Awareness	We will: review each of the seven habits.
	I will: complete a self-awareness survey.
Lesson Frame: Personal Bank Account	We will: learn about Covey's personal bank accounts for employability.
	I will: log daily deposits and withdrawals during this unit.
Performance Tasks: personal bank account log, multimedia presentation of habits, habits tree, Kohn partner review activity	Notes:
Topic 2: Maslow's Hierarchy of Needs	**Length:** 2 days
Standards: CD1, LE1	**Academic Vocabulary:** hierarchy, self-actualization, esteem, physiological needs, safety needs, concrete, abstract
Lesson Frame: Maslow's	We will: learn Maslow's Hierarchy of Needs.
	I will: sketch the pyramid into notes.
Lesson Frame: Self-Actualization	We will: determine steps necessary to achieve self-actualization.
	I will: determine self care steps.
Performance Tasks: Maslow pyramid creation, self analysis survey, word wall, jigsaw activity	Notes:

Unit Name: **Personal Career Prep**	Length: 15 days
Standards: CD4.b: Demonstrate skills related to seeking and applying for employment to find and obtain a desired job.	**Outcomes:** Identify the qualities employers may seek in a candidate. Use technology to assist in career exploration and job-seeking activities. Compare and contrast personal attributes with employment needs and trends. Complete required employment forms and documentation.
Essential Questions: How do you best portray yourself in employment documents (resume, cover letter, job applications, etc)? How has social media and technology changed the world of work? How can you utilize ACP for your future plans?	**Learning Targets:** Prepare a resume, cover letter, employment application.
Topic 1: **Resumes**	Length: 5 days
Standard(s): CD4.b	**Academic Vocabulary:** action words, active vs passive voices, infographic, chronological, functional, combination and targeted
Lesson Frame: Types of Resumes	We will: distinguish between all the different types of resumes.
	I will: compare and contrast the purposes of each type.
Lesson Frame: Action Words	We will: review top 100 action verbs in resumes.
	I will: highlight 10 that I can quantify examples for.
Lesson Frame: Resume Formats	We will: learn about formats of paper and electronic resumes.
	I will: select the format that best meets my experience.
Performance Tasks: create a resume, peer evaluation, explore online portals, Career Cruising project	Notes:
Topic 2: **Professional Communications**	Length: 4 days
Standard(s): CD4.b	**Academic Vocabulary:** resignation, cover letter, inquiries, correspondence, cultural expectations
Lesson Frame: Cover Letter	We will: review components of a professional cover letter.
	I will: save examples of cover letter formats in portfolio.
Lesson Frame: Professional Communications	We will: learn techniques for communicating with prospective employers.
	I will: develop skills in completing applications.
Performance Tasks: accurately complete paper and online applications, review online and paper sources of employment, create an information sheet with positive references, compare and contrast job applications	Notes:
Topic 3: **Business Communications**	**Length:** 4 days

Standard(s): CD4.b	**Academic Vocabulary:** references, desired wage, social security number, privacy, equal opportunity employer, scholastic, qualifications, termination, disability, course of study
Lesson Frame: Paper Applications	We will: learn the components of a job application.
	I will: obtain information on 5 positive references.
Lesson Frame: Online Applications	We will: discuss etiquette and tips of completing an online application.
	I will: develop skills in completing applications.
Lesson Frame: Job Postings/Seeking	We will: explore how to find job postings and what descriptions mean.
	I will: understand parts of a job description.
Performance Tasks: accurately complete paper and online applications, review online and paper sources of employment, create an information sheet with positive references, compare and contrast job applications	Notes:
Topic 4: **Employment Documents**	Length: 2 days
Standard(s): CD4.b:	**Academic Vocabulary:** at-will agreement, benefits enrollment, non compete agreement, withholding
Lesson Frame: Review of essential documents and forms for a newly hired employee	We will: review definitions of essential forms and documents.
	I will: correctly match the definition to term.
Lesson Frame: Withholding information	We will: review tax implications for new hires.
	We will: complete a withholding form.
Performance Tasks: comparison of employment agreements, word wall, document completions	Notes:

Unit Name: **Communication Skills**	**Length:** 6 days
Standards: 4C3: Students will communicate and collaborate with others to accomplish tasks and develop solutions to problems and opportunities. CD4: Students will identify and apply employability skills.	**Outcomes:** Communicate thoughts and feelings with others using verbal and non-verbal language. Demonstrate skills related to seeking and applying for employment to find and obtain a desired job. Identify and exhibit traits for retaining employment.
Essential Questions: What non-verbal and verbal cues happen in the world of work? What messages are you conveying with non-verbal skills? What would your "elevator speech" be?	**Learning Targets:** Describe various ways people communicate with each other without using words. Demonstrate effective listening skills. Explore non-verbal and non-written means of communication. Recognize the appro-priate behavior and communication skills necessary in adult interactions.
Topic 1: **Non-verbal and verbal communication**	Length: 3 days
Standard(s): 4C3, CD4	**Academic Vocabulary:** communication, tone, non-verbal, body language, cues
Lesson Frame: Importance of verbal and nonverbal communication	We will: compare and contrast verbal and nonverbal communication.
	I will: sort positive and negative examples of each.
Lesson Frame: Delivery of Messages	We will: discuss communication delivery methods.
	I will: select appropriate communication method.
Performance Tasks: listening activity, non-verbal communication tasks, nonverbal vs verbal	Notes:
Topic 2: **Elevator Speech**	**Length:** 3 days
Lesson Frame: 30 second "Tell me about yourself" speech	We will: discuss what to include in 30 second elevator speech.
	I will: craft a 30 second personal speech.
Lesson Frame: Positive Personal Critiques	We will: create a rubric to evaluate 30 second speeches.
	I will: practice listening skills and positive non-verbal skills.
Performance Tasks: elevator speech partner introductions, Flipgrid video creation, Top 5 About Me	Notes:

Unit Name: **Interview Skills**	Length: 12 days
Standards: CD2: Students will identify the connection between educational achievement and work opportunities in order to reach personal and career goals. CD4: Demonstrate skills related to seeking and applying for employment to find and obtain a desired job. LE1: Students will apply leadership skills in real-world, family, community and business and industry applications	**Outcomes:** Evaluate how performance and connections within the learning community enhance future opportunities. Apply academic information from a variety of sources to enhance career preparedness and lifelong learning. Participate in civic and community leadership and teamwork opportunities to enhance skills to develop leadership potential.
Essential Questions: How do you best prepare for a job interview? What questions should you ask and be ready to be asked in an interview? How can career opportunities match personal skills, interests and aptitudes?	**Learning Targets:** Give examples of positive personal characteristics (e.g., honesty, dependability, responsibility, integrity and loyalty). Identify career opportunities of interest; match personal interests and aptitudes. Build an ongoing awareness of personal abilities, skills, interests and motivation and determine how these fit with chosen career pathway. Identify the qualities employers may seek in a candidate.
Topic 1: **Character Education**	**Length:** 6 days
Standard(s): CD2, CD4	**Academic Vocabulary:** reputation, integrity, aptitude, values, service learning, intrinsic value, resume enhancement
Lesson Frame: Strengths and Weaknesses for Success	We will: identify individual personal characteristics and methods.
	I will: create a descriptive self-bio of action words.
Lesson Frame: Service Learning Project	We will: discuss the 6 steps of service learning.
	I will: self-reflect on the 6 steps after completing a project.
Lesson Frame: FFA Motto & Genius Hours	We will: learn the 4 lines of the FFA Motto.
	I will: complete an exit ticket assessing self on the motto.
Performance Tasks: biography creation, FFA motto evaluation, 6 steps of service learning reflection, personal surveys of strengths and weaknesses, Genius Hour Lessons	Notes:
Topic 2: **Interviewing**	Length: 6 days
Standard(s): CD4	**Academic Vocabulary:** business casual, scheduler, active dialogue, concise, timeline, interpersonal skills, hygiene
Lesson Frame: Pre-Interview	We will: review tips to prepare prior to the interview.
	I will: be aware of dos/don'ts.
Lesson Frame: Interview	We will: practice successful interviews.
	I will: participate in a mock interview.

Lesson Frame: Post-Interview	We will: learn what to do after an interview.
	I will: practice responses when offered/not offered employment.
Performance Tasks: mock interviews, interview interactive notebook, dos/don'ts checklists, follow-up thank you notes, feedback activity	Notes:

Unit Name: **Workplace Ethics & Security**	Length: 3 days
Standards: 4C2: Students will formulate and defend judgments and decisions by employing critical thinking skills. 4C3: Students will communicate and collaborate with others to accomplish tasks and develop solutions to problems and opportunities. IMT1: Students will access, interpret and evaluate information from a variety of sources in order to inform and support premises, arguments, decisions, ideas and initiatives.	**Outcomes:** Develop effective resolutions for a given problem, decision or opportunity using available information. Predict how an action could result in unintended consequences, both positive and negative. Choose appropriate sources of data and information for a given purpose.
Essential Questions: What are ethics and how does it affect your life? What are workplace violations in ethics and how can you navigate the situation? How do you you utilize information from a variety of sources to make an informed decision?	**Learning Targets:** Differentiate between problems and symptoms. Analyze the impact of a decision using a systems thinking model. Explain how information can be portrayed differently by groups with varying purposes and perspectives. Show organizational skills necessary to be a successful leader and citizen and practice those skills in real-life situations.
Topic 1: **Ethics Violations**	**Length:** 2 days
Standard(s): 4C2, 4C3, IMIT1	**Academic Vocabulary:** discrimination, conflict of interest, harassment, breach, policy, conduct, code
Lesson Frame: Ethical Scenarios of the World of Work	We will: discuss workplace ethics scenarios.
	I will: defend my position on scenarios.
Lesson Frame: Illegal Questions/Workplace	We will: learn about illegal interview and hiring questions.
	I will: formulate a response when asked a question that is not allowed.
Performance Tasks: ethics scenarios, ethics puzzles, teamwork challenge	Notes:
Topic 2: **Workplace Cybersecurity**	**Length: 1** days
Standard(s): 4C3, IMT1	**Academic Vocabulary:** cyber security, passwords, data, insecure data, malware, PINs
Lesson Frame: Cybersecurity	We will: utilize a systems thinking model to learn about cybersecurity in the workplace.
	I will: create a systems thinking model.
Lesson Frame: Electronic Expectations	We will: review policies and expectations of electronic usage in the workplace.
	I will: complete a sorting exit ticket.
Performance Tasks: security rebus puzzle, word wall, categorization	Notes:

Unit Name: **Goal Setting & Goal Burning**	Length: 4 days
Standards: CD1: Students will consider, analyze and apply an awareness of self, identity and culture to identify skills and talents. CD3: Students will create and manage a flexible and responsive individualized learning plan to meet their career goals.	**Outcomes:** Identify personal strengths, aptitudes and passions. Demonstrate effective decision-making, problem solving and goal setting. Investigate the world of work in order to gain knowledge of self in order to make informed career decisions. Examine and evaluate opportunities that could enhance life and career plans and articulate plan to guide decisions and actions.
Essential Questions: What does it mean to burn your goals and trust the process? What education and steps are needed to reach personal and career goals?	**Learning Targets:** Evaluate various occupations and career pathways to identify personal, academic and career goals based on personal strengths, aptitudes and passions. Define a goal and describe why it is important to have goals. Identify long and short-term goals. Locate, evaluate and interpret career information. Describe educational levels (e.g., work-based learning, certificate, two-year, four-year and professional degrees) and performance skills needed to attain personal and career goals.
Topic 1: **Chop Wood, Carry Water**	Length: 2 days
Standard(s): CD1, CD3	**Academic Vocabulary:** adversity, sensei, warrior, goals
Lesson Frame: What does it mean to burn your goals?	We will: discuss the concept of "burn your goals".
	I will: reflect on the process of goals.
Lesson Frame: Persistence and Grit	We will: view TED TALK on grit and perseverance.
	I will: complete a self assessment.
Performance Tasks: reading from Chop Wood/Carry Water, personal beliefs essay, grit meter	Notes:
Topic 2: **Goal Setting**	Length: 2 days
Lesson Frame: Goal setting process.	We will: identify components of SMART goals.
	I will: write a goal in SMART format.
Lesson Frame: Understand the difference between a goal and a SMART goal.	We will: evaluate goals to see if they are in SMART format.
	I will: develop a personal SMART goal.
Lesson Frame: Growth Mindset	We will: review the concept of fixed vs. growth mindset.
	I will: reflect on personal goals.
Performance Tasks: FFA journey SMART goals, Smarties competition, Carol Dweck reading	Notes:

Unit Name: **Taxes**	**Length:** 4 days
Standards: 3c, 3b, 3b, 3c, 3d	**Outcomes:** Students will exam how a career impacts their taxes, how to file taxes and employment forms.
Essential Questions: What do you think are the top three categories the government spends our tax dollars on? Do you (or another teenager you know) file taxes? Why or why not? When do people file their tax returns? What method do you think most millennials (ages 18-24) prefer to use when filing their taxes? Why?	**Learning Targets:** Explain where income taxes are collected from and how they provide revenue for public expenses. Read a pay stub and describe the different deductions. Understand what a W-4 form is used for and how it impacts the taxes withheld from their paycheck. Explain why making contributions to a Roth IRA with their earnings and/or tax refunds can be a good saving strategy. Identify important dates of the tax cycle. Explain the purpose of a W-4 and what withholdings mean for their paycheck. Understand the purpose of a W-2 form and how to use it to file their taxes.
Topic: **Taxes**	**Length:** 4 days
Standards: 3c, 3b, 3b, 3c, 3d	**Academic Vocabulary:** income tax, social security, medicare, 401K, W-4, W-2, dependents, I-9, 1040EZ, tax cycle, 1099, pay stub
Lesson Frame: Taxes and Your Pay Stub	We will: differentiate between gross, net and taxable income.
	I will: read a pay stub.
Lesson Frame: Teens and Taxes	We will: explain where income taxes are collected.
	I will: understand what a W-4 form is used for.
Lesson Frame: The Tax Cycle & Job Paperwork	We will: determine the optimal amount to withhold for personal income tax.
	I will: explain the different ways to file taxes.
Lesson Frame: How to File Your Taxes	We will: complete a 1040EZ and complete all forms associated with filling my taxes next year.
	I will: use a simulation to prepare a tax form.
Performance Tasks: Diagnostic exams,unit tests, pay stub simulation, exit tickets and final project.	Notes: use exit ticket on Taxes and Your Pay Stub

Unit Name: **Banking**	**Length:** 4 days
Standards: 2a, 2d, 2e, 2f, 2a, 3a, 3b; Spending & Saving:1a,1d; Investing: 1d, 1e; Financial Decision Making: 4d, 8c	**Outcomes:** An investigation into banking will be done by students, who will research about checking accounts and the banking industry.This unit will help students to understand how vital it is to our economy to save and how they can start saving.
Essential Questions: What are some of the advantages and disadvantages of having a checking account? What are the reasons to use mobile banking? What are some of the risks are for using online and mobile banking? The average U.S. household spends $290 a year on bank fees according to MarketWatch. What fees do banks charge on checking accounts?	**Learning Targets:** Explain what a checking account is used for. Understand the variety of ways they can deposit and withdraw funds from their checking account. Conduct various banking activities, such as write a check, use an ATM, and more. Read a bank statement. Explain the advantages and disadvantages of using online and mobile banking. Identify ways they can protect their checking account. Understand what direct deposit is and how they can use it. Explain how overdraft protection works and the impact of overdraft fees. Understand fundamentals of saving such as reasons for saving, how much to save, and strategies to enable saving. Explain why it is important to start investing for retirement when you are still young. Understand why it is important to maintain an emergency fund. Determine whether a direct deposit or manually saving is the better strategy for them. Understand how compound interest works to increase savings.Identify important criteria to consider when selecting accounts.
Topic: **Checking**	**Length:** 2 days
Standards: 2a, 2d, 2e, 2f, 2a, 3a, 3b	**Academic Vocabulary:** bank statement, ATM, mobile banking, direct deposit, reconcile, fees, overdraft, reorder, agreement
Lesson Frame: How Checking Works	We will: trace the steps a check takes from start to finish.
	I will: properly write a check out.
Lesson Frame: Online & Mobile Banking	We will: read a bank statement
	I will: explain the difference between a debit card and credit card
Lesson Frame: Beware of Banking Fees	We will: explain how overdraft protection works
	I will: complete an overdraft fee analysis
Performance Tasks: Diagnostic exams, check ledger simulation, exit tickets and final project.	Notes: Reconcile a bank statement
Topic: **Saving**	**Length:** 2 days

Standards: Spending & Saving:1a,1d; Investing: 1d, 1e; Financial Decision Making: 4d, 8c	**Academic Vocabulary:** investing, retirement, emergency fund, unemployment, compound interest
Lesson Frame: Save Early & Often	We will: illustrate how the concept of the time value of money applies to retirement planning.
	I will: read a graph to compare saving over time.
Lesson Frame: Saving Only Seems Hard	We will: research tricks to save money.
	I will: make an infographic on saving money.
Lesson Frame: Where to Save	We will: investigate financial institutions that provide the best services for me.
	I will: understand compound interest.
Performance Tasks: Diagnostic exams, projects, exit tickets and infographic.	Notes:

Unit Name: **Credit and Loans**	**Length:** 6 days
Standards: Spending & Saving: 4c, 1a; Financial Decision Making: 2a; Credit & Debt: 1f; Financial Decision Making: 2a, 1c, 8b, 1g, 3d; Credit & Debt: 1c, 1d, 1b, 6b, 1e, 1h; Credit and Debt: 2a, 2b, 2c, 2d, 2e, 2f, 2g, 2i, 2j, 3b, 3c, 3d, 3e, 4f, 4a; Risk Management & Insurance: 7a, 7c	**Outcomes:** This part of the course will take a more indepth look into personal expenses, savings, and spending. Student loans will be a focus. This unit will also cover borrowing money and how to pay it back. Students will be looking at how they can also raise their credit score. Determining where credit comes from and how to avoid debt will be the focus.
Essential Questions: Why do you think savings, scholarships, and state aid are good "preparation" steps to take before applying for federal financial aid? Your friend asks you, "How early do you think I should start saving and searching for scholarships and state aid?" What do you recommend? Why? What do you think are some of the advantages and disadvantages to having and using a credit card vs a debit card? Why do most people need a mortgage to buy a home? If someone were to grade you on your financial habits, what grade would you get? Why do you think identity theft is so common?	**Learning Targets:** Understand and correctly use the three basic components of lines of credit: principal, interest rate, and term. Understand how the use of a credit card can impact the total cost of purchasing goods and services. Understand how down payment, term, and principal influence the overall cost of a mortgage and the size of monthly payments. List ways that teens can begin establishing credit. Enumerate the components of a credit report and how long each data type is retained. Understand which people or organizations may review your credit report and why. Understand the importance of reviewing one's credit report and the steps to take to find and dispute errors.
Topic: **Paying for College**	**Length: 1 day**
Standards: Spending & Saving: 4c, 1a; Financial Decision Making: 2a; Credit & Debt: 1f; Financial Decision Making: 2a, 1c, 8b, 1g, 3d	**Academic Vocabulary:** financial aid, loans, scholarship, grants
Lesson Frame: Paying for College	We will: research ways to pay for college.
	I will: list options of payment.
Lesson Frame: Applying for the FAFSA	We will: learn components of FAFSA.
	I will: understand deadlines and necessary paperwork.
Lesson Frame: Scholarships & Grants	We will differentiate between loans, scholarships, and grants.
	I will: compare and contrast various methods.
Lesson Frame: Student Loans	We will: differentiate between the various types of loans.
	I will: explain the differences between federal and private loans.
Performance Tasks: ACP meeting, sample loan form, projects, exit tickets and final project. Analyze three student profiles and choose a repayment option that works best for them.	
Topic: **Types of Credit**	**Length:** 3 days

Standards: Credit & Debt: 1c, 1d, 1b, 6b, 1e, 1h	**Academic Vocabulary:** credit, principal, interest rate, term, statement, debit card, financing
Lesson Frame: Introduction to Credit	We will: explain why a person needs or wants credit.
	I will: identify the major types of credit.
Lesson Frame: How Credit Cards Work	We will: explain how credit card grace periods and interest work for billing purposes.
	I will: how to make cc billing payments and how to avoid interest.
Lesson Frame: Select a Credit Card	We will: find information needed when applying for credit.
	I will: avoid marketing schemes that might lead to bad credit decisions.
Lesson Frame: Loan Fundamentals	We will: learn essential loan vocabulary and systems.
	I will: create an exit ticket on loan fundamentals.
Lesson Frame: Understanding Mortgages	We will: differentiate between adjustable and fixed-rate mortgages.
	I will: explain what a mortgage is and why most people need one to finance a home.
Performance Tasks: Diagnostic exams, midterm and final exam, unit tests, projects, exit tickets and final project.	Notes: Use end of unit test.
Topic: **Managing Credit**	**Length: 2 days**
Standards: Credit and Debt: 2a, 2b, 2c, 2d, 2e, 2f, 2g, 2i, 2j, 3b, 3c, 3d, 3e, 4f, 4a; Risk Management & Insurance: 7a, 7c	**Academic Vocabulary:** credit, credit report, credit score, identity theft
Lesson Frame: Why You Need Credit	We will: explain the value of a credit report.
	I will: list ways teens can begin establishing credit.
Lesson Frame: Your Credit History	We will: summarize online information about the Fair Credit Reporting Act.
	I will: understand which people or organizations may review your credit report and why.
Lesson Frame: Read a Credit Report	We will: outline the process of disputing inaccurate credit report data.
	I will: read a credit report.
Lesson Frame: Intro to Credit Scores	We will: summarize factors that affect a particular credit scoring system.
	I will: identify ways of finding out one's credit score.
Lesson Frame: Identity Theft	We will: outline steps to resolve identity theft problems.
	I will: explain actions to take if they become a victim of identity theft.
Performance Tasks: Reading a credit report, researching credit bureau reporting options, projects, exit tickets, credit history poster.	

Unit: **Insurance**	**Length:** 3 days
Standards: Risk Management & Insurance; 3a, 1c, 3b, 3e, 2a, 2b, 2c, 2d; Financial Decision Making: 6c, 6d	**Outcomes:** Students will understand the importance of having the law required insurance to protect themselves monetarily.
Essential Questions: What risks do you take in an average day? What are the consequences to risk? What (if anything) do you do to protect yourself against those risks? Do you already have any types of insurance? Consider your life and identify other things (aside from your health and car) that you might want to receive insurance for. List as many as you can and explain why it may be important to get insurance for them.	**Learning Targets:** Identify risks and protection strategies. Illustrate how everyone risks financial loss and how insurance shares that risk. Discuss factors that impact insurance premiums and the relationship between premiums and out-of-pocket expenses. Describe the main types of auto insurance policies and compare state requirements. Explain a deductible, out-of-pocket expenses, and what insurance will pay for in different situations.
Topic: **Insurance**	**Length:** 3 days
Standards: Risk Management & Insurance; 3a, 1c, 3b, 3e, 2a, 2b, 2c, 2d; Financial Decision Making: 6c, 6d	**Academic Vocabulary:** insurance premiums, policy, risk, deductible, coverage, accident
Lesson Frame: Insurances a Vital Risk Management	We will: find conditions where it is appropriate for you to have various insurance coverage.
	I will: identify risk strategies.
Lesson Frame: Fundamentals of Insurance	We will: investigate the requirements for health insurance.
	I will: conduct online research to understand basic policy types.
Lesson Frame: Types of Insurance	We will: explain the purpose of long-term care.
	I will: find differences between different types of insurance.
Lesson Frame: Auto Insurance	We will: list factors that determine auto insurance premiums.
	I will: describe the main types of auto insurance policies and compare state requirements.
Performance Tasks: research of types of insurance, vocabulary word wall, personal risk assessment tolerance	

Course Name:	Kindergarten Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	Topics covered: numbers 0-100, sorting, classifying, adding, subtracting, measurement,		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Numbers	60-65 days	KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KCC.6, KCC.7, K.G.1-K.G.6, KNBT.1, K.OA.1-K.OA.4	Identify numbers 0-19, compare numbers 1-10, count and explore numbers to 100, and compare sets.
Classification and Sorting	20-25 days	KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KCC.6, K.MD.1-K.MD.3, K.G.1-K.G.6, K.OA.1-K.OA.4	Sort and classify numbers, objects, and shapes, identify 2D shapes, identify 3D shapes
Measurement	10-12 days	K.CC.1, K.CC.2, K.CC.3, K.CC.4, K.CC.5, K.CC.6, K.MD.1-K.MD.3, K.OA.1-K.OA.4	Determine which object is the heaviest or lightest, compare objects by height, weight, and length using short, shorter, shortest, heavy, heavier, heaviest, long, longer, and longest.
Addition	20-25 days	K.CC.1, K.CC.2, K.CC.3, K.CC.4, K.CC.5, K.CC.6, K.MD.1-K.MD.3, K.OA.1-K.OA.4	Identify the addition sign, add numbers from 0 -10, solve addition story problems using manipulatives.
Subtraction to 10	10-12 days	K.CC.1, K.CC.2, K.CC.4, K.CC.5, K.CC.6, K.G.1-K.G.5, K.OA.1-K.OA.4	Identify the minus sign, subtract numbers from 0 -10, solve subtraction story problems using manipulatives.

Unit Name: **Numbers**	**Length:** 60-65 days
Standards: KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KCC.6, KCC.7, K.G.1-K.G.6, KNBT.1, K.OA.1-K.OA.4	**Outcomes:** Identify numbers 0-19, compare numbers 1-10, count and explore numbers to 100, and compare sets.
Essential Questions: What number is this? How do you know a number/set is bigger than another? Smaller (less)? How can you tell if sets are equal?	**Learning Targets:** Students can identify numbers 0-20, compare numbers 1-10, count to 100, compare different groups and tell which group is greater, less than or equal.
Topic: **Numbers 0-10**	**Length:** 20-25 days
Standard(s): KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KOA.1-KOA.4	**Academic Vocabulary:** count, one, two, three, four, five, six, seven, eight, nine, ten
Lesson Frame:	I can count to 10.
Lesson Frame:	I can recognize and write numbers 1-10.
Lesson Frame:	I can order numbers 1-10.
Lesson Frame:	I can state the quantity of a set.
Performance Tasks: Make a number book, games	Notes: KinderMath Units 1 & 3
Topic: **Comparing Numbers and Sets**	**Length:** 20-25 days
Standard(s): KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KCC.6, KCC.7, KNBT.1, KOA.1-KOA.4	**Academic Vocabulary:** count, quantity, compare, greater, less, same
Lesson Frame:	I can tell which number is bigger or smaller.
Lesson Frame:	I can tell which set has more or less.
Lesson Frame:	I can tell if two numbers or sets are equal.
Performance Tasks: Ten frames, games, projects	Notes: KinderMath Untis 4 & 9
Topic: **Numbers 10-100**	**Length:** 20-25 days
Standard(s): KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KCC.6, KNBT.1, K.OA.1-K.OA.4, K.G.1-K.G.6	**Academic Vocabulary:** count, tens, ones, digits, pairs, twos, fives, tally
Lesson Frame:	I can count and understand a group of 10 or more.

Lesson Frame:	I can show numbers on a set of two ten frames.
Lesson Frame:	I can recognize and use pairs to assist in counting by 2's, 5's, and 10's.
Performance Tasks: ten frames, games, number charts	Notes: KinderMath Units 6 & 8

Unit Name: **Classification and Sorting**	**Length:** 20-25 days
Standards: KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KCC.6, K.MD.1-K.MD.3, K.G.1-K.G.6, K.OA.1-K.OA.4	**Outcomes:** Sort and classify numbers, objects, and shapes, identify 2D shapes, identify 3D shapes.
Essential Questions: Which number/group is bigger? smaller? Which number/group has more? less? What would come next in this pattern? How do you know? Is this a 2D or a 3D shape? How do you know?	**Learning Targets:** Students can sort and classify numbers, objects, and shapes, identify 2D shapes, identify 3D shapes.
Topic: **Sort and Classify**	**Length:** 10-12 days
Standard(s): KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, K.MD.1-K.MD.3	**Academic Vocabulary:** alike, different, same, sort, pair, more, less, pattern
Lesson Frame:	I can recognize same and different.
Lesson Frame:	I can group into pairs or matches.
Lesson Frame:	I can sort by attributes.
Performance Tasks: Snap cubes, ten frames, games, projects	Notes: KinderMath Unit 2
Topic: **2D and 3D Shapes**	**Length:** 10-12 days
Standard(s): KCC.1, KCC.2, KCC.3, KCC.4, KCC.5, KCC.6, K.G.1-K.G.6, K.OA.1-K.OA.4	**Academic Vocabulary:** cubes, cones, cylinders, spheres, sides, faces, triangle, circle, square, rectangle, hexagon, corners, vertices
Lesson Frame:	I can identify 2D shapes.
Lesson Frame:	I can identify 3D shapes.
Lesson Frame:	I can compare and sort 2D and 3D shapes.
Performance Tasks: Riddle cards, 3D and 2D shapes, games, projects	Notes: KinderMath Unit 7

Unit Name: **Measurement**	**Length:** 10-12 days
Standards: K.CC.1, K.CC.2, K.CC.3, K.CC.4, K.CC.5, K.CC.6, K.MD.1-K.MD.3, K.OA.1-K.OA.4	**Outcomes:** Determine which object is the heaviest or lightest, compare objects by height, weight, and length using short, shorter, shortest, heavy, heavier, heaviest, long, longer, and longest.
Essential Questions: Which object is heavier? Which object is lighter?	**Learning Targets:** Students can compare objects by height, weight, and length.
Topic: **Measurement**	**Length:** 10-12 days
Standard(s): K.CC.1, K.CC.2, K.CC.3, K.CC.4, K.CC.5, K.CC.6, K.MD.1-K.MD.3, K.OA.1-K.OA.4	**Academic Vocabulary:** bigger, smaller, mid-sized, same, longer, shorter, longest, shortest, length, taller, height, same as, tallest, weight, heavier, lighter, equal to, heaviest, lightest, capacity, holds more, holds less, holds the same, capacity
Lesson Frame:	I can compare two objects by height.
Lesson Frame:	I can compare two objects by length.
Lesson Frame:	I can compare two objects by weight.
Performance Tasks: games, projects, weight cards	Notes: Kindermath Unit 5

Unit Name: **Addition**	**Length:** 20-25 days
Standards: KCC.1, KCC.2, KCC.4, KCC.5, KCC.6, K.G.1-K.G.6, K.OA.1-K.OA.4	**Outcomes:** Identify the addition sign, add numbers from 0 -10, solve addition story problems using manipulatives.
Essential Questions: What information do you need to solve that problem? What would happen if? Can you explain that more?	**Learning Targets:** Students can identify the addition sign, add numbers from 0 -10 and solve addition story problems using manipulatives.
Topic: **Addition to 10**	**Length:** 10-12 days
Standard(s): KCC.1, KCC.2, KCC.4, KCC.6, K.OA.1-K.OA.4	**Academic Vocabulary:** combine, add
Lesson Frame:	I can combine sets of objects to make a number and understand all the possible sets up to that number.
Lesson Frame:	I can understand that addition is combining two sets of objects.
Lesson Frame:	I can practice and explore solving addition problems.
Performance Tasks: Playing cards, ten frames, number bonds, games, projects	Notes: KinderMath Unit 10
Topic: **Addition with Word Problems**	**Length:** 10-12 days
Standard(s): KCC.1, KCC.2, KCC.4, KCC.5, KCC.6, K.G.1-K.G.6, K.OA.1-K.OA.4	**Academic Vocabulary:** combine, add, equal
Lesson Frame:	I can understand addition is combining 2 sets of objects.
Performance Tasks: Playing cards, ten frames, number bonds, games, projects.	Notes: KinderMath Unit 11

Unit Name: **Subtraction to 10**	**Length:** 10-12 days
Standards: K.CC.1, K.CC.2, K.CC.4, K.CC.5, K.CC.6, K.G.1-K.G.5, K.OA.1-K.OA.4	**Outcomes:** Identify the minus sign, subtract numbers from 0 -10, solve subtraction story problems using manipulatives.
Essential Questions: What is a minus sign? What is the difference between numbers? Why does your answer make sense? How could you use this skill in real life? How could you use manipulatives to help you solve this subtraction problem?	**Learning Targets:** Students can identify the minus sign. Students can subtract up to 10. Students can use pictures and other manipulatives to help them subtract.
Topic 1: **Subtraction to 10**	**Length:** 10-12 days
Standard(s): K.CC.1, K.CC.2, K.CC.4, K.CC.5, K.CC.6, K.G.1-K.G.5, K.OA.1-K.OA.4	**Academic Vocabulary:** difference, left, minus, subtract
Lesson Frame:	I can subtract numbers up to 10.
Lesson Frame:	I can understand the name and use of the minus sign.
Lesson Frame:	I can solve subtraction word problems.
Performance Tasks: snap cubes, counters, games, projects, ten frames, five frames	Notes: KinderMath Unit 12

Course Name:	1st Grade Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	In Grade 1, instructional time focuses on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Patterns and Number Patterns to 10	16 days	CC.1.OA.1; CC.1.OA.3; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8	Develop a basic understanding of numbers 1-10, number patterns, and number partners.
Addition and Subtraction Strategies	24 days	CC.1.OA.1; CC.1.OA.6; CC.1.OA.7; CC.1.OA.3; CC.1.OA.5; CC.1.OA.8	Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20.
Unknown Numbers in Addition and Subtraction	19 days	CC.1.OA.1; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.OA.4; CC.1.OA.7	Using number patterns and partners to find unknown numbers.
Place Value Concepts	24 days	CC.1.OA.1; CC.1.OA.3; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.NBT.1; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2a; CC.1.NBT.2b; CC.1.NBT.2c, CC.1.NBT.3; CC.1.NBT.5; CC.1.NBT.4	Developing a basic understanding of place value concepts and utilizing place value when adding.
Place Value Situations	19 days	CC.1.OA.1; CC.1.OA.2; CC.1.OA.3; CC.1.OA.4; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2c; CC.1.NBT.4; CC.1.NBT.5	Developing a further understanding of place value and discovering more strategies for addition and subtraction using place value concepts.
Comparisons and Data	15 days	CC.1.OA.1; CC.1.OA.2; CC.1.MD.4;	Students will be able to organize and compare data effectively.
Geometry, Measurement, and Equal Shares	23 days	CC.1.MD.1, CC.1.MD.2, CC.1.MD.3, CC.1.G.1, CC.1.G.2, CC.1.G.3	Students will learn the attributes of specific shapes. Students will begin to discover concepts of length and time measurements.
Two-Digit Addition	10 days	CC.1.NBT.3, CC.1.NBT.4, CC.1.NBT.6	Students will apply prior knowledge along with modeling skills to perform two-digit addition.

Unit Name: **Partners and Number Patterns Through 10**	**Length:** 16 days
Standards CC.1.OA.1; CC.1.OA.3; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8	**Outcomes:** Develop a basic understanding of numbers 1-10, number patterns, and number partners.
Essential Questions: How can we use number partners and number patterns to help us in addition and subtraction?	**Learning Targets:** The students will focus on the 1- more and 1- less pattern with counting numbers, finding partners, and with addition and subtraction.
Topic 1: **Numbers Through 10**	**Length:** 3 days
Standard(s): CC.1.OA.1; CC.1.OA.3; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8	**Academic Vocabulary:** more, less, 5-group, plus, plus sign, equal sign, equation
Lesson Frame: Discuss Numbers 1-10	I can represent numbers 1-10.
Lesson Frame: Visualize Numbers as a 5-group and ones	I can visualize and represent numbers 1-10.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Patterns with Partners Through 10**	**Length:** 13 days
Standard(s): CC.1.OA.1; CC.1.OA.3; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8	**Academic Vocabulary:** partner, total, circle drawing, break-apart, Math Mountain, add, subtract, pattern, double switch the partners, difference
Lesson Frame: Partners of 2 Through 5	I can add and subtract within 5.
Lesson Frame: Partners of 6	I can add and subtract within 6.
Lesson Frame: Partners of 7	I can add and subtract within 7.
Lesson Frame: Partners of 8	I can add and subtract within 8.
Lesson Frame: Partners of 9	I can add and subtract within 9.
Lesson Frame: Partners of 10	I can add and subtract within 10.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Plant Flowers Quick Quiz 2, Unit 1 Review and Test	Notes: Rubric assessment for Report Card:OA: Add within 10, demonstrating fluency

Unit Name: **Addition and Subtraction Strategies**	Length: 24 Days
Standards: CC.1.OA.1; CC.1.OA.6; CC.1.OA.7; CC.1.OA.3; CC.1.OA.5; CC.1.OA.8	**Outcomes:** Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20.
Essential Questions: What different types of strategies can we use for addition and subtraction? How do we determine if number sentences are true or false?	**Learning Targets:** The students will recognize addition and subtraction problem types and write equations to represent addition and subtraction situations. The students will discuss different types of equations, decide if they are true or false, and develop strategies for adding and subtracting within 10.
Topic 1: **Represent Addition Situations**	**Length:** 5 days
Standard(s): CC.1.OA.1, CC.1.OA.6, CC.1.OA.7	**Academic Vocabulary:** add, partners, plus sign, total, circle drawing, equal, equal sign (=), not equal sign, equation
Lesson Frame: Represent Addition; Addition with Circle Drawings	I can use addition to solve story problems and visualize equality.
Lesson Frame: Addition Equations	I can use = to write addition equations and determine if an equation is true.
Lesson Frame: Addition Equations and Stories	I can represent and solve addition story problems and determine if addition equations are true.
Performance Tasks: Quick Quiz 1, Fluency Check 1	Notes:
Topic 2: **Solve Addition Equations**	**Length:** 7 days
Standard(s): CC.1.OA.3, CC.1.OA.5, CC.1.OA.6, CC.1.OA.8	**Academic Vocabulary:** count all, count on, unknown total, count on,
Lesson Frame: Explore Solution Methods; Adding Strategies: Counting On	I can find the total in addition equations.
Lesson Frame: Count On from the Greater Number	I can count on from the greater number to add.
Lesson Frame: Addition Game: Unknown Totals; Practice Counting On	I can solve addition equations.
Performance Tasks: Quick Quiz 2, Fluency Check 2	Notes:
Topic 3: **Solve Subtraction Equations**	**Length:** 5 days
Standard(s): CC.1.OA.1, CC.1.OA.6, CC.1.OA.7, CC.1.OA.8	**Academic Vocabulary:** minus, minus sign (-), subtract, proof drawing, subtraction story problem, vertical forms
Lesson Frame: Represent Subtraction	I can solve subtraction problems and equations.
Lesson Frame: Subtraction with Drawings and Equations	I can represent and solve subtraction problems, and write subtraction equations.
Lesson Frame: Practice with Subtraction	I can solve subtraction problems, and write and solve subtraction equations.
Lesson Frame: Generate Subtraction Problems	I can write and solve subtraction equations and problems.
Performance Tasks: Quick Quiz 3, Fluency Check 3	Notes:

Topic 4: **Equation Exploration**	**Length:** 7 days
Standard(s):	**Academic Vocabulary:** vertical forms
Lesson Frame: Relate Addition and Subtraction	I can relate addition and subtraction and solve vertical forms.
Lesson Frame: Mixed Practice with Equations	I can write and solve addition and subtraction equations and vertical forms.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: How Many? Quick Quiz 4, Fluency Check 4, Unit Review and Test	Notes: Rubric assessment Subtract within 10.

Unit Name: **Unknown Numbers in Addition and Subtraction**	**Length:** 19 days
Standards: CC.1.OA.1; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.OA.4; CC.1.OA.7	**Outcomes:** Using number patterns and partners to find unknown numbers.
Essential Questions: How can we use number patterns and number partners to help us discover unknown numbers?	**Learning Targets:** The students will focus on unknown partners represented as both addition and subtraction situations; the students will adapt strategies for finding an unknown total to finding an unknown partner.
Topic 1: **Counting On with Addition Situations**	**Length:** 7 days
Standard(s): CC.1.OA.1, CC.1.OA.5, CC.1.OA.6, CC.1.OA.8	**Academic Vocabulary:** unknown partner, story problem, label
Lesson Frame: Explore Unknowns	I can relate partners and totals and find an unknown partner.
Lesson Frame: Problems with Unknown Partners	I can solve story problems with unknown partners.
Lesson Frame: Solve equations with Unknown Partners; Addition Game: Unknown Partners	I can solve equations with unknown partners.
Lesson Frame: Practice with Unknown Partners	I can identify and find unknown partners.
Performance Tasks: Quick Quiz 1, Fluency Check 5	Notes:
Topic 2: **Counting On with Subtraction Situations**	**Length:** 4 days
Standard(s): CC.1.OA.1, CC.1.OA.4, CC.1.OA.5, CC.1.OA.6, CC.1.OA.8	**Academic Vocabulary:** difference, subtraction story problem
Lesson Frame: Subtraction Strategies	I can solve subtraction story problems.
Lesson Frame: Subtraction Stories and Games	I can solve subtraction story problems and equations.
Lesson Frame: Practice with Subtraction Stories	I can create and solve subtraction stories.
Performance Tasks: Quick Quiz 2, Fluency Check 6.	Notes:
Topic 3: **Mixed Story Problems**	**Length:** 8 days
Standard(s): CC.1.OA.1, CC.1.OA.4, CC.1.OA.5, CC.1.OA.6, CC.1.OA.7, CC.1.OA.18	**Academic Vocabulary:**
Lesson Frame: Relate Addition and Subtraction Situations	I can model and relate addition and subtraction situations.
Lesson Frame: Solve Mixed Problems	I can solve story problems with unknown partners and totals.
Lesson Frame: Practice with Mixed Problems	I can solve for unknown partners or totals in story problems and equations.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.

Performance Tasks:	Notes:
Hide and Seek, Quick Quiz 3, Fluency Check 7, Unit 3 Review and Test	Rubric Assessment: OA: add and subtract within 10, demonstrating fluency

Unit Name: **Place Value Concepts**	**Length:** 24 days
Standards: CC.1.OA.1; CC.1.OA.3; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.NBT.1; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2a; CC.1.NBT.2b; CC.1.NBT.2c, CC.1.NBT.3; CC.1.NBT.5; CC.1.NBT.4	**Outcomes:** Developing a basic understanding of place value concepts and utilizing place value when adding.
Essential Questions: What is place value and how can we use it to help us add?	**Learning Targets:** The students will explore tens and ones groupings using physical groupings and math drawings. The students will extend place value concepts to add with 1 and 2 digit numbers.
Topic 1: **Tens and Teens**	**Length:** 7 days
Standard(s): CC.1.OA.1; CC.1.OA.3; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.NBT.1; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2a; CC.1.NBT.2b; CC.1.NBT.2c, CC.1.NBT.3; CC.1.NBT.5	**Academic Vocabulary:** decade number, tens, ones, digit, teen number, 10-stick, compare, is equal to (=), is greater than (>), is less than (<), teen total, make a ten, Make a Ten strategy, doubles, doubles plus 1, doubles plus 2, doubles minus 1, doubles minus 2
Lesson Frame: Introduction to Tens Groupings	I can recognize 10 as a group of ten ones and count decade numbers as groups of ten.
Lesson Frame: Explore Teen Numbers	I can recognize that teen numbers are composed of a ten and extra ones.
Lesson Frame: Represent and Compare Teen Numbers	I can model and compare teen numbers.
Lesson Frame: Visualize Teen Addition	I can represent teen totals as a group of ten and extra ones.
Lesson Frame: Teen Addition Strategies	I can add and solve story problems to find teen totals.
Lesson Frame: Investigate Doubles	I can add with doubles.
Performance Tasks: Quick Quiz 1, Fluency Check 8	Notes:
Topic 2: **Place Value to 100**	**Length:** 8 days
Standard(s): CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2a; CC.1.NBT.2b; CC.1.NBT.2c; CC.1.NBT.3; CC.1.NBT.4	**Academic Vocabulary:** number word, 10-group, tens digit, ones digit, compare, is greater than (>), is less than (<), is equal to (=)
Lesson Frame: Understand Tens and Ones	I can represent 2-digit numbers as tens and ones.

Lesson Frame: Integrate Tens and Ones	I can identify the tens and ones in 2-digit numbers, and read and write numerals and number words.
Lesson Frame: Practice Grouping Ones into Tens	I can add a 1-digit number to a 2-digit number.
Lesson Frame: Add with Groups of Ten	I can use tens and ones to add.
Lesson Frame: Practice with Tens and Ones	I can identify tens and ones in 2-digit numbers and add with tens and ones.
Lesson Frame: Use Place Value to Compare Numbers	I can compare two 2-digit numbers.
Performance Tasks: Quick Quiz 2, Fluency Check 9	Notes: Rubric assessment: NBT: Understand that the two digits of a two-digit number represent amounts of tens and ones
Topic 3: **Addition Strategies**	**Length:** 9 days
Standard(s): CC.1.OA.5; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2a; CC.1.NBT.2c; CC.1.NBT.3; CC.1.NBT.4	**Academic Vocabulary:**
Lesson Frame: Add Tens or Ones	I can distinguish between adding ones and adding tens, and add 1 or 10 other numbers.
Lesson Frame: Mixed Addition with Tens and Ones	I can add ones or tens to decade numbers.
Lesson Frame: Counting On Strategy: 2-Digit Numbers	I can add a 1-digit number to a 2-digit number.
Lesson Frame: Practice with 2-Digit Numbers	I can count on into the next decade and compare 2-digit numbers.
Lesson Frame: 2-Digit Addition Games	I can add with tens and ones.
Lesson Frame: Focus on Mathematical: Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Snack Time, Quick Quiz 3, Fluency Check 10, Unit 4 Review and Test	Notes: Rubric Assessment: NBT: Add within 100, including a two-digit number and a one-digit number

Unit Name: **Place Value Situations**	**Length:** 19 days
Standard(s): CC.1.OA.1; CC.1.OA.2; CC.1.OA.3; CC.1.OA.4; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2c; CC.1.NBT.4; CC.1.NBT.5	**Outcomes:** Developing a further understanding of place value and discovering more strategies for addition and subtraction using place value concepts.
Essential Questions: What other place value strategies can we use to help us with addition **and** subtraction?	**Learning Targets:** The students will learn more strategies for unknown partners in addition and subtraction situations. The students will access prior knowledge from previous unit to work with greater numbers.
Topic 1: **Teen Solution Methods**	**Length:** 10 days
Standard(s): CC.1.OA.1; CC.1.OA.2; CC.1.OA.3; CC.1.OA.4; CC.1.OA.5; CC.1.OA.6; CC.1.OA.8	**Academic Vocabulary:** unknown partner, addend
Lesson Frame: Unknown Partners with Teen Totals	I can solve teen addition problems with unknown partners.
Lesson Frame: Subtraction with Teen Numbers	I can solve teen subtraction.
Lesson Frame: Mixed Practice with Teen Problems	I can solve and write addition and subtraction problems to find teen totals and unknown partners.
Lesson Frame: Small Group Practice with Teen Problems	I can solve teen addition and subtraction problems with various unknowns.
Lesson Frame: Teen Problems with Various Unknowns	I can create and solve story problems to find unknown partners and teen totals.
Lesson Frame: Problems with Three Addends	I can solve problems with three addends.
Performance Tasks: Quick Quiz 1, Fluency Check 11	Notes: Assessment Rubric: Operations and Algebraic Thinking: Apply properties of operations as strategies to add and subtract
Topic 2: **Find Patterns and Relationships**	**Length:** 9 days
Standard(s): CC.1.OA.1; CC.1.OA.2; CC.1.OA.6; CC.1.NBT.1; CC.1.NBT.2; CC.1.NBT.2c; CC.1.NBT.4; CC.1.NBT.5	**Academic Vocabulary:** 10-group, hundred, column, row, grid
Lesson Frame: Count with Groups of 10	I can count with groups of 10.
Lesson Frame: Numbers Through 120	I can count and write numbers to 120 and find 10 more and 10 less than a given number.
Lesson Frame: Add and Subtract Tens	I can add tens to 2-digit numbers and subtract tens from decade numbers.
Lesson Frame: Add and Subtract Multiples of 10	I can add and subtract decade numbers.

Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Beach Day, Quick Quiz 2, Fluency Check 12, Unit Review and Test	Notes: Rubric Assessment: OA: Add and subtract within 20 NBT: Add a two-digit number and multiple of 10 (i.e. 38 + 10)

Unit Name: **Comparisons and Data**	**Length:** 15 days
Standards: CC.1.OA.1; CC.1.OA.2; CC.1.MD.4;	**Outcomes:** Students will be able to organize and compare data effectively.
Essential Questions: How can we collect data and use it to make comparisons in math?	**Learning Targets:** The students will organize, represent, and interpret data. The students will build on what they know about comparing numbers to develop comparison statements for a set of data, and solve comparison story problems.
Topic 1: **Represent and Compare Data**	**Length:** 7 days
Standard(s): CC.1.OA.1; CC.1.OA.2; CC.1.MD.4	**Academic Vocabulary:** sort, data, compare, more, most, fewer, fewest, category
Lesson Frame: Explore Representing Data	I can organize and represent categorical data.
Lesson Frame: Organize Categorical Data	I can organize, represent, and interpret categorical data.
Lesson Frame: Use Stair Steps to Represent Data	I can organize, represent, and interpret data.
Lesson Frame: Data Sets with Three Categories	I can organize, represent, and interpret data with three categories.
Lesson Frame: Data Collecting	I can collect, organize, represent, and interpret data with three categories.
Performance Tasks: Quick Quiz 1, Fluency Check 13	Notes: Rubric Assessment: Measurement and Data: Organize, Represent, and interpret data with up to three categories
Topic 2: **Compare Problem Types**	**Length:** 8 days
Standard(s): CC.1.OA.1; CC.1.OA.2; CC.1.MD.4	**Academic Vocabulary:** comparison bars
Lesson Frame: Introduce Comparison Bars; Comparison Bars and Comparing Language; Solve Compare Problems	I can solve *Compare* bars.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of read world problem solving situations.
Performance Tasks: Activity: Sort and Compare Quick Quiz 2, Fluency Check 14, Unit Review and Test	Notes:

Unit Name: **Geometry, Measurement, and Equal Shares**	**Length:** 23 days
Standards: CC.1.MD.1, CC.1.MD.2, CC.1.MD.3, CC.1.G.1, CC.1.G.2, CC.1.G.3	**Outcomes:** Students will learn the attributes of specific shapes. Students will begin to discover concepts of length and time measurements.
Essential Questions: How can we tell different shapes apart? What is measurement and how can measurements be used to solve problems? Why do we need to tell time?	**Learning Targets:** The students will distinguish between defining and non-defining attributes of shapes, and compose shapes; The students will learn more basic concepts about length measurements (including time).
Topic 1: **Tell and Write Time**	**Length**: 6 days
Standard(s): CC.1.MD.3	**Academic Vocabulary:** clock, hour, minute, hour hand, minute hand, half-hour
Lesson Frame: Introduction to Time; Time in Our Day	I can tell and write time in hours.
Lesson Frame: Tell and Write Time in Hours	I can show, tell, and write time in hours.
Lesson Frame: Tell and Write Time in Half-Hours	I can tell and write time in half-hours.
Lesson Frame: Practice Telling and Writing Time	I can tell and write in hours and half-hours.
Performance Tasks: Quick Quiz 1, Fluency Check 15	Notes:
Topic 2: **Shapes and Equal Shares**	**Length:** 11 days
Standard(s): CC.1.G.1, CC.1.G.2, CC.1.G.3	**Academic Vocabulary:** rectangle, square, side, corner, square corner, triangle, circle, halves, fourths, quarters, equal shares, half of, fourth of, quarter of, trapezoid, cube, rectangular prism, cone, cylinder, sphere, face, edge, vertex
Lesson Frame: Squares and Other Rectangles	I can distinguish between defining and non-defining attributes of squares and other rectangles.
Lesson Frame: Triangles and Circles	I can distinguish between defining and non-defining attributes of triangles and circles.
Lesson Frame: Equal Shares	I can partition circles and rectangles into two and four equal shares.
Lesson Frame: Compose 2-Dimensional Shapes	I can compose 2-dimensional shapes, and compose new shapes from the composite shape.
Lesson Frame: 3-Dimensional Shapes	I can identify attributes of 3-dimensional shapes and composite rectangular prisms.
Lesson Frame: Compose 3-Dimensional Shapes	I can compose 3-dimensional shapes, and compose new shapes from the composite shape.
Performance Tasks: Quick Quiz 2, Fluency Check 16	Notes: Rubric assessment: Geometry: Distinguish between defining attributes and build and draw shapes to possess defining attributes.

Topic 3: **Measure and Order by Length**	**Length**: 6 days
Standard(s): CC.1.MD.1, CC.1.MD.2, CC.1.MD.3, CC.1.G.3	**Academic Vocabulary:** compare, order, longer, longest, shorter, shortest
Lesson Frame: Order by Length	I can compare and order objects by length.
Lesson Frame: Measure with Length Units	I can measure objects with same-size length units.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Busy Bug's Bedtime, Quick Quiz 3, Fluency Check 17, Unit Review and Test	Notes: Rubric Assessment: Measure the length of an object as a whole number and length units

Unit Name: **Two-Digit Addition**	**Length:** 10 days
Standards: CC.1.NBT.3, CC.1.NBT.4, CC.1.NBT.6	**Outcomes:** Students will apply prior knowledge along with modeling skills to perform two-digit addition.
Essential Questions: How can we use our prior knowledge and modeling skills to help us perform two-digit addition?	**Learning Targets:** The students will use modeling skills, place value, and addition concepts to add with 2 digit numbers when grouping a ten is and is not required.
Topic 1: **Add 2-Digit Addition**	**Length**: 10 days
Standard(s): CC.1.NBT.3, CC.1.NBT.4, CC.1.NBT.6	**Academic Vocabulary:** group, New Group Below method, New Group Above method, Proof Drawing, Show All Totals method,
Lesson Frame: Explore 2-Digit Addition	I can add 2-digit numbers.
Lesson Frame: Methods of 2-Digit Addition	I can add 2-digit numbers.
Lesson Frame: Addition of Tens and Ones	I can add 2-digit numbers.
Lesson Frame: Discuss Solution Methods	I can add 2-digit numbers.
Lesson Frame: Practice 2-Digit Addition	I can add 2-digit numbers.
Lesson Frame: Focus on Mathematical Practices	I can use Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Picking Pears, Quick Quiz 1, Fluency Check 18, Unit Review and Test	Notes: Rubric Assessment: OA: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking away from, putting together, taking apart, and comparing with unknowns in all positions.

Course Name:	Grade 2 Mathematics		
Description:	A comprehensive collection of Mathematics topics including: addition, subtraction, telling time, place value, money, graphing, and fractions.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Power Standards:**	**Unit Outcomes:**
Operations & Algebraic Thinking	4 Quarters	2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.	Students represent and solve problems with addition and subtraction and work with equal groups of objects to gain foundations for mulitplication. Addition and subtraction can be represented on various models. Numbers are composed of other numbers. Mental strategies help in solving problems quickly and accurately. There are different problem solving structures which can be used to solve problems in multiple ways. Flexible methods of computation involve grouping numbers in strategic ways. Even numbered objects can be modeled using pairs or rectangular arrays.
Number Base Ten	1 Quarter	2.NBT.3 Read and write numbers to 1,000 using base-ten numeral, number names, and expanded-form.	Students focus on understanding and using place value and the properties of operations to add and subtract. Numbers are composed of other numbers. Place value is based on groups of ten. Place value can be used to understand and model properties of operations. Number patterns repeat predictable and can be generalized and applied.
Measurement & Data	1 Quarter	2.MD.7 Tell and write time from analog and digital clocks to the nearest 5 minutes, using A.M. and P.M.	Students show time to the nearest 5 minutes using analog and digital clocks. We use measurement and data, telling time, and money in our everyday life.

Unit Name: **Operations & Algebraic Thinking**	**Length:** Four Quarters
Standards: I can fluently add & subtract within 10. I can fluently add & subtract within 20.	**Outcomes:** Addition and subtraction can be represented on various models. Numbers are composed of other numbers. Mental strategies help in solving problems quickly and accurately. There are different problem solving structures which can be used to solve problems in multiple ways. Flexible methods of computation involve grouping numbers in strategic ways. Even numbered objects can be modeled using pairs or rectangular arrays.
Essential Questions: What are some ways to think about addition and subtraction? What are strategies for finding addition and subtraction facts? Why do we have to know how to add and subtract quickly without mistakes? How can numbers be put together and taken apart to solve problems?	**Learning Targets:** 1. Students will add and subtract accurately and efficiently. 2. Students will be able to determine whether a group of objects is odd or even. 3. Students will be able to skip-count by 2s, 5s, 10s, and 100s.
Topic 1: **Fluent computation to add and subtract**	**Length:** ongoing
Standard(s): I can add and subtract using accuracy (correct answer) and efficiency (within 3-4 seconds).	**Academic Vocabulary:** addend, sum, difference, double
Lesson Frame: Addition & Subtraction within 10	I can add and subtract within 10.
Lesson Frame: Addition & subtractions within 20	I can add and subtract within 20.
Performance Tasks: Progress monitoring with flashcards 1:00 Math assessment	Notes: 0-9 facts flashcards 10-20 facts flashcards Teach double facts and Double plus 1
Topic 2: **Math Patterns**	**Length:** Ongoing
Standard(s): I can determine if a number is odd or even. I can use number patterns.	**Academic Vocabulary:** odd, even
Lesson Frame: Odd and Even Numbers	I can: determine if a number is odd or even.
Lesson Frame: Skip Counting	I can count by 2's to 100. I can count by 5's to 200. I can count by 10's to 200. I can count by 100's to 1,000.
Performance Tasks: Progress monitoring with flashcards 1:00 Math assessment orally recite skip counting patterns Completion of rubric	Notes: Activities may vary depending on individual needs. Various videos Dry erase math boards and other manipulatives

Unit Name: **Numbers & Operations Base 10**	**Length:** January through May
Standards: I can read numbers to 1,000 using base-ten numerals. I can read numbers to 1,000 using number names. I can read numbers to 1,000 using expanded-form. I can write numbers to 1,000 using base-ten numerals. I can write numbers to 1,000 using number names. I can write numbers to 1,000 using expanded-form. I can add and subtract 2-digit numbers using place value. I can add and subtract 3-digit numbers using place value.	**Outcomes:** Numbers are composed of other numbers. Place value is based on groups of ten. Place value can be used to understand and model properties of operations. Number patterns repeat predictable and can be generalized and applied.
Essential Questions: How can numbers to 100 be shown and compared? What number patterns are helpful in reading and writing numbers to 1,000? How does the position of a digit in a number affect its value? How do predictable patterns help me understand how number work? In what ways can numbers be composed or decomposed? What are efficient methods for finding sums and differences?	**Learning Targets:** 1. Students will compare numbers based on the value of the hundreds, tens, and ones digits, using >, <, and = symbols. 2. Students will read and write numbers to 1,000 using base-ten numerals, number names, and expanded form. 3. Students will fluently add and subtract within 1,000, using strategies based on place value.
Topic 1: **Reading numbers to 1,000**	**Length:** January through May
Standard(s): I can read numbers using base-ten numerals, number names, and expanded-form.	**Academic Vocabulary:** base-ten numerals, secret code cards, pattern, ones, tens, hundreds, thousands, decade numbers, expanded form, number name, greater than, less than, equal to
Lesson Frame: Base-ten numerals	I can: read numbers to 1,000 using base-ten numerals.
Lesson Frame: Number Names	I can: read numbers to 1,000 using number names.
Lesson Frame: Expanded-Form	I can: read numbers to 1,000 using expanded form.
Performance Tasks: Progress monitoring with flashcards 1:00 Math assessment	Notes: Activities may vary depending on individual needs. Various videos Dry erase math boards and other manipulatives Secret Code Cards
Topic 2: **Write Numbers to 1,000**	**Length:** January through May
Standard(s): I can write numbers using base-ten numerals, number names, and expanded-form.	**Academic Vocabulary:** base-ten numerals, secret code cards, pattern, ones, tens, hundreds, thousands, decade numbers, expanded form, number name, greater than, less than, equal to
Lesson Frame: Base-Ten Numerals	I can write numbers to 1,000 using base-ten numerals.

Lesson Frame: Number Names	I can write numbers to 1,000 using number names.
Lesson Frame: Expanded-Form	I can write numbers to 1,000 using expanded-form.
Performance Tasks: Progress monitoring with flashcards 1:00 Math assessment Completion of rubric	Notes: Activities may vary depending on individual needs. Various videos Dry erase math boards and other manipulatives Secret Code Cards
Topic 3: **Addition and Subtraction using Place Value**	**Length:** January through May
Standards(s): I can add numbers fluently without regrouping. I can add numbers fluently with regrouping. I can subtract numbers fluently without ungrouping. I can subtract numbers fluently with ungrouping.	**Academic Vocabulary:** sum, difference, ones, ten, hundreds, thousands, regroup, ungroup
Lesson Frame: Addition without regrouping	I can add numbers fluently without regrouping.
Lesson Frame: Addition with regrouping	I can add numbers fluently with regrouping.
Lesson Frame: Subtraction without ungrouping	I can subtract numbers fluently without ungrouping.
Lesson Frame: Subtraction with ungrouping	I can subtract numbers fluently with ungrouping.
Performance Tasks: Formal and informal assessment completion of rubric	Notes: Activities may vary depending on individual needs dry erase boards math manipulatives

Unit Name: **Measurement & Data**	**Length:** One Quarter
Standards: I can measure the length of an object with the correct tool. I can recognize and draw shapes with specific attributes. I can tell and write time using analog and digital clocks to the nearest 5 minutes. I can draw a picture graph and a bar graph with single unit scale to represent a data set with up to four categories. I can count quarters, dimes, nickels and pennies up to one dollar. I can solve word problems involving dollar bills, quarters, dimes, nickels and pennies using $ and cent symbols.	**Outcomes:** We use measurement and data, telling time, and money in our everyday life.
Essential Questions: What is the process for measuring length? How can bar graphs and pictographs be used to show data and answer questions? How do we tell time to 5 minutes? What strategies can be used to count money?	**Learning Targets:** 1. Students will measure the length of an object using units of inch, feet, centimeter, and meter. 2. Students will draw and identify shapes with specific attributes. 3. Students will use analog and digital clocks to tell time to the nearest 5 minutes. 4. Students will draw a picture graph to represent a data set with up to four categories. 5. Students will solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using symbols appropriately.
Topic 1: **Measuring Length**	**Length:** 2 weeks
Standard(s): I can measure the length of an object with the correct tool.	**Academic Vocabulary:** length, inch, foot, yard, centimeter, meter, ruler, horizontal, vertical, width, height
Lesson Frame: measure in inches with a ruler	I can measure objects in inches using a ruler accurately.
Lesson Frame: measure in feet with a ruler or yardstick	I can measure objects in feet with a yardstick.
Lesson Frame: measure in centimeters with a ruler	I can measure objects in cm with a ruler.
Performance Tasks: informal and formal assessment Completion of Rubric	Notes: Activities may vary depending on individual needs. Materials needed: Inch and Centimeter rulers
Topic 2: **Geometry**	**Length:** 2 weeks
Standard(s): I can recognize and draw shapes with specific attribute.	**Academic Vocabulary:** square, rectangle, triangle, quadrilateral, measure the length of an object with the correct tool, hexagon, opposite sides, rectangular prism, face, view, cube, angle, right angle, 2-D, 3-D

Lesson Frame: Identify Shapes: 2D and 3D, square, rectangle, triangle, quadrilateral, pentagon, hexagon, rectangular prism, cube	I can tell the name of 2-D and 3D shapes.
Lesson Frame: Draw 2-D and 3-D shapes with specific attributes; sides, opposite sides, angles, face, & view.	I can draw 2-D shapes with specific attributes. I can draw 3D shapes with specific attributes.
Performance Tasks: Formal and informal assessments Completion of Rubric	Notes: Activities may vary depending on individual needs. Materials needed: 3-D shapes, dry erase boards
Topic 3: **Telling Time to Nearest 5 minutes**	**Length:** 2 weeks
Standard(s): I can read and write the time on an analog and digital clock to the nearest five minutes.	**Academic Vocabulary:** clock, analog, digital, minute hand, hour hand, AM, PM
Lesson Frame: Tell time to Hour and Half Hour	I can tell time on analog and digital clocks to hour and half hour.
Lesson Frame: Tell time using Quarter after and Quarter to	I can tell time on analog clocks that represent quarter after and quarter to.
Lesson Frame: Tell time to the nearest 5 minutes	I can tell time on analog clocks and digital clocks to the nearest five minutes.
Lesson Frame: Determine if a time is AM or PM	I can tell if a time is AM or PM.
Performance Tasks: formal and informal assessment Completion of Rubric	Notes: Activities may vary depending on individual needs. Materials needed: clock manipulatives, dry erase boards
Topic 4: **Money**	**Length:** 2 weeks
Standard(s): I can identify and count quarters, dimes, nickels, and pennies. I can solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using symbols appropriately.	**Academic Vocabulary:** penny, nickel, dime, quarter, dollar
Lesson Frame: Identify and count quarters, dimes, nickels & pennies	I can identify and count coins within a dollar.
Lesson Frame: Solve word problems using dollars and coins	I can count coins and dollars. I can solve word problems related to counting coins and dollars.
Performance Tasks: Formal and informal assessment Completion of rubric	Notes: Activities may vary depending on individual needs. Materials needed: coin manipulatives, dry erase boards
Topic 5: **Represent and Interpret Data**	**Length:** 2 weeks

Standard(s): I can draw a picture graph and bar graph to represent data from a table. I can solve simple put-together, take-apart, and comparing problems using information presented in a bar graph.	**Academic Vocabulary:** picture graph, bar graph, data, table, horizontal, vertical, sort, survey, title, more, most, fewest, less, fewer, line segment, line plot
Lesson Frame: Picture Graphs and Bar Graphs	I can draw a picture graph and bar graph to represent data from a table.
Lesson Frame: Answer questions using a Bar Graph	I can put -together, take-apart, and compare numbers from a bar graph so solve simple problems.
Lesson Frame: Plot Lines	I can plot points on a line segment to represent data.
Performance Tasks: Formal and informal assessment Completion of rubric	Notes: Activities may vary depending on individual needs. Manipulatives- dry erase boards

Course Name:	3rd Grade Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	In Grade 3, instructional time should focus on four critical areas: 1) develop an understanding of operations and algebraic thinking: multiplication and division and strategies for multiplication and division within 100; 2) develop an understanding of numbers and operations in base ten: adding and subtracting within 1000 using regrouping; 3) develop an understanding of measurement and data; use rectangular arrays to find area and perimeter; and 4) develop an understanding of fractions and geometry: divide shapes into parts with equal areas to find unit fractions and understand fractions as a whole differentiating between numerator and denominator.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Multiplication and Division with 0-5, 9, and 10	30 days (+ on going through out 4 quarters)	CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.k-12.MP.1,CC.k-12.MP.2,CC.k-12.MP.3, CC.k-12.MP.4, CC.k-12.MP.5,CC.k-12.MP.6, CC.k-12.MP.7,CC.k-12.MP.8	Students will understand that multiplication and division are inverse operations, and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Multiplication and Division with 6s, 7s, 8s and Multiply with Multiples of 10	22 days	CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.3.NBT.3, CC.3.MD.5, CC.3.MD.7	Students will understand that multiplication and division are inverse operations and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Measurement, Time, and Graphs	23 days	CC.3.OA.3, CC.3.NBT.2, CC.3.MD.1, CC.3.MD.2, CC.3.MD.3, CC.3.MD.4	Students independently use their learning to measure and describe attributes of real world objects using quantified unit amounts. They will independently use their learning to solve real world problems involving time and elapsed time. They will use their learning to represent a data set with a scaled picture or bar graph and solve problems using that information.
Multidigit Addition and Subtraction	25 days	CC.3.NBT.1, CC.3.NBT.2	Students understand every number in a multi digit number has a value based on its location. Students know that each place value implies 10 units. Students interpret sums and differences of larger digit numbers in real world problems.

Write Equations to Solve Word Problems	17 days	CC.3.OA.3, CC.3.OA.4, CC.3.OA.8, CC.3.NBT.1, CC.3.NBT.2	Students use drawings and equations with a symbol for the unknown number to represent the problem. Students use information presented in scaled bar graphs to solve comparison problems. Students will use properties of operations to explain patterns.
Polygons, Perimeter, and Area	17 days	CC.3.G.1, CC.3.G.2, CC.3.MD.5, CC.3.MD.5a, CC.3.MD.5b, CC.3.MD.6, CC.3.MD.7, CC.3.MD.7a, CC.3.MD.7b, CC.3.MD.7c, CC.3.MD.7d, CC.3.MD.8, CC.3.G.1	Students identify, classify, and describe properties of standard two-and three-dimensional shapes independently in order to recognize geometry in the world around them. Students use their understanding of geometric measurement and use the concept of area to relate area to multiplication and division. Students recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Explore Fractions	16 days	CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2, CC.3.NF.3a, CC.3.NF.3b, CC.3.NF.3c, CC.3.NF.3d	Students develop an understanding of fractions as numbers and like whole numbers fractions have a place on the number line. Students refer to a fraction as relative to the size of the whole and know that different but equivalent fractions can be used to represent the same amount. Students can now independently use their learning to represent and interpret real world items as fractional parts by reasoning with shapes and their attributes.
Geometry	13 days	CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	Students classify and draw angles, triangles, and quadrilaterals. They identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.

Unit 1 Name: **Multiplication and Division with 0-5, 9, and 10**	**Length:** 30 days (+ on going through out 4 quarters)
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.k-12.MP.1,CC.k-12.MP.2,CC.k-12.MP.3, CC.k-12.MP.4, CC.k-12.MP.5,CC.k-12.MP.6, CC.k-12.MP.7,CC.k-12.MP.8	**Outcomes:** Students will understand that multiplication and division are inverse operations, and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Essential Questions: How can you use your knowledge of multiplication and division to solve problems or answer questions? How do you write a good mathematical explanation? What patterns can be found in multiplication tables? How can you write a story to describe a multiplication and a division fact?	**Learning Targets:** Students will interpret and solve word problems with products and quotients of whole numbers using different mathematical tools. Students will understand the inverse relationship of addition, subtraction, multiplication, and division. Students will appropriately apply the associative, commutative, and distributive properties of operations as a strategy to multiply and divide. Students will demonstrate understanding of multiplication and division tables 0-5, 9 and 10. Students will demonstrate understanding and the ability to solve two-step word problems including an unknown quantity. Students will demonstrate the ability to identify patterns on addition and multiplication tables and explain how they work.
Topic 1: **Meanings of Multiplication and Division: 5s and 2s**	**Length:** 10 days
Standard(s): CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, 3.OA.9	**Academic Vocabulary:** count-by, equation, multiplication, factor, product, multiplier, multiples, equal groups, equal shares drawing, function table, array, row, column,
Lesson Frame: Multiply with 5	I can identify and use patterns to multiply with 5
Lesson Frame: Multiplication as Equal Groups	I can use multiplication and drawings to represent equal groups situations
Lesson Frame: Multiplication and Arrays	I can use multiplication and drawings to represent array situations and the Commutative Property.
Lesson Frame: The Meaning of Division	I can relate division to multiplication with an unknown factor.
Lesson Frame: Multiply and Divide with 2	I can identify patterns in 2s count-bys and multiplications and relate multiplication and division.
Lesson Frame: Building Fluency with 2s and 5s	I can build fluency with 2s and 5s multiplications and divisions
Performance Tasks: Remembering Sheets, weekly fact fluency checks, Quick Quiz 1	Notes:
Topic 2: **Patterns and Strategies: 9s and 10s**	**Length:** 5 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.6, 3.OA.7, CC.3.OA.9	**Academic Vocabulary:** equation, variable, quick 9s, multiplier finger, fast array drawing
Lesson Frame: Multiply and Divide with 10	I can explore patterns in 10s count-bys, multiplications, and divisions and represent and solve problems involving multiplication and division with 10.
Lesson Frame: Multiply and divide with 9	I can identify patterns in 9s multiplications and divisions and learn a strategy for quickly multiplying and dividing with 9s.
Lesson Frame: Building Fluency with 2s, 5s, 9s, and 10s	I can build fluency with 2s, 5s, 9s, and 10s multiplications and divisions.

Performance Task: Remembering Sheets, weekly fact fluency checks, Quick Quiz 2	Notes:
Topic 3: **Strategies for Factors and Products: 3s and 4s**	**Length:** 8 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.9, CC.3.MD.5a, 5b, CC.3.MD.6, 7a, 7b, 7c, 7d	**Academic Vocabulary:** product, multiplier, commutative, divisor
Lesson Frame: Multiply and Divide with 3	I can look for patterns in and practice 3s count-bys, multiplications, and divisions.
Lesson Frame: Multiplication and Area	I can use the area model for multiplications.
Lesson Frame: Multiply and Divide with 4	I can look for patterns in 4s multiplications and count-bys and learn a strategy for finding 4s and solving problems involving 4s.
Lesson Frame: Use the Strategy Cards	I can develop multiplication and division strategies and use them to solve problems.
Lesson Frame: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s	I can build fluency with 2s, 3s, 4s, 5s, 9s, and 10s multiplications and divisions.
Performance Tasks: Remembering Sheets, weekly fact fluency checks, Quick Quiz 3	Notes:
Topic 4: **Multiply with 1 and 0**	**Length:** 8 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.9	**Academic Vocabulary:** Commutative Property of Multiplication, Associative Property of Multiplication, Identity Property of Multiplication, Zero Property of Multiplication, equal groups, array, multiples, quotient, divisor
Lesson Frame: Multiply and Divide with 0 and 1	I can use multiplication properties and division rules as strategies to multiply and divide with 1 and 0.
Lesson Frame: Solve and Create Word Problems	I can identify, solve, and create word problems for multiplication and division.
Lesson Frame: Play Multiplication and Division Games	I can practice with 2s, 3s, 4s, 5s, 9s, and 10s multiplications and divisions.
Lesson Frame: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s	I can practice with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s multiplications and divisions.
Performance Tasks: Remembering Sheets, weekly fact fluency checks, Quick Quiz 4, Unit 1 Review, Unit 1 Test	Notes:

Unit Name: **Multiplication and Division with 6s, 7s, 8s and Multiply with Multiples of 10**	**Length:** 22 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.3.NBT.3, CC.3.MD.5, CC.3.MD.7	**Outcomes:** Students willd understand that multiplication and division are inverse operations and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Essential Questions: How can you use your knowledge of multiplication and division to solve problems or answer questions? How do you write a good mathematical explanation? What patterns can be found in multiplication tables? How can you write a story to describe a multiplication and a division fact?	**Learning Targets:** Students will interpret and solve word problems with products and quotients of whole numbers using different mathematical tools. Students will understand the inverse relationship of addition, subtraction, multiplication, and division. Students will appropriately apply the associative, commutative, and distributive properties of operations as a strategy to multiply and divide. Students will demonstrate understanding of multiplication and division tables 6-8 and square numbers while continuing to build fluency with 0-5, 9, and 10. Students will demonstrate understanding and the ability to solve two-step word problems including an unknown quantity. Students will demonstrate the ability to identify patterns on addition and multiplication tables and explain how they work. Students will develop and understanding of multiplying with multiples of 10.
Topic 1: **The Remaining Multiplications**	**Length:** 11 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.9, CC.3.NBT.3, CC.3.MD.5a-b, CC.3.MD.7a-b	**Academic Vocabulary:** length, width, area, fast area drawing, fast array drawing, array problem, equal groups problem, area problem, square number
Lesson Frame: Multiply and Divide with 6	I can explore patterns in 6s count-bys, multiplications, and divisions, and solve multiplication problems.
Lesson Frame: Solve Area Word Problems	I can develop strategies for solving real-world area problems.
Lesson Frame: Multiply and Divide with 8	I can explore patterns in 8s count-bys, multiplications, and divisions, and solve multiplication problems.
Lesson Frame: Write Word Problems and Equations	I can write multiplication and division problems of various types.
Lesson Frame: Multiply and Divide with 7	I can explore patterns in 7s count-bys, multiplications, and divisions and solve word problems.
Lesson Frame: Square Numbers	I can understand what a square number is and describe square number patterns in the multiplication table.
Lesson Frame: Practice with 6s, 7s, and 8s	I can practice 6s, 7s, 8s ,multiplications and divisions.
Lesson Frame: Building Fluency with 0s - 10s	I can build fluency with 0s-10s.
Performance Tasks: Quick Quiz 1, weekly fact fluency checks	Notes:

Topic 2: **Problem Solving and Multiples of 10**	**Length:** 11 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8.CC.3.OA.9, CC.3.NBT.3	**Academic Vocabulary:** expression, evaluate, multiple
Lesson Frame: Equations and Word Problems	I can represent and solve word problems using the four operations.
Lesson Frame: Write First Step Questions for Two Step Problems	I can develop strategies for solving two step word problems.
Lesson Frame: Make Sense of Two Step Word Problems	I can develop strategies for solving two step word problems.
Lesson Frame: Multiply with Multiples of 10	I can use place value and properties to multiply one digit numbers by multiples of 10.
Lesson Frame: Play Multiplication and Division Games	I can use strategies to fluently multiply and divide within 100 and solve two step word problems.
Lesson Frame: Building Fluency with 0s-10s	I can build fluency with 0-10s multiplications and divisions
Performance Tasks: Quick Quiz 2, weekly fact fluency checks, Unit 2 Review, Unit 2 Test	Notes:

Unit 3 Name: **Measurement, Time, and Graphs**	**Length:** 23 days
Standards: CC.3.OA.3, CC.3.NBT.2, CC.3.MD.1, CC.3.MD.2, CC.3.MD.3, CC.3.MD.4	**Outcomes:** Students independently use their learning to measure and describe attributes of real world objects using quantified unit amounts. They will independently use their learning to solve real world problems involving time and elapsed time. They will use their learning to represent a data set with a scaled picture or bar graph and solve problems using that information.
Essential Questions: What are the different types of measurement units? What are some ways to measure weight and time? How can we represent real world measurement situations visually? How do we measure time and intervals of time? Why do we analyze data? Describe when using a graph would be meaningful?	**Learning Targets:** Tell and write time to the nearest minute. Solve word problems involving time intervals. Use number lines to represent time intervals. Use drawings to represent a problem involving liquid volume and mass. Represent and interpret data. Generate measurement data and make a line plot.
Topic 1: **Length, Capacity, Weight, and Mass**	**Length:** 7 days
Standard(s): CC.3.OA.3, CC.3.MD.2, CC.3.MD.4	**Academic Vocabulary:** inch, foot, ruler, line segment, cup, fluid ounce, pint, quart, gallon, liquid volume, liter, milliliter, liquid volume, weight, pound ounce, mass, gram, kilogram
Lesson Frame: Customary Units of Length	I can measure length in inches, half inches, and quarter inches with a ruler.
Lesson Frame: Customary Units of Liquid Volume	I can use customary units of liquid volume.
Lesson Frame: Metric Units of Liquid Volume	I can use metric units of liquid volume.
Lesson Frame: Customary Units of Weight and Metric Units of Mass	I can measure and estimate weight and mass.
Lesson Frame: Solve Word Problems Involving Liquid Volume and Mass	I can solve word problems involving liquid volumes or masses using addition,m subtraction, multiplication, and division.
Performance Tasks: Quick Quiz 1, Remembering Pages, weekly fact fluency checks	Notes:
Topic 2: **Time and Data**	**Length:** 11 days
Standard(s): CC.3.MD.1	**Academic Vocabulary:** A.M., P.M., elapsed time
Lesson Frame: Tell Time	I can tell and write time to the minute, quarter hour, half hour, and hour.
Lesson Frame: Before and After the Hour	I can tell and write the time before and after the hour to the nearest minute.
Lesson Frame: Elapsed Time	I can find elapsed time.
Lesson Frame: Add and Subtract Time	I can solve word problems involving addition and subtraction of time intervals in minutes.

Lesson Frame: Solve Word Problems Involving Time	I can solve word problems involving addition and subtraction of intervals of time.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks	Notes:
Topic 3: **Pictographs, Bar Graphs, and Line Plots**	**Length:** 10 days
Standards: CC.3.OA.3, CC.3.NBT.2, CC.3.MD.1, CC.3.MD.3, CC.3.MD. 4	**Academic Vocabulary:** vertical axis, horizontal axis, vertical bar graph, horizontal bar graph, pictograph, axes, scale, key
Lesson Frame: Read and Create Pictographs and Bar Graphs	I can draw scaled pictographs and bar graphs and solve comparison problems using data in pictographs and bar graphs.
Lesson Frame: Read and Create Bar Graphs with Multi Digit Numbers	I can analyze to create horizontal and vertical bar graphs.
Lesson Frame: Represent and Organize Data	I can construct and analyse frequency tables and line plots.
Lesson Frame: Use Graphs to Solve Time and Measurement Problems	I can solve word problems using data in line plots and scaled bar graphs.
Performance Tasks: Quick Quiz 3, Remembering pages, weekly fact fluency checks, Unit 3 Review, Unit 3 Test	Notes:

Unit 4 Name: **Multidigit Addition and Subtraction**	**Length:** 25 days
Standards: CC.3.NBT.1, CC.3.NBT.2	**Outcomes:** Students understand every number in a multidigit number has a value based on its location. Students know that each place value implies 10 units. Students interpret sums and differences of larger digit numbers in real world problems.
Essential Questions: How does place value support addition and subtraction? How can you use addition and subtraction to solve problems? What does it mean when a number is rounded? In what situations would rounding/estimating numbers be useful?	**Learning Targets:** Students use place value understanding to round whole numbers to the nearest 10 and 100. Students fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
Topic 1: **Understand Place Value and Rounding**	**Length:** 7 days
Standards: CC.3.NBT.1, CC.3.NBT.2	**Academic Vocabulary:** Place value, place value drawing, ten stick, hundred stick, thousand bar
Lesson Frame: Make Place Value Drawings	I can make and interpret place value drawings.
Lesson Frame: Build Numbers	I can identify the value of a digit.
Lesson Frame: Place Value in Word Problems	I can use an understanding of place value to group and ungroup multi digit numbers and solve word problems.
Lesson Frame: Practice with Place Value	I can identify numbers from scrambled place value names and solve word problems.
Lesson Frame: Round to the Nearest Hundred	I can round numbers to the nearest hundred to estimate sums and differences.
Lesson Frame: Round to the Nearest Ten	I can round numbers to the nearest ten to estimate sums and differences.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: **Addition and Subtraction Strategies and Group to Add**	**Length:** 6 days
Standard(s): CC.3.NBT.1, CC.3.NBT.2	**Academic Vocabulary:** proof drawing, show all totals method, new groups below method, new groups above method, expression, grouping
Lesson Frame: Explore Multidigit Addition	I can discuss and apply multidigit addition methods.
Lesson Frame: Discuss Addition Methods	I can apply and discuss multidigit addition methods with place value alignment.
Lesson Frame: The Grouping Concept in Addition	I can decide when and how to group in multidigit addition.
Lesson Frame: Practice Addition	I can identify and explain errors in addition and solve word problems.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks	Notes:

Topic 3: **Ungroup to Subtract**	**Length:** 12 days
Standards: CC.3.OA.8, CC.3.OA.9, CC.3.NBT.1, CC.3.NBT.2	**Academic Vocabulary:** ungrouping, subtract, grouping, math mountain, addend, total, associative property of addition, commutative property of addition, identity property of addition
Lesson Frame: Ungroup to Subtract	I can explore methods for subtracting multi digit numbers.
Lesson Frame: Subtract Across Zeros	I can subtract with zeros in the top number.
Lesson Frame: Discuss Methods of Subtracting	I can subtract using two different methods.
Lesson Frame: Relate Addition and Subtraction	I can relate grouping in addition and ungrouping in subtraction.
Lesson Frame: Subtraction Practice	I can practice and discuss subtraction methods.
Lesson Frame: Addition and Subtraction Practice	I can practice and discuss addition and subtraction methods.
Lesson Frame: Solve Word Problems	I can solve word problems that involve two or more steps and assess reasonableness.
Performance Tasks: Quick Quiz 3, Remembering pages, weekly fact fluency checks	Notes:

Unit 5 Name: **Write Equations to Solve Word Problems**	**Length:** 17 days
Standards: CC.3.OA.3, CC.3.OA.4, CC.3.OA.8, CC.3.NBT.1, CC.3.NBT.2	**Outcomes:** Students use drawings and equations with a symbol for the unknown number to represent the problem. Students use information presented in scaled bar graphs to solve comparison problems. Students will use properties of operations to explain patterns.
Essential Questions: How can visual models and equations assist you in solving for the unknown in word problems? How can using the properties of operations help you to explain patterns in one and two step word problems, solve them, and write equations of your own?	**Learning Targets:** Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities. Solve two-step word problems using the four operations. Solve one- and two-step "how many more" and "how many less" problems. Identify arithmetic patterns (including patterns in the addition table or multiplication table).
Topic 1: **Addition and Subtraction Situations**	**Length:** 9 days
Standard(s): CC.3.OA.3, CC.3.OA.4, CC.3.NBT.1, CC.3.NBT.2	**Academic Vocabulary:** unknown addend, equation, total, sum, equality, inequality, addend, add to, take from, put together/take apart, expression, unknown start, situation equation, solution equation, compare, equal to (=), greater than (>), comparison problem, comparison bars, unknown amount
Lesson Frame: Addition and Subtraction Situations	I can solve addition and subtraction word problems.
Lesson Frame: Word Problems with Unknown Addends or Unknown Factors	I can represent and solve word problems with unknown addends and unknown factors.
Lesson Frame: Word Problems with Unknown Starts	I can solve word problems with unknown starts and write situation and solution equations for word problems.
Lesson Frame: Comparison Problems	I can solve comparison word problems.
Lesson Frame: Comparison Problems with Misleading Language	I can represent and solve comparison word problems with misleading language.
Lesson Frame: Word Problems with Extra, Hidden, or Not Enough Information	I can represent and solve word problems with extra, hidden or not enough information.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: **Solve Two Step Word Problems**	**Length:** 9 days

Standard(s): CC.3.OA.3, CC.3.OA.8, CC.3.NBT.2	**Academic Vocabulary:** Associative Property of Addition, Commutative Property of Addition, Identity Property of Addition, Associative Property of Multiplication, Commutative Property of Multiplication, Identity Property of Multiplication, Zero Property of Multiplication, Distributive Property of Multiplication
Lesson Frame: Write First Step Questions for Two Step Problems	I can use addition subtraction multiplication, and division to solve two step problems.
Lesson Frame: Solve Two Step Word Problems	I can solve word problems requiring two steps.
Lesson Frame: Equations and Two Step Word Problems	I can Solve word problems requiring two operations.
Lesson Frame: Practice with Two Step Word Problems	I can solve word problems using two step equations and decide if answers are reasonable.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks Unit 5 Review, Unit 5 Test	Notes:

Unit 6 Name: **Polygons, Perimeter, and Area**	**Length:** 17 days
Standard(s): CC.3.G.1, CC.3.G.2, CC.3.MD.5, CC.3.MD.5a, CC.3.MD.5b, CC.3.MD.6, CC.3.MD.7, CC.3.MD.7a, CC.3.MD.7b, CC.3.MD.7c, CC.3.MD.7d, CC.3.MD.8, CC.3.G.1	**Outcomes:** Students identify, classify, and describe properties of standard two-and three-dimensional shapes independently in order to recognize geometry in the world around them. Students use their understanding of geometric measurement and use the concept of area to relate area to multiplication and division. Students recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Essential Questions: What is a solid figure? How can you describe parts of solid figures? What is a polygon? How can you describe triangles? What are some special names for quadrilaterals? How can you use the attributes of two- and three-dimensional shapes to classify them? What are some ways to determine the area of rectangles? How are perimeter and area related? How do we use multiplication to find area?	**Learning Targets:** Recognize attributes of triangles, quadrilaterals, and other polygons. Decompose polygons into triangles and compose polygons from triangles. Recognize perimeter and area as attributes of plane figures and find ways to measure both attributes. Investigate the relationship between perimeter and area. Solve real world problems involving area, perimeter, and unknown side lengths.
Topic 1: **Analyzing Triangles and Quadrilaterals**	**Length:** 5 days
Standard(s): CC.3.G.1, CC.3.G2	**Academic Vocabulary:** angle, concave, convex, decagon, hexagon, octagon, polygon, pentagon, ray, right angle, opposite, parallelogram, rectangle, rhombus, square, trapezoid, parallel, quadrilateral,
Lesson Frame: Triangles	I can understand the relationship between angles, triangles, and polygons.
Lesson Frame: Parallelograms, Rectangles, Square, and Rhombuses	I can explore the relationships among parallelograms, rectangles, squares, rhombuses, and trapezoids.
Lesson Frame: Draw Quadrilaterals	I can draw quadrilaterals.
Lesson Frame: Classify Quadrilaterals	I can describe the relationships among various types of quadrilaterals and draw quadrilaterals that match a description.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: **Area and Perimeter**	**Length:** 11 days

Standard(s): CC.3.G.1, CC.3.MD.5, CC.3.MD.5a, CC.3.MD.5b, CC.3.MD.6, CC.3.MD.7, CC.3.MD.7a, CC.3.MD.7b, CC.3.MD.7c, CC.3.MD.7d, CC.3.MD.8, CC.3.G.1	**Academic Vocabulary:** area, perimeter, unit square, side length, decompose, rectilinear polygon, dimensions, tangram
Lesson Frame: Perimeter and Area	I can develop concepts of perimeter and area.
Lesson Frame: Side Lengths with Area and Perimeter	I can use side lengths in area and perimeter calculations and problems.
Lesson Frame: Compare Areas and Perimeters	I can recognize that rectangles with the same perimeter can have different areas, and rectangles with the same area can have different perimeters.
Lesson Frame: Area of Rectilinear Figures	I can find the area of figures by decomposing them into rectangles.
Lesson Frame: Solve Perimeter and Area Problems	I can use concepts of perimeter and area to solve real world problems.
Lesson Frame: Tangram Shapes and Area	I can use tangram shapes to find areas of figures.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks, Unit 6 Review, Unit 6 Test	Notes:

Unit 7 Name: **Explore Fractions**	**Length:** 16 days
Standards: CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2, CC.3.NF.3a, CC.3.NF.3b, CC.3.NF.3c, CC.3.NF.3d	**Outcomes:** Students develop and understanding of fractions as numbers, and like whole numbers fractions have a place on the number line. Students refer to a fraction as relative to the size of the whole, and know that different but equivalent fractions can be used to represent the same amount. Students can now independently use their learning to represent and interpret real world items as fractional parts by reasoning with shapes and their attributes.
Essential Questions: What is a unit fraction? How do we use a number line to show fractions? How can fractions be used to represent numbers and their parts? How can we show equivalent fractions? How can we compare fractions with the same numerator or the same denominator?	**Learning Targets:** Understand the meaning of fractions and see that fractions must be equal parts of the same whole. Build non-unit fractions from unit fractions. Represent fractions in various ways, including fraction bars, number lines, and fraction strips. Compare unit fractions and compare fractions with either the same numerator or the same denominator. Find equivalent fractions.
Topic 1: **Fraction Concepts**	**Length**: 8 days
Standards: CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2	**Academic Vocabulary:** fraction, numerator, denominator, unit fraction, whole, number line, locate
Lesson Frame: Understand Fractions	I can develop a conceptual understanding of unit fractions and how they are used to build other fractions.
Lesson Frame: Model Fractions	I can use fraction bars and number lines to represent fractions.
Lesson Frame: Locate Fractions on the Number Line	I can locate fractions on the number line.
Lesson Frame: Compare Unit Fractions	I can use fraction bars and number lines to compare unit fractions.
Lesson Frame: Compare Fractions	I can use fraction circles to develop understanding of comparing fractions with the same denominator or with the same numerator.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: **Equivalent Fractions**	**Length:** 8 days
Standard(s): CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2, CC.3.NF.3a, CC.3.NF.3b, CC.3.NF.3c, CC.3.NF.3d	**Academic Vocabulary:** equivalent fractions, denominator, numerator, equivalence chain, equivalent
Lesson Frame: Introduce Equivalence	I can develop understanding of equivalent fractions.
Lesson Frame: Equivalent Fractions	I can find two or more equivalent fractions using number lines.
Lesson Frame: Problem Solving with Fractions	I can use fraction concepts to solve real world problems.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks, Unit 7 Review, Unit 7 Test	Notes:

Unit Name: **Geometry**	**Length:** 13 days
Standards: CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	**Outcomes:** Students classify and draw angles, triangles, and quadrilaterals. They identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.
Essential Questions: How are the different types of lines and angles related to the creation of polygons?	**Learning Targets:** Use a protractor to measure angles. Use an equation with a symbol for an unknown angle measure.
Topic 1: **Measuring and Drawing Angles**	**Length:** 3 days
Standard(s): CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1	**Academic Vocabulary:** point, line, line segment, endpoint, angle, ray, vertex, right angle, acute angle, obtuse angle, straight angle, degree, protractor, circle, reflex angle
Lesson Frame: Points, Rays, and Angles	I can draw and describe points, rays, angles, and other simple geometric figures.
Lesson Frame: Measuring Angles	I can draw and measure angles.
Lesson Frame: Circles and Angles	I can identify, measure, and draw angles in a circle.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Triangles and Angle Measurements**	**Length:** 3 days
Standard(s): CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2	**Academic Vocabulary:** triangle, right triangle, obtuse triangle, acute triangle, congruent, equilateral triangle, isosceles triangle, scalene triangle,adjacent angles, compose, decompose
Lesson Frame: Name Triangles	I can draw and classify triangles by their angles and sides.
Lesson Frame: Compose and Decompose Angles	I can find unknown angle measures.
Lesson Frame: Real World Problems	I can add and subtract angle measures in real world situations.
Performance Tasks: Quick Quiz 2	Notes:
Topic 3: **Analyzing Quadrilaterals**	**Length:** 3 days
Standard(s): CC.4.G.1, CC.4.G.2	**Academic Vocabulary:** parallel, perpendicular, quadrilateral, adjacent, opposite, trapezoid, parallelogram, rhombus, rectangle, square, diagonal, congruent, vertex
Lesson Frame: Parallel and Perpendicular Lines and Line Segments	I can demonstrate understanding of parallel and perpendicular figures.
Lesson Frame: Classify Quadrilaterals	I can name and classify quadrilaterals based on sides and angles.
Lesson Frame: Decompose Quadrilaterals and Triangles	I can decompose quadrilaterals and triangles into other figures.

Performance Tasks: Quick Quiz 3	Notes:
Topic 4: **Analyzing Polygons**	**Length:** 4 days
Standard(s): CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	**Academic Vocabulary:** polygon, line symmetry, line of symmetry
Lesson Frame: Classify Polygons	I can sort triangles and quadrilaterals by a number of different rules.
Lesson Frame: Line Symmetry	I can recognize and draw lines of symmetry and determine when figures have line symmetry.
Lesson Frame: Unit Review and Test	I can classify and draw angles, triangles, and quadrilaterals and identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.
Performance Tasks: Quick Quiz 4, Unit 8 Review, Unit 8 Test	Notes:

Course Name:	4th Grade Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	In Grade 4, instructional time focuses on four critical areas: 1) develop an understanding of strategies used in solving multidigit multiplication and division problems, 2) develop an understanding of fractions and how to compare them, 3) develop an understanding of converting Customary and metric units of measurement, and 4) develop an understanding of basic geometry (lines, angles, polygons, etc).		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Place Value and Multidigit Addition and Subtraction	15 days	CC.4.NBT.1, CC.4.NBT.2, CC.4.NBT.3, CC.4.NBT.4, CC.4.OA.3, CC.4.MD.2	Students use place value to compare and round multidigit numbers. They use place value concepts and grouping and ungrouping methods to add and subtract multidigit numbers.
Multiplication with Whole Numbers	20 days	CC.4.NBT.1, CC.4.NBT.2, CC.4.NBT.3, CC.4.NBT.5, CC.4.OA.3, CC.4.MD.2	Students use place value, area models, and numerical methods to multiply one-digit numbers by two-, three-, and four-digit numbers. They also solve two-digit by two-digit multiplication problems.
Division with Whole Numbers	12 days	CC.NBT.3, CC.4.NBT.6, CC.4.OA.3	Students adapt methods they learned for multiplying to divide with whole numbers. They interpret quotients and remainders in the context of real world problems.
Equations and Word Problems	13 days	CC.4.NBT.4, CC.4.NBT.5, CC.4.NBT.6, CC.4.MD.2, CC.4.OA.1, CC.4.OA.2, CC.4.OA.3, CC.4.OA.4, CC.4.OA.5	Students write and solve equations to solve real world problems involving addition, subtraction, multiplication, and division. They also find factors and multiples of whole numbers, and identify and extend numerical and geometric patterns.
Measurement	9 days	CC.4.MD.1, CC.4.MD.2, CC.4.MD.3, CC.4.MD.4	Students develop their understanding of U.S. Customary and metric measurement units, including converting from larger units to smaller units. Students apply their knowledge to area and perimeter formulas.
Fraction Concepts and Operations	11 days	CC.4.NF.2, CC.4.NF.3, CC.4.NF.3a, CC.4.NF.3b, CC.4.NF.3c, CC.4.NF.3d, CC.4.NF.4, CC.4.NF.4a, CC.4.NF.4b, CC.4.NF.4c, CC.4.MD.2, CC.4.MD.4	Students apply fraction concepts to add and subtract fractions and mixed numbers with like denominators and multiply whole numbers by fractions.

Fraction and Decimals	14 days	CC.4.NF.1, CC.4.NF.2, CC.4.NF.5, CC.4.NF.6, CC.4.NF.7, CC.4.MD.2, CC.4.MD.4	Students compare fractions with like and unlike denominators. They model related fractions, mixed numbers, and decimals.
Geometry	13 days	CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	Students classify and draw angles, triangles, and quadrilaterals. They identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.

Unit 1 Name: **Place Value and Multidigit Addition and Subtraction**	**Length:** 15 days
Standards: CC.4.NBT.1, CC.4.NBT.2, CC.4.NBT.3, CC.4.NBT.4, CC.4.OA.3, CC.4.MD.2	**Outcomes:** Students use place value to compare and round multidigit numbers. They use place value concepts and grouping and ungrouping methods to add and subtract multidigit numbers.
Essential Questions: How does place value understanding assist in addition and subtraction computation?	**Learning Targets:** Use place value drawings to help them conceptualize numbers and understand the relative sizes of place values. Use different methods to add and subtract whole numbers.
Topic 1: **Place Value to One Million**	**Length:** 5 days
Standard(s): CC.4.NBT.1, CC.4.NBT.2, CC.4.NBT.3	**Academic Vocabulary:** place value drawings, dot array, digit, standard form, word form, expanded form, greater than, less than
Lesson Frame: Place Value to Thousands	I can identify the place value of numbers through thousands.
Lesson Frame: Place Value Patterns	I can read, write, and model numbers to thousands.
Lesson Frame: Round Numbers	I can round and compare multidigit whole numbers by value of the digits in each place.
Lesson Frame: Numbers to One Million	I can identify the place value of numbers to one million.
Lesson Frame: Compare and Round Greater Numbers	I can compare and round multidigit whole numbers.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Addition with Greater Numbers**	**Length:** 3 days
Standard(s): CC.4.NBT.3, CC.4.NBT.4, CC.4.OA.3, CC.4.MD.2	**Academic Vocabulary:** groups, sum, digit
Lesson Frame: Make New Groups for Addition	I can add four digit numbers.
Lesson Frame: Add Greater Numbers	I can add multidigit numbers.
Lesson Frame: Estimation and Mental Math	I can add using estimation and mental math.
Performance Tasks: Quick Quiz 2	Notes:
Topic 3: **Subtraction with Greater Numbers**	**Length:** 7 days
Standard(s): CC.4.NBT.3, CC.4.NBT.4, CC.4.OA.3, CC.4.MD.2	**Academic Vocabulary:** difference, inverse operations, addend
Lesson Frame: Subtract from Thousands	I can subtract multi digit whole numbers.
Lesson Frame: Subtraction Undoes Addition	I can relate subtraction to addition.

Lesson Frame: Subtract Greater Numbers	I can use methods for ungrouping to subtract any size numbers.
Lesson Frame: Practice Addition and Subtraction	I can add and subtract multi digit numbers.
Lesson Frame: Problem Solving with Greater Numbers	I can solve addition and subtraction word problems with greater numbers.
Performance Tasks: Quick Quiz 3, Unit 1 Review, Unit 1 Test	Notes:

Unit 2 Name: **Multiplication With Whole Numbers**	**Length:** 20 days
Standards: CC.4.NBT.1, CC.4.NBT.2, CC.4.NBT.3, CC.4.NBT.5, CC.4.OA.3, CC.4.MD.2	**Outcomes:** Students use place value, area models, and numerical methods to multiply one-digit numbers by two-, three-, and four-digit numbers. They also solve two-digit by two-digit multiplication problems.
Essential Questions: How can visual models assist you in solving multidigit multiplication problems?	**Learning Targets:** Draw visual array and area diagrams to represent multiplication. Reason repeatedly about the connection between math drawings and written numerical work. See that multiplication and division algorithms are summaries of their reasoning about quantities.
Topic 1: **Multiplication with Tens and Hundreds**	**Length:** 3 days
Standard(s): CC.4.NBT.1, CC.4.NBT.5	**Academic Vocabulary:** array, area, area model, square unit, factor, product
Lesson Frame: Arrays and Area Models	I can use area models for multiplication of ones and tens.
Lesson Frame: Connect Place Value and Multiplication	I can use place value understanding to multiply tens.
Lesson Frame: Mental Math and Multiplication	I can use patterns in multiplication with ones, tens, and hundreds.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Multiply by One-Digit Numbers**	**Length:** 8 days
Standard(s): CC.4.NBT.2, CC.4.NBT.3, CC.4.NBT.5, CC.4.OA.3, CC.4.MD.2	**Academic Vocabulary:** estimate, rounding, place value section method, expanded notation method, Distributive Property, partial products, Algebraic Notation Method, Shortcut Method
Lesson Frame: Model One-Digit by Two-Digit Multiplication	I can represent one-digit by two-digit multiplication using area models.
Lesson Frame: Estimate Products	I can use estimation and multiplication with tens to check products and solve real world word problems.
Lesson Frame: Use Place Value to Multiply	I can relate the area model of multiplication to numerical methods of multiplication.
Lesson Frame: Algebraic Notation Method	I can relate the Distributive Property to multiplication.
Lesson Frame: Compare Methods of One-Digit by Two-Digit Multiplication	I can use area models and numerical methods of multiplication.
Lesson Frame: Discuss Different Methods	I can compare and analyze methods of multiplication.
Lesson Frame: One-Digit by Three-Digit Multiplication	I can model one-digit by three-digit multiplication.
Lesson Frame: Multi Step Word Problems	I can solve real world problems.

Performance Tasks: Quick Quiz 2	Notes:
Topic 3: **Multiplication with Two-Digit Numbers**	**Length:** 4 days
Standard(s): CC.4.NBT.2, CC.4.NBT.5, CC.4.OA.3	**Academic Vocabulary:** No new vocabulary
Lesson Frame: Two-Digit by Two-Digit Multiplication	I can represent two-digit by two-digit multiplication using area models.
Lesson Frame: Different Methods for Two-Digit Multiplication	I can use different methods of two-digit by two-digit multiplication.
Lesson Frame: Check Products of Two-Digit Numbers	I can compare methods of multiplication and estimate products of two-digit numbers.
Lesson Frame: Practice Multiplication	I can practice two-digit by two-digit multiplication.
Performance Tasks: Quick Quiz 3	Notes:
Topic 4: **Multiplication with Thousands**	**Length:** 5 days
Standard(s): CC.4.NBT.2, CC.4.NBT.3, CC.4.NBT.5, CC.4.OA.3, CC.4.MD.2	**Academic Vocabulary:** No new vocabulary
Lesson Frame: Multiply One-Digit and Four-Digit Numbers	I can multiply with thousands.
Lesson Frame: Use the Shortcut Method	I can multiply one-digit numbers by four-digit numbers.
Lesson Frame: Practice Multiplication	I can perform multi digit multiplication with up to one-digit by four-digits.
Performance Tasks: Quick Quiz 4, Unit 2 Review, Unit 2 Test	Notes:

Unit 3 Name: **Division With Whole Numbers**	**Length:** 12 days
Standards: CC.NBT.3, CC.4.NBT.6, CC.4.OA.3	**Outcomes:** Students adapt methods they learned for multiplying to divide with whole numbers. They interpret quotients and remainders in the context of real world problems.
Essential Questions: How can visual models assist you in solving multidigit division problems? What is the relationship between multiplication and division?	**Learning Targets:** Draw visual array and rectangle diagrams to represent multiplication. Reason repeatedly about the connection between math drawings and written numerical work. See that division algorithms are summaries of their reasoning about quantities.
Topic 1: **Dividing Whole Numbers**	**Length:** 6 days
Standard(s): CC.4.NBT.6	**Academic Vocabulary:** divisor, dividend, quotient
Lesson Frame: Divide With Remainders	I can divide with remainders. I can use multiplication patterns to divide with zeros.
Lesson Frame: Relate 3-Digit Multiplication to Division	I can use multiplication methods to divide.
Lesson Frame: Discuss 2-Digit and 4-Digit Quotients	I can divide with 2-digit and 4-digit quotients.
Lesson Frame: Digit-by-Digit Method	I can use the Digit-by-Digit Method to divide.
Lesson Frame: Relate Three Methods	I can divide with 4-digit dividends.
Lesson Frame: Divide by Any Method	I can solve division problems by using any method.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Division Issues and Word Problems**	**Length:** 6 days
Standard(s): CC.NBT.3, CC.4.NBT.6, CC.4.OA.3	**Academic Vocabulary:** situation equation, solution equation
Lesson Frame: Just-Under Quotient Digits	I can determine the correct-size multiplier for a division quotient.
Lesson Frame: Estimate to Check Quotients	I can use rounding and estimation to check quotients.
Lesson Frame: Make Sense of Remainders	I can understand different ways to interpret remainders in division.
Lesson Frame: Mixed Problem Solving	I can solve word problems with mixed operations.
Performance Tasks: Quick Quiz 2, Unit 3 Review, Unit 3 Test	Notes:

Unit 4 Name: **Equations and Word Problems**	**Length:** 13 days
Standards: CC.4.NBT.4, CC.4.NBT.5, CC.4.NBT.6, CC.4.MD.2, CC.4.OA.1, CC.4.OA.2, CC.4.OA.3, CC.4.OA.4, CC.4.OA.5	**Outcomes:** Students write and solve equations to solve real world problems involving addition, subtraction, multiplication, and division. They also find factors and multiples of whole numbers, and identify and extend numerical and geometric patterns.
Essential Questions: How can real world problems be represented in an equation?	**Learning Targets:** Use drawings and equations with a symbol for the unknown number to represent the problem. Represent verbal statements of multiplicative comparisons as multiplication equations. Write equations to represent problems with more than one step.
Topic 1: **Reasoning and Solving Problems**	**Length:** 3 days
Standard(s): CC.4.NBT.4, CC.4.NBT.5, CC.4.NBT.6, CC.4.MD.2	**Academic Vocabulary:** expression, equation, simplify, term, evaluate, sum, difference, inverse operations, break-apart drawing, situation equation, solution equation, factor pair.
Lesson Frame: Properties and Algebraic Notation	I can demonstrate an understanding of properties and algebraic notation.
Lesson Frame: Situation and Solution Equations for Addition and Subtraction	I can read, write, and solve addition and subtraction equations.
Lesson Frame: Situation and Solution Equations for Multiplication and Division	I can write equations to solve multiplication and division problems.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Comparison Word Problems**	**Length:** 3 days
Standard(s): CC.4.OA.1, CC.4.OA.2	**Academic Vocabulary:** compare, comparison bars, comparison situation, fewer, pictograph
Lesson Frame: Multiplication Comparisons	I can write and solve multiplication and division equations for comparison problems.
Lesson Frame: Discuss Comparison Problems	I can write, solve, and compare addition and multiplication comparison problems.

Lesson Frame: Graphs and Comparison Problems	I can answer comparison questions about a pictograph and a bar graph.
Performance Tasks: Quick Quiz 2	Notes:
Topic 3: **Problems with More Than One Step**	**Length:** 3 days
Standard(s): CC.4.OA.3	**Academic Vocabulary:** No new vocabulary
Lesson Frame: Solve Two-Step Problems	I can use equations to solve two-step word problems involving all four operations.
Lesson Frame: Solve Multi-Step Problems	I can use equations to solve multi-step word problems involving all four operations.
Lesson Frame: Practice with Multi Step Problems	I can use addition, subtraction, multiplication, and division to solve problems that involve more than one step.
Performance Tasks: Quick Quiz 3	Notes:
Topic 4: **Analyzing Patterns**	**Length:** 4 days
Standard(s): CC.4.NBT.4, CC.4.NBT.5, CC.4.NBT.6, CC.4.MD.2, CC.4.OA.1, CC.4.OA.2, CC.4.OA.3, CC.4.OA.4, CC.4.OA.5	**Academic Vocabulary:** prime number, composite number, multiple, pattern, sequence, term
Lesson Frame: Factors and Prime Numbers	I can practice with factors, multiples, and prime and composite numbers.
Lesson Frame: Analyze Patterns	I can generate number or shape patterns.
Performance Tasks: Quick Quiz 4, Unit 4 Review, Unit 4 Test	Notes:

Unit 5 Name: **Measurement**	**Length:** 9 days
Standards: CC.4.MD.1, CC.4.MD.2, CC.4.MD.3, CC.4.MD.4	**Outcomes:** Students develop their understanding of U.S. Customary and metric measurement units, including converting from larger units to smaller units. Students apply their knowledge to area and perimeter formulas.
Essential Questions: How does converting units of measurement (both U.S. Customary and metric) relate to equivalent quantities? How does finding area and perimeter relate to real world situations?	**Learning Targets:** Use a two column table to record measurement equivalents. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. Apply the perimeter and area formulas for rectangles in real world and mathematical problems.
Topic 1: **Converting Measurements**	**Length:** 5 days
Standard(s): CC.4.MD.1, CC.4.MD.2, CC.4.MD.4	**Academic Vocabulary:** millimeter, centimeter, decimeter, meter, kilometer, prefixes, metric system, liquid volume, liter, kiloliter, milliliter, mass, gram, kilogram, milligram, line plot, inch, foot, yard, mile, pound, ounce, tom, cup, fluid ounce, quart, pint, gallon
Lesson Frame: Measure Length	I can explore the system of metric units of length.
Lesson Frame: Metric Measures of Liquid Volumes and Mass	I can recognize and measure metric units of liquid volume and mass.
Lesson Frame: Units of Time	I can solve problems involving different units of time.
Lesson Frame: Customary Measures of Length	I can apply knowledge of customary units of length.
Lesson Frame: Customary Measures of Weight and Liquid Volume	I can understand and use customary units of weight and liquid volume.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Perimeter and Area**	**Length:** 4 days
Standard(s): CC.4.MD.1, CC.4.MD.2, CC.4.MD.3	**Academic Vocabulary:** perimeter, length, width, formula, area, square unit
Lesson Frame: Perimeter and Area of Rectangles	I can explore the general methods for finding perimeter and area of rectangles.
Lesson Frame: Solve Measurement Problems	I can solve real world measurement word problems involving all four operations.
Performance Tasks: Quick Quiz 2, Unit 5 Review, Unit 5 Test	Notes:

Unit 6 Name: **Fraction Concepts and Operations**	**Length:** 11 days
Standards: CC.4.NF.2, CC.4.NF.3, CC.4.NF.3a, CC.4.NF.3b, CC.4.NF.3c, CC.4.NF.3d, CC.4.NF.4, CC.4.NF.4a, CC.4.NF.4b, CC.4.NF.4c, CC.4.MD.2, CC.4.MD.4	**Outcomes:** Students apply fraction concepts to add and subtract fractions and mixed numbers with like denominators and multiply whole numbers by fractions.
Essential Questions: How can fraction models be used to make comparisons? How can fraction models be used to solve addition and subtraction problems?	**Learning Targets:** Decompose a fraction into a sum of fractions with the same denominator in more than one way. Justify decompositions by using a visual fraction model. Use visual fraction models and equations to represent a problem.
Topic 1: **Fractions with Like Denominators**	**Length:** 3 days
Standard(s): CC.4.NF.2, CC.4.NF.3, CC.4.NF.3a, CC.4.NF.3b, CC.4.NF.3d, CC.4.NF.4a, CC.4.MD.2	**Academic Vocabulary:** unit fraction, fraction numerator, denominator
Lesson Frame: Understand Fractions	I can understand fractions as sums of unit fractions.
Lesson Frame: Fractions that Add to One	I can find pairs of fractions that add to one.
Lesson Frame: Add and Subtract Fractions with Like Denominators	I can add and subtract fractions with like denominators.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Mixed Numbers with Like Denominators**	**Length:** 3 days
Standard(s): CC.4.NF.2, CC.4.NF.3, CC.4.NF.3a, CC.4.NF.3b, CC.4.NF.3c, CC.4.NF.3d, CC.4.NF.4a, CC.4.MD.2, CC.4.MD.4	**Academic Vocabulary:** mixed number
Lesson Frame: Mixed Numbers and Fractions Greater Than 1	I can understand mixed numbers and fractions greater than 1.
Lesson Frame: Add and Subtract Mixed Numbers with Like Denominators	I can understand addition and subtraction with fractions greater than 1 and mixed numbers.
Lesson Frame: Practice with Fractions and Mixed Numbers	I can solve problems involving addition and subtraction of fractions and mixed numbers.
Performance Tasks:	Notes:

Topic 3: **Multiply Fractions and Whole Numbers**	**Length:** 4 days
Standard(s): CC.4.NF.2, CC.4.NF.3, CC.4.NF.3a, CC.4.NF.3b, CC.4.NF.3c, CC.4.NF.3d, CC.4.NF.4, CC.4.NF.4a, CC.4.NF.4b, CC.4.NF.4c, CC.4.MD.2	**Academic Vocabulary:** No new vocabulary
Lesson Frame: Multiply a Fraction by a Whole Number	I can understand multiplication of fractions by whole numbers.
Lesson Frame: Practice Multiplying a Fraction by a Whole Number	I can solve problems that require multiplying a fraction by a whole number.
Lesson Frame: Mixed Practice	I can practice operations with fractions.
Lesson Frame: Review and Test	I can apply fraction concepts to add and subtract fractions and mixed numbers with like denominators and multiply whole numbers by fractions.
Performance Tasks: Quick Quiz 3, Unit 6 Review, Unit 6 Test	Notes:

Unit 7 Name: **Fraction and Decimals**	**Length:** 14 days
Standards: CC.4.NF.1, CC.4.NF.2, CC.4.NF.5, CC.4.NF.6, CC.4.NF.7, CC.4.MD.2, CC.4.MD.4	**Outcomes:** Students compare fractions with like and unlike denominators. They model related fractions, mixed numbers, and decimals.
Essential Questions: How does creating common denominators or numerators assist in comparing fractions?	**Learning Targets:** Use visual fraction models to explain equivalent fractions. Create common denominators or numerators by comparing to a benchmark to compare fractions. Use the symbols >, <, or = to compare fractions and justify conclusions using a visual model.
Topic 1: **Comparing Fractions**	**Length:** 3 days
Standard(s): CC.4.NF.2	**Academic Vocabulary:** No new vocabulary.
Lesson Frame: Compare Fractions	I can compare non-unit fractions.
Lesson Frame: Fractions on the Number Line	I can use the number line model for fractions.
Lesson Frame: Fractions of Different-Size Wholes	I can understand that the size of a fraction depends on the size of the whole.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Equivalent Fractions**	**Length:** 4 days
Standard(s): CC.4.NF.1, CC.4.NF.2, CC.4.NF.5, CC.4.MD.4	**Academic Vocabulary:** equivalent fractions, simplify, common denominator
Lesson Frame: Equivalent Fractions Using Multiplication	I can find equivalent fractions using multiplication.
Lesson Frame: Equivalent Fractions Using Division	I can find equivalent fractions using division.
Lesson Frame: Compare Fractions with Unlike Denominators	I can compare fractions with unlike denominators.
Lesson Frame: Fractions and Line Plots	I can make and use line plots with fractions.
Performance Task: Quick Quiz 2	Notes:
Topic 3: **Understanding Decimals**	**Length:** 7 days
Standard(s): CC.4.NF.1, CC.4.NF.2, CC.4.NF.6, CC.4.NF.7, CC.4.MD.2, CC.4.MD.4	**Academic Vocabulary:** tenths, hundredths, decimal number
Lesson Frame: Relate Fractions and Decimals	I can model related fractions, decimals, and mixed numbers.
Lesson Frame: Explore Decimal Numbers	I can recognize equivalent tenths and hundredths and model decimal numbers.

Lesson Frame: Compare Decimals to Hundredths	I can write and compare decimals in tenths and in hundredths.
Lesson Frame: Decimals Greater Than 1	I can read, write, and model decimals greater than 1.
Lesson Frame: Compare Decimals Greater Than 1	I can compare decimal numbers.
Lesson Frame: Unit Review and Test	I can compare fractions with like and unlike denominators and model related fractions, mixed numbers, and decimals.
Performance Tasks: Quick Quiz 3, Unit 7 Review, Unit 7 Test	Notes:

Unit Name: **Geometry**	**Length:** 13 days
Standards: CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	**Outcomes:** Students classify and draw angles, triangles, and quadrilaterals. They identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.
Essential Questions: How are the different types of lines and angles related to the creation of polygons?	**Learning Targets:** Use a protractor to measure angles. Use an equation with a symbol for an unknown angle measure.
Topic 1: **Measuring and Drawing Angles**	**Length:** 3 days
Standard(s): CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1	**Academic Vocabulary:** point, line, line segment, endpoint, angle, ray, vertex, right angle, acute angle, obtuse angle, straight angle, degree, protractor, circle, reflex angle
Lesson Frame: Points, Rays, and Angles	I can draw and describe points, rays, angles, and other simple geometric figures.
Lesson Frame: Measuring Angles	I can draw and measure angles.
Lesson Frame: Circles and Angles	I can identify, measure, and draw angles in a circle.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: **Triangles and Angle Measurements**	**Length:** 3 days
Standard(s): CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2	**Academic Vocabulary:** triangle, right triangle, obtuse triangle, acute triangle, congruent, equilateral triangle, isosceles triangle, scalene triangle,adjacent angles, compose, decompose
Lesson Frame: Name Triangles	I can draw and classify triangles by their angles and sides.
Lesson Frame: Compose and Decompose Angles	I can find unknown angle measures.
Lesson Frame: Real World Problems	I can add and subtract angle measures in real world situations.
Performance Tasks: Quick Quiz 2	Notes:
Topic 3: **Analyzing Quadrilaterals**	**Length:** 3 days
Standard(s): CC.4.G.1, CC.4.G.2	**Academic Vocabulary:** parallel, perpendicular, quadrilateral, adjacent, opposite, trapezoid, parallelogram, rhombus, rectangle, square, diagonal, congruent, vertex
Lesson Frame: Parallel and Perpendicular Lines and Line Segments	I can demonstrate understanding of parallel and perpendicular figures.

Lesson Frame: Classify Quadrilaterals	I can name and classify quadrilaterals based on sides and angles.
Lesson Frame: Decompose Quadrilaterals and Triangles	I can decompose quadrilaterals and triangles into other figures.
Performance Tasks: Quick Quiz 3	Notes:
Topic 4: **Analyzing Polygons**	**Length:** 4 days
Standard(s): CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	**Academic Vocabulary:** polygon, line symmetry, line of symmetry
Lesson Frame: Classify Polygons	I can sort triangles and quadrilaterals by a number of different rules.
Lesson Frame: Line Symmetry	I can recognize and draw lines of symmetry and determine when figures have line symmetry.
Lesson Frame: Unit Review and Test	I can classify and draw angles, triangles, and quadrilaterals.and identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.
Performance Tasks: Quick Quiz 4, Unit 8 Review, Unit 8 Test	Notes:

Course Name:	5th Grade Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	In Grade 5, instructional time focuses on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Addition and Subtraction with Fractions	20 days	CC.5.NF.1, CC.5.NF.2, CC.5.MD.2	Fractions and decimals represent a relationship between two numbers. Fractions are division models. The use of area models, fraction strips, and number lines are effective strategies to model sums and differences. Use equivalent fractions as a strategy to add and subtract fractions. Use number sense of fractions to estimate and assess reasonableness of answers to word problems.
Addition and Subtraction with Decimals	17 days	CC.5.NBT.1, CC.5.NBT.3, CC.5.NBT.3a, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.7, CC.5.MD.1	The number system is based on a well-defined system. In a multidigit number, a number in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. Multiplying by a power of 10 shifts the digits of a whole number or decimal that many places to the left. The exponent not only indicates how many places the decimal is moving, but also that you are multiplying or making the number 10 times greater, three times, when you multiply 10. Convert like measurement units within a given measurement system.
Multiplication and Division with Fractions	23 days	CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c, CC.5.MD.2	Fractions can be used to aid in explaining real world problems. The use of area models, fraction strips, and number lines are effective strategies to model products and quotients. Multiply a fraction or whole number by a fraction. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by fractions.

Multiplication with Whole Numbers and Decimals	18 days	CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.3, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.7	Perform operations with multi-digit whole numbers and with decimals to hundredths. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Understand and explain patterns in whole numbers and decimals.
Division with Whole Numbers and Decimals	16 days	CC.5.NBT.2, CC.5.NBT.3b, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.5, CC.5.NF.5a	Find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using stategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is divided or multiplied by a power of 10. Interpret multiplication as scaling.
Operations and Word Problems	18 days	CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c	Fluently multiply mulitdigit whole numbers using the standard algorithm. Write and interpret numerical expressions. Solve real world problems involving addition, subtraction, multiplication, division, fractions, and decimals problems. Use models or drawings and strategies based on place value, properties of operations,
Algebra, Patterns, and Coordinate Graphs	12 days	CC.5.OA.1, CC.5.OA.2, CC.5.OA.3, CC.5.G.1, CC.5.G.2	Write and interpret numerical expressions. Analyze patterns and relationships. Graph points on the coordinate plane to solve real-world mathematical problems. There is an order of operations that must be followed in all mathematical expressions. Parentheses, brackets, or braces are used to guide the order of operations when simplifying expressions. An algebraic expression or equation can be represented in a variety of ways that have the same value. On the coordinate plane, a point represents the two facets of information associated with an ordered pair. In a coordinate plane, the first number indicates how far to travel from the origin in the direction of the x-axis and the second number indicates how far to travel in the direction of the y-axis.
Measurement and Geometry	26 days	CC.5.MD.1, CC.5.MD.2, CC.5.MD.3, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4, CC.5.MD.5, CC.5.MD.5a, CC.5.MD.5b, CC.5.MD.5c, CC.5.G.3, CC.5.G.4, CC.5.NF.4b	Measurement processes are used in everyday life to describe and quantify the world. Measurement problems can be solved using the appropriate tools. Volume is an attribute of three-dimensional space and is measured in cubic units. Multiple rectangular prisms can have the same volume. Volume can be found by repeatedly adding the area of the base or by multiplying all three dimensions. Data analysis is formulating questions that can be addressed, explored, and synthesized with relevant information. Two-dimensional shapes can be described and classified by their properties. Two-dimensional shapes are composed of various parts that are described with precise vocabulary.

Unit Name: **Addition and Subtraction with Fractions**	**Length:** 20 days
Standards: CC.5.NF.1, CC.5.NF.2, CC.5.MD.2	**Outcomes:** Fractions and decimals represent a relationship between two numbers. Fractions are division models. The use of area models, fraction strips, and number lines are effective strategies to model sums and differences. Use equivalent fractions as a strategy to add and subtract fractions. Use number sense of fractions to estimate and assess reasonableness of answers to word problems.
Essential Questions: How is computation with fractional numbers similar or different to whole number computation? What does it mean to add and subtract fractions with unlike denominators? How do you add and subtract fractional parts with like and unlike denominators? What does it mean to add and subtract mixed numbers? What is a standard procedure for adding and subtracting fractions?	**Learning Targets:** Students will be able to add and subtract fractions and mixed numbers. Students will be able to represent the addition and subtraction of fractions with unlike denominators as equivalent problems with like denominators.
Topic 1: **Equivalent Fractions**	**Length:** 8 days
Standard(s): CC.5.NF.1, CC.5.NF.2	**Academic Vocabulary:** denominator, fraction, numerator, unit fraction, equivalent fractions, multiplier, n-split, simplify, unsimplify, benchmark, common denominator, common factor, greater than, >, less than, <, mixed number
Lesson Frame: Introduce the MathBoard	I can use the MathBoard fraction bars to discuss basic fraction ideas.
Lesson Frame: Explain Equivalent Fractions	I can generate and explain simple equivalent fractions.
Lesson Frame: Equivalent Fractions and Multipliers	I can understand the role of the multiplier in equivalent fractions.
Lesson Frame: Strategies for Comparing Fractions	I can use a variety of strategies to compare fractions.
Lesson Frame: Fractions Greater Than One	I can convert between fractions and mixed numbers.
Performance Tasks: Quick Quiz 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes: Teach GCF (Greatest Common Factor) during Lesson 4.
Topic 2: **Addition and Subtraction with Fractions**	**Length:** 12 days
Standard(s): CC.5.NF.1, CC.5.NF.2, CC.5.MD.2	**Academic Vocabulary:** add on, regroup, ungroup, line plot, benchmark, estimate, round, situation equation, solution equation
Lesson Frame: Add and Subtract Like Mixed Numbers	I can add and subtract mixed numbers with like denominators.
Lesson Frame: Add Unlike Fractions	I can add fractions with different denominators.
Lesson Frame: Subtract Unlike Fractions	I can subtract fractions with different denominators.
Lesson Frame: Solve with Unlike Mixed Numbers	I can add and subtract mixed numbers with unlike denominators.

Lesson Frame: Practice with Unlike Mixed Numbers	I can add and subtract mixed numbers with unlike denominators.
Lesson Frame: Reasonable Answers	I can estimate sums and differences of fractions and mixed numbers and decide whether answers are reasonable.
Lesson Frame: Real World Problems	I can use estimates to determine whether answers to word problems are reasonable.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 2, Math Challenges to start class, differentiated online practice through games, check understanding, Unit Review and Test	Notes:

Unit Name: **Addition and Subtraction with Decimals**	**Length:** 17 days
Standards: CC.5.NBT.1, CC.5.NBT.3, CC.5.NBT.3a, CC.5.NBT.3b,CC.5.NBT.4, CC.5.NBT.7, CC.5.MD.1	**Outcomes:** The number system is based on a well-defined system. In a multidigit number, a number in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. Multiplying by a power of 10 shifts the digits of a whole number or decimal that many places to the left. The exponent not only indicates how many places the decimal is moving, but also that you are multiplying or making the number 10 times greater, three times, when you multiply 10. Convert like measurement units within a given measurement system.
Essential Questions: How does understanding the structure of the number system help you solve problems? How can you represent decimal numbers in multiple ways? How can sums and differences of decimals be estimated? What are the standard procedures for adding and subtracting whole numbers and decimals?	**Learning Targets:** Students will be able to extend their understanding of the base-ten system to decimals. Students will observe that the process of composing and decomposing a base-ten unit is the same for decimals as for whole numbers. Students will observe the same methods of recording operations work can be used with decimals.
Topic 1: **Read and Write Whole Numbers and Decimals**	**Length:** 5 days
Standard(s): CC.5.NBT.1, CC.5.NBT.3, CC.5.NBT.3a, CC.5.NBT.3b	**Academic Vocabulary:** decimal, tenth, hundredth, thousandth, notation, standard form, word form, expanded form, power of ten, equivalent decimal
Lesson Frame: Decimals as Equal Divisions	I can understand decimals as equal divisions of a whole.
Lesson Frame: Thousands to Thousandths	I can read, write, and model whole and decimal numbers.
Lesson Frame: Equate and Compare Thousandths	I can model and identify equivalent decimals.
Performance Tasks: Quick Quiz 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: **Addition and Subtraction**	**Length:** 6 days
Standard(s): CC.5.NBT.7, CC.5.MD.1	**Academic Vocabulary:** meter (m), decimeter (dm), centimeter (cm), millimeter (mm), grouping, ungrouping, break apart drawing, ungroup, Commutative Property of Addition, Associative Property of Addition, Distributive Property of Multiplication over Addition
Lesson Frame: Adding and Subtracting Decimals	I can model adding and subtracting decimals.
Lesson Frame: Add Whole Numbers and Decimals	I can add whole numbers and decimals.
Lesson Frame: Subtract Whole and Decimal Numbers	I can subtract whole and decimal numbers to hundredths.
Lesson Frame: Properties and Strategies	I can use the Commutative, Associative, and Distributive Properties to compute mentally.
Performance Tasks: Quick Quiz 2, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:

Topic 3: **Round and Estimate with Decimals**	**Length:** 6 days
Standard(s): CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.7	**Academic Vocabulary:** round, estimate
Lesson Frame: Round and Estimate with Decimals	I can estimate decimal sums and differences.
Lesson Frame: Graph with Decimal Numbers	I can read and construct graphs with decimal scales and decimal numbers.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 2 Review and Test	Notes:

Unit Name: **Multiplication and Division with Fractions**	**Length:** 23 days
Standards: CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b,CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c, CC.5.MD.2	**Outcomes:** Fractions can be used to aid in explaining real world problems. The use of area models, fraction strips, and number lines are effective strategies to model products and quotients. Multiply a fraction or whole number by a fraction. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by fractions.
Essential Questions: How do you use previous understandings of multiplication and division to multiply or divide fractions? How does multiplication and division of fractions help to solve real world problems? What does it mean to multiply a number by a fraction? What are the standard procedures for estimating and finding products and quotients of fractions and mixed numbers?	**Learning Targets:** Students will be able to extend work with multiplication and fractions and explore fractions and division. Students will be able to interact with visual models and read world situations to illustrate important fraction concepts.
Topic 1: **Multiplication with Fractions**	**Length:** 9 days
Standard(s): CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6	**Academic Vocabulary:** comparison bar, multiplicative comparison, factor, product, area model for multiplication, fraction-bar model for multiplication, multiply and simplify method, simplify and multiply method, unit fraction method
Lesson Frame: Basic Multiplication Concepts	I can connect multiplying by 1/*n* to dividing by *n,* and use this idea to make multiplicative comparisons.
Lesson Frame: Multiplication with Non-Unit Fractions	I can interpret *a/b* times a quantity as *a* of *b* equal parts of that quantity.
Lesson Frame: Multiplication with Fractional Solutions	I can multiply a whole number by a fraction to produce a fraction.
Lesson Frame: Multiply a Fraction by a Fraction	I can multiply any two fractions.
Lesson Frame: Multiplication Strategies	I can compare and apply strategies for multiplying fractions.
Lesson Frame: Multiply Mixed Numbers	I can multiply with mixed numbers.
Performance Tasks: Quick Quiz 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: **Multiplication Links**	**Length:** 4 days
Standard(s): CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6	**Academic Vocabulary:** Associative Property, Commutative Property, Distributive Property
Lesson Frame: Relate Fraction Operations	I can relate operations with fractions and whole numbers, and discuss properties of arithmetic.
Lesson Frame: Solve Real World Problems	I can add, subtract, compare, and multiply fractions to solve word problems.

Lesson Frame: Make Generalizations	I can predict the size of a product relative to the size of one factor based on the size of the other factor.
Performance Tasks: Quick Quiz 2, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 3: **Division with Fractions**	**Length:** 10 days
Standard(s): CC.5.NF.1, CC.5.NF.2, CC.5.NF.3, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c, CC.5.MD.2	**Academic Vocabulary:** decimal fraction, dividend, divisor, quotient
Lesson Frame: When Dividing is also Multiplying	I can relate division by a unit fraction or whole number to multiplication.
Lesson Frame: Solve Division Problems	I can write and solve division word problems.
Lesson Frame: Distinguish Multiplication from Division	I can determine whether solving a word problem requires multiplication or division.
Lesson Frame: Review Operations with Fractions	I can solve numerical and word problems involving all four operations with fractions.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 3 Review and Test	Notes:

Unit Name: **Multiplication with Whole Numbers and Decimals**	**Length:** 18 days
Standards: CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.3, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.7	**Outcomes:** Perform operations with multi-digit whole numbers and with decimals to hundredths. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Understand and explain patterns in whole numbers and decimals.
Essential Questions: How can we use models/aides to help understand decimals? How do you compare decimals using place value? What patterns can we identify in the base ten system? What are the standard procedures for estimating and finding products involving decimals?	**Learning Targets:** Students will be able to shift the decimal when multiplying decimals. Students will be able to multiply with numbers greater than 1 and less than 1 using the traditional algorithm. Students will begin to develop fluency for multiplying multidigit whole numbers.
Topic 1: **Multiplication with Whole Numbers**	**Length:** 7 days
Standard(s): CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.5, CC.5.NBT.7	**Academic Vocabulary:** shift, base, exponent, exponential form, power of ten, odd, even, partial products, Place Value Sections, Expanded Notation, New Groups Below, Place Value Rows, Short Cut
Lesson Frame: Shift Patterns in Multiplication	I can understand the shift pattern when multiplying by 10, 100, or 1,000.
Lesson Frame: Patterns with Fives and Zeros	I can understand that multiples of 5 need extra attention in the zeros pattern.
Lesson Frame: Sharing Methods for Multiplication	I can understand how a place value model can be used to solve multidigit multiplication problems.
Lesson Frame: Mulitply Two-Digit Numbers	I can solve two-digit multiplication problems using various methods.
Lesson Frame: Practice Multiplication	I can practice multiplying multidigit numbers.
Performance Tasks: Quick Quiz 1, Fluency Check 1, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: **Multiplication with Decimal Numbers**	**Length:** 11 days
Standard(s): CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.3, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.7	**Academic Vocabulary:** Commutative Property of Multiplication, Associative Property of Multiplication, Distributive Property of Multiplication over Addition
Lesson Frame: Multiply Decimals by Whole Numbers	I can solve multiplication problems in which one factor is a decimal number.
Lesson Frame: Multiply by Decimals	I can solve multiplication problems in which at least one factor is a decimal number.
Lesson Frame: Multiply with Decimals Greater Than 1	I can mulitply with decimal numbers greater than 1.

Lesson Frame: Compare Shift Patterns	I can understand and apply shift patterns when multiplying by 10,100, 1000, 0.1, or 0.01.
Lesson Frame: Estimate Products	I can round whole numbers and decimal numbers to estimate the product in a multiplication problem.
Lesson Frame: Multiplication Practice	I can perform multidigit multiplication with decimal numbers.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 2, Fluency Check 2, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 4 Review and Test	Notes:

Unit Name: **Division with Whole Numbers and Decimals**	**Length:** 16 days
Standards: CC.5.NBT.2, CC.5.NBT.3b, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.5, CC.5.NF.5a	**Outcomes:** Find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using stategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is divided or multiplied by a power of 10. Interpret multiplication as scaling.
Essential Questions: What occurs when decimals are multiplied, divided, or ordered by 10 or powers of 10? What are the standard procedures for estimating and finding quotients involving decimals?	**Learning Targets:** Students will extend their understanding of division to include 2-digit divisors. Students will explore dividing with decimal numbers. Students will solve real world problems and interpret the remainders in the context of the problem.
Topic 1: **Division with Whole Numbers**	Length: 6 days
Standard(s): CC.5.NBT.6	**Academic Vocabulary:** Digit-by-Digit Method, dividend, divisor, Expanded Notation Method, Place Value Sections Method, quotient, remainder, overestimate, underestimate
Lesson Frame: Divide Whole Numbers by One Digit	I can divide multidigit numbers by single-digit divisors.
Lesson Frame: Explore Dividing by Two-Digit by Two-Digit Whole Numbers	I can solve division problems having two-digit divisors.
Lesson Frame: Too Large, Too Small, or Just Right?	I can understand several ways to adjust the estimated divisor when it is too small.
Lesson Frame: Interpret Remainders	I can express and interpret remainders for a variety of problem types.
Lesson Frame: Division Practice	I can practice dividing whole numbers.
Performance Tasks: Quick Quiz 1, Fluency Check 3, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: **Division with Decimal Numbers**	**Length:** 10 days
Standard(s): CC.5.NBT.2, CC.5.NBT.3b, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.5, CC.5.NF.5a	**Academic Vocabulary:** no new vocabulary for this topic
Lesson Frame: Divide Decimal Numbers by Whole Numbers	I can divide decimal numbers by one- and two-digit whole numbers.
Lesson Frame: Divide Whole Numbers by Decimal Numbers	I can solve division problems that have decimal divisors.
Lesson Frame: Divide with Two Decimal Numbers	I can solve division problems in which both numbers are decimals.
Lesson Frame: Division Practice	I can solve division problems involving whole numbers and decimals numbers.
Lesson Frame: Distinguish Between Multiplication and Division	I can solve problems that require multiplying or dividing whole numbers and decimal numbers.

Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 2, Fluency Check 4, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 5 Review and Test	Notes:

Unit Name: **Operations and Word Problems**	**Length:** 18 days
Standards: CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c	**Outcomes:** Fluently multiply mulit-digit whole numbers using the standard algorithm. Write and interpret numerical expressions. Solve real world problems involving addition, subtraction, multiplication, division, fractions, and decimals problems. Use models or drawings and strategies based on place value and properties of operations.
Essential Questions: How do numbers allow people to communicate? How can you apply addition, subtraction, multiplication, and division to real life situations? How does knowing how to compute fraction and decimal problems connect to real life?	**Learning Targets:** Students will be able to interpret problems and represent them. Students will engage in the problem solving process, emphasizing problem types utilizing whole numbers, fractions, and decimals.
Topic 1: **Equations and Problem Solving**	**Length:** 5 days
Standard(s): CC.5.NBT.4, CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.1, CC.5.NF.2, CC.5.NF.4, CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.6, CC.5.NF.7, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c	**Academic Vocabulary:** situation equation, solution equation, break apart drawing, rectangle model, benchmark
Lesson Frame: Situation and Solution Equations for Addition and Subtraction	I can write situation and solution equations to solve addition and subtraction problems.
Lesson Frame: Situation and Solution Equations for Multiplication and Division	I can write situation and solution equations to solve multiplication and division problems.
Lesson Frame: Write Word Problems	I can write word problems for equations involving fractions and decimals and model the product.
Lesson Frame: Determine Reasonable Answers	I can use a variety of methods to determine reasonable answers.
Performance Tasks: Quick Quiz 1, Fluency Check 5, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: **Comparison Word Problems**	**Length:** 5 days
Standard(s): CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.2, CC.5.NF.5, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6, CC.5.NF.7c	**Academic Vocabulary:** comparison, leading language, misleading language, scaling, additive, multiplicative
Lesson Frame: Language of Comparison Problems	I can understand and apply comparison language.
Lesson Frame: Multiplicative Comparison Problems	I can model and solve multiplicative comparison problems.
Lesson Frame: Types of Comparison Problems	I can solve comparison problems.
Performance Tasks: Quick Quiz 2, Fluency Check 6, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 3: **Problems with More Than One Step**	**Length:** 10 days
Standard(s): CC.5.OA.1,CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.2, CC.5.NF.3, CC.5.NF.6, CC.5.NF.7c	**Academic Vocabulary:** parentheses, equation
Lesson Frame: Equations and Parentheses	I can solve two-step problems.
Lesson Frame: Multistep Word Problems	I can solve multistep problems.

Lesson Frame: Practice Problem Solving	I can practice solving multistep problems.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Fluency Check 7, Math Challenges to start class, differentiated online practice	Notes:

Unit Name: **Algebra, Patterns, and Coordinate Graphs**	**Length:** 12 days
Standards: CC.5.OA.1, CC.5.OA.2, CC.5.OA.3, CC.5.G.1, CC.5.G.2	**Outcomes:** Write and interpret numerical expressions. Analyze patterns and relationships. Graph points on the coordinate plane to solve real-world and mathematical problems. There is an order of operations that must be followed in all mathematical expressions. Parentheses, brackets, or braces are used to guide the order of operations when simplifying expressions. An algebraic expression or equation can be represented in a variety of ways that have the same value. On the coordinate plane, a point represents the two facets of information associated with an ordered pair. In a coordinate plane, the first number indicates how far to travel from the origin in the direction of the x-axis and the second number indicates how far to travel in the direction of the y-axis.
Essential Questions: How can patterns help us problem solve? How are the values of an algebraic expression and numerical expression found? How is the order of an expression determined? What is the purpose of a coordinate plane? How do you plot a point on a coordinate plane? How can graphing points on a coordinate plane help you predict and interpret a given situation?	**Learning Targets:** Students will read, write, simplify, and evaluate algebraic expressions using the Order of Operations. Students will explore patterns and relationships. Students will plot and locate points in the coordinate plane.
Topic 1: **Algebraic Reasoning and Expressions**	**Length:** 4 days
Standard(s): CC.5.OA.1, CC.5.OA.2	**Academic Vocabulary:** expression, Order of Operations, simplify, evaluate, variable
Lesson Frame: Read and Write Expressions	I can read and write expressions.
Lesson Frame: Simplify Expressions	I can simplify numerical expressions.
Lesson Frame: Evaluate Expressions	I can write and evaluate expressions that contain variables.
Performance Tasks: Quick Quiz 1, Fluency Check 8, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: **Patterns and Graphs**	**Length:** 8 days
Standard(s): CC.5.OA.1, CC.5.OA.2, CC.5.OA.3, CC.5.G.1, CC.5.G.2	**Academic Vocabulary:** numerical pattern, term, coordinate plane, ordered pair, origin, x-coordinate, y-coordinate, x-axis, y-axis
Lesson Frame: Patterns and Relationships	I can generate and extend numerical patterns and identify relationships of corresponding terms.
Lesson Frame: The Coordinate Plane	I can locate and plot points in the first quadrant of the coordinate plane.
Lesson Frame: Graph Ordered Pairs	I can graph ordered pairs and use them to represent and solve real world problems.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Content Standards and Practices in a variety of real world problem solving situations.

Performance Tasks: Quick Quiz 2, Fluency Check 9, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 7 Review and Test	Notes:

Unit Name: **Measurement and Geometry**	Length: 26 days
Standards: CC.5.MD.1, CC.5.MD.2, CC.5.MD.3, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4, CC.5.MD.5, CC.5.MD.5a, CC.5.MD.5b, CC.5.MD.5c, CC.5.G.3, CC.5.G.4, CC.5.NF.4b	**Outcomes:** Measurement processes are used in everyday life to describe and quantify the world. Measurement problems can be solved using the appropriate tools. Volume is an attribute of three-dimensional space and is measured in cubic units. Multiple rectangular prisms can have the same volume. Volume can be found by repeatedly adding the area of the base or by multiplying all three dimensions. Data analysis is formulating questions that can be addressed, explored, and synthesized with relevant information. Two-dimensional shapes can be described and classified by their properties. Two-dimensional shapes are composed of various parts that are described with precise vocabulary.
Essential Questions: In the real world, how do you solve problems relating to measurement? What is volume and how is it used in real life? How do you determine the volume or a cube or rectangular prism? How can three-dimensional shapes be represented and analyzed? How do you compare and convert units of measure using the metric system? What are the metric measurement units and how are they related? What occurs when whole numbers are multiplied or divided by 10 or a power of 10? How can problems be solved using information represented in a line plot? How can we describe, classify, and name different shapes (polygons, triangles, and quadrilaterals)? How can angles be measured and classified? Why is it important to use precise language and mathematical tools in the study of two-dimensional shapes?	**Learning Targets:** Students will convert units within the same measurement system using both multiplication and division. Students will review perimeter and area and explore the concept of volume of a rectangular prism. Students will classify and draw polygons according to properties. Students will begin to formulate the idea of a hierarchy of quadrilateral properties.
Topic 1: **Measurements and Data**	Length: 9 days
Standard(s): CC.5.MD.1, CC.5.MD.2	**Academic Vocabulary:** meter, millimeter, centimeter, decimeter, dekameter, hectometer, kilometer, liter, mililiter, centiliter, deciliter, dekaliter, hectoliter, kiloliter, mass, gram, milligram, centigram, decigram, dekagram, hectogram, kilogram, mile (mi), ton, frequency table, line plot
Lesson Frame: Convert Metric Units of Length	I can convert among metric units of length.
Lesson Frame: Metric Units of Liquid Volume	I can convert among metric units of liquid volume.
Lesson Frame: Metric Units of Mass	I can convert among metric units of mass.
Lesson Frame: Customary Units of Length	I can convert among customary units of length.
Lesson Frame: Customary Units of Liquid Volume	I can convert among customary measures of liquid volume.
Lesson Frame: Customary Units of Weight	I can convert among customary measures of weight.
Lesson Frame: Read and Make Line Plots	I can make and analyze line plots.

Performance Tasks: Quick Quiz 1, Fluency Check 10, Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 2: **Area and Volume**	**Length:** 8 days
Standard(s): CC.5.NF.4b, CC.5.MD.3, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4, CC.5.MD.5, CC.5.MD.5a, CC.5.MD.5b, CC.5.MD.5c	**Academic Vocabulary:** perimeter, area, square centimeter, square unit, face, edge, rectangular prism, cube, unit cube, volume, cubic unit, one-dimensional, two-dimensional, three-dimensional, composite
Lesson Frame: Perimeter and Area of Rectangles	I can use a formula to find the perimeter and area of a rectangle with fractional side lengths.
Lesson Frame: Cubic Units and Volume	I can use a formula to find the volume of a rectangular prism.
Lesson Frame: Visualize Volume	I can compute the volume of a rectangular prism.
Lesson Frame: Introduce Volume Formulas	I can use a formula to find the volume of a rectangular prism.
Lesson Frame: Relate Length, Area, and Volume	I can identify whether a situation involves length, area, or volume.
Lesson Frame: Volume of Composite Solid Figures	I can find the volume of a composite solid figure.
Performance Tasks: Quick Quiz 2, Fluency Check 11 Math Challenges to start class, differentiated online practice through games, check understanding	Notes:
Topic 3: **Classify Geometric Figures**	Length: 9 days
Standard(s): CC.5.MD.3, CC.5.MD.5, CC.5.MD.5b, CC.5.G.3, CC.5.G.4	**Academic Vocabulary:** acute angle, adjacent angle, adjacent sides, congruent, counterexample, line of symmetry, opposite angle, opposite sides, parallel, parallelogram, perpendicular, quadrilateral, rectangle, rhombus, right angle, square, trapezoid, acute triangle, congruent angles, congruent sides, equilateral triangle, isosceles triangle, obtuse angle, obtuse triangle, perpendicular sides, right triangle, scalene triangle, closed, concave, convex, open, polygon, reflex angle, regular polygon
Lesson Frame: Attributes of Quadrilaterals	I can understand attributes of different types of quadrilaterals.
Lesson Frame: Attributes of Triangles	I can understand attributes of different types of triangles.
Lesson Frame: Attributes of Two-Dimensional Shapes	I can understand attributes of polygons and other two-dimensional shapes.
Lesson Frame: Focus on Mathematical Practices	I can use the Common Core Standards and Practices in a variety of real world problem solving situations.
Performance Tasks: Quick Quiz 3, Fluency Check 12, Math Challenges to start class, differentiated online practice through games, check understanding, Unit 8 Review and Test	Notes:

Course Name:	6th Grade Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	In Grade 6, instructional time focuses on these 6 critical areas: 1.) Understanding the concept of a ratio and using ratio language to describe a ratio relationship between two quantities. 2.) Interpreting and computing quotients of fractions, and solving word problems involving division of fractions by fraction. 3.) Fluently adding, subtracting, multiplying, and dividing multi-digit decimals using the standard algorithm for each operation. 4.) Writing, reading, and evaluating expressions in which letters stand for numbers. 5.) Identifying when two expressions are equivalent and 6.) Finding the areas of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; and applying these techniques in the context of solving real world and mathematical problems.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Rates, Ratios, and Proportions	21 days	CC.6.RP.1, CC.6.RP.2, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9	This unit introduces rates and ratios by connecting rate and ratio to whole number multiplication and division and using concepts of rate and ratio to solve problems.
Area of Polygons	13 days	CC.6.G.1, CC.6.G.3, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.3, CC.6.EE.6	Students explore formulas for the area of different polygons in this unit. They compose and decompose rectangles and parallelograms as they derive formulas.
Operations with Whole Numbers, Fractions, and Decimals	24 days	CC.6.NS.1, CC.6.NS.2, CC.6.NS.3, CC.6.NS.4	Unit 3 builds upon the concept of place value and its relationship to multiplication and division of whole numbers and decimals.
Surface Area of Prisms and Pyramids	10 days	CC.6.G.1, CC.6.G.4, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.6	Hands-on activities help students explore the properties of prisms and pyramids. They use the area concepts they learned in Unit 2 to find the surface area of these figures.
Expressions and Equations	24 days	CC.6.EE.2, CC.6.EE.2b, CC.6.EE.2c, CC.6EE.1, CC.6.EE.2a, CC.6.EE.4, CC.6.G.1, CC.6.G.4, CC.6.EE.3, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9, CC.6.EE.5, CC.6.EE.7, CC.6.EE.8	Students write and evaluate algebraic expressions and analyze their underlying structures. They also learn to use the properties of arithmetic to recognize and write equivalent expressions. Students learn to find solutions for equations and inequalities.
Volume of a Rectangular	8 days	CC.6.G.1, CC.6.G.2, CC.6.G 4, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.6	Students bring their prior knowledge to this unit as they explore volume for prisms that have fractional edge lengths.

Ratios and Rates with Fractions, Decimals, and Percents	20 days	CC.6.RP.1, CC.6.RP.2,, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.EE.6, CC.6.EE.7, CC. 6.RP.3c, CC.RP.3d, CC.6.EE.9, CC.6.G.1, CC.6.G.4	Unit 7 builds upon the concepts of rates, ratios, and proportions introduced in Unit 1. The concept of unit rate is extended to all ratios, and unit rates are used to solve proportions, including those with non whole-number solutions.
Analyzing Statistics	19 days	CC.6.SP.1, CC.6.SP.4, CC.6.SP.5, CC.6.SP.5a, CC.6.SP.2, CC.6.SP.3, CC.6.SP.5c, CC.6.SP.5d, CC.6.SP.5b	Students begin to think statistically as they make sense of data. They explore measures of center and variability as ways to describe data.
Rational Numbers and the Coordinate Plane	15 days	CC.6.NS.5, CC.6.NS.6, CC.6.NS.6a, CC.6.NS.6b, CC.6.NS.6c, CC.6.NS.7, CC.6.NS.7a, CC.6.NS.7.b, CC.6.NS.7c, CC.6.NS.7d, CC.6.NS.8	This unit extends our base-ten number system to include positive and negative rational numbers, using both number lines and the coordinate plane.

Unit Name: **Rates, Ratios, and Proportions**	**Length:** 21 days
Standards: CC.6.RP.1, CC.6.RP.2, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9	**Outcomes:** This unit introduces rates and ratios by connecting rate and ratio to whole number multiplication and division and using concepts of rate and ratio to solve problems.
Essential Questions: How do ratios and proportions relate to multiplication and division? What is a constant rate and how does it apply to a rate table? How can a graph of a rate table aid in understanding if a rate is a constant rate? How do ratio tables relate to rate tables? How do ratios relate to proportions?	**Learning Targets:** Students can solve a ratio problem. Students can use ratio language to describe a ratio relationship between two quantities.
Topic 1: **Multiplication and Rates**	**Length:** 7 days
Standard(s): CC.6.RP.2, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b	**Academic Vocabulary:** column, row, Factor Puzzle, factors, product, multiple, rate table, unit rate, ratio, rate, constant rate, every, each, per, scrambled rate table
Lesson Frame: Factor Puzzles and the Multiplication Table	I can relate Factor Puzzles to four numbers in the Multiplication table. I can use various strategies to solve Factor Puzzles.
Lesson Frame: Solving Factor Puzzles	I can solve and make Factor Puzzles.
Lesson Frame: Rate Situations and Rate Tables	I can understand rate situations as involving a constant increase. I can make a table to show a rate situation for many multiples of the situation.
Lesson Frame: Rate Situations and Unit Rate Language	I can understand unit rate and totals made from rates. I can understand unit rate language.
Lesson Frame: Unit Rates, Products, and Rate Tables	I can decide if a constant rate is reasonable for a given situation. I can identify rate tables and make up rate situations. I can find the unit rate and use it to make a rate table. I can make drawings to show a unit rate situation.
Performance Tasks: Unit 1: Quick Quiz 1, Daily Quick Practice Assessments	Notes:
Topic 2: **Special Rate Situations and Graphing**	**Length:** 3 days
Standard(s): CC.6.RP.2, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.EE.6, CC.6.EE.9	**Academic Vocabulary:** unit price, coordinate plane, x-axis, y-axis, ordered pair, coordinates, x-coordinate, y-coordinate, unit rate triangle, speed, distance, time
Lesson Frame: Unit Pricing	I can determine missing values in a rate table. I can solve unit pricing problems.

Lesson Frame: Constant Speed	I can solve constant speed problems. I can graph a rate table in the coordinate plane. I can make a rate table using a given graph.
Performance Tasks: Unit 1: Quick Quiz 2, Daily Quick Practice Assessments	Notes:
Topic 3: **Solve Problems with Ratio and Proportion**	**Length:** 5 days
Standard(s): CC.6.RP.1, CC.6.RP.2, CC.6.RP.3, CC.6.RP.3a	**Academic Vocabulary:** ratio, rate, Linked Rate Table, ratio table, basic ratio, equivalent ratios, proportion, solving a proportion
Lesson Frame: Ratio as Linked Rates	I can understand that a ratio table is made from two related rate tables. I can make drawing to show ratios.
Lesson Frame: Finding Linked Values in Ratio tables	I can use ratio language and the 2:3 written form. I can understand basic ratios and equivalent ratios. I can recognize ratio and non-ratio tables.
Lesson Frame: Seeing Proportions in Ratio Tables	I can understand that a proportion is made up of two equal ratios. I can solve a proportion problem by solving a Factor Puzzle.
Lesson Frame: Identify and Solve Proportion Situations	I can tell the assumptions that must be stated to make a situation a proportion problem. I can understand that a Factor Puzzle can have the rows or columns switched and still represent a proportion.
Performance Tasks: Unit 1: Quick Quiz 3, Daily Quick Practice Assessments	Notes:
Topic 4: **Identify, Solve, and Write Proportion Situations**	**Length:** 4 days
Standard(s): CC.6.RP.1, CC.6.RP.2, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.NS.4	**Academic Vocabulary:** greatest common factor, scale
Lesson Frame: Solve Numeric Proportion Problems	I can solve numeric proportion problems. I can create proportion problems for numeric proportions. I can differentiate proportion from non-proportion problems.
Lesson Frame: Basic Ratio Solution Strategies	I can solve proportion problems containing greater numbers. I can use the greatest common factor to find a basic ratio.
Lesson Frame: Write and Solve Proportion Problems	I can solve problems that use a basic ratio. I can solve, explain, and edit proportion problems.
Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful contexts.

Performance Tasks: Unit 1: Quick Quiz 4, Daily Quick Practice Assessments	Notes:

Unit Name: **Area of Polygons**	**Length:** 13 days
Standards: CC.6.G.1, CC.6.G.3, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.3, CC.6.EE.6	**Outcomes:** Students explore formulas for the area of different polygons in this unit. They compose and decompose rectangles and parallelograms as they derive formulas.
Essential Questions: How can you use a rectangle to find the area of a triangle, a parallelogram, and a trapezoid? How could graphing a figure on a coordinate plane aid in finding the length of a side of that figure? What does it mean to decompose a compound figure? How does decomposing aid in the ability to find the area of a compound figure?	**Learning Targets:** Students will be able to find the area of triangles. Students will be able to find the area of quadrilaterals. Students will be able to find the area of polygons. Students will be able to find the area of compound figures.
Topic 1: **Derive Area Formulas and Solve Problems: Parallelograms and Triangles**	**Length:** 5 days
Standard(s): CC.6.G.1, CC.6.EE.2, CC.6.EE.2c	**Academic Vocabulary:** perimeter, area, square unit, base, height, square inch, square foot, square centimeter, right triangle, perpendicular, related rectangle, right angle, parallelogram, rhombus, perpendicular, related parallelogram, acute triangle, obtuse triangle, vertex, dimensions
Lesson Frame: Units of Area	I can express measurements using exponents. I can use formulas to solve problems involving perimeter and area.
Lesson Frame: Area of Any Right Triangle	I can derive formulas for the area of a right triangle. I can use formulas to solve problems involving perimeter and area.
Lesson Frame: Area of Any Parallelogram	I can derive formulas for the area of a parallelogram using a rectangle. I can use formulas to solve problems involving perimeter and area.
Lesson Frame: Area of Any Triangle	I can identify the height of any triangle. I can recognize that the area of a triangle is always 1/2 the area of a parallelogram with the same height and base.
Lesson Frame: Select the Needed Measurements	I can select or infer the dimensions needed to find the area and perimeter of triangles and parallelograms. I can solve real-world problems.
Performance Tasks: Unit 2: Quick Quiz 1, Daily Quick Practice Assessments	Notes:
Topic 2: **Derive Area Formulas and Solve Problems: Trapezoids and Other Polygons**	**Length:** 6 days
Standard(s): CC.6.G.1, CC.6.G.3, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.3, CC.6.EE.6	**Academic Vocabulary:** trapezoid, complex figures, pentagon, hexagon, octagon, polygon, regular polygon, ordered pair, regular polygon, coordinates
Lesson Frame: Area of Trapezoid	I can derive the formula for the area of a trapezoid. I can use formulas to solve problems involving perimeter and area.

Lesson Frame: Area of a Complex Figure	I can decompose complex figures into simpler figures. I can solve problems involving perimeter and area.
Lesson Frame: Area of Any Regular Polygon	I can decompose regular polygons into triangles. I solve problems involving perimeter and area.
Lesson Frame: Graph Polygons in the Coordinate Plane	I can draw polygons in the coordinate plane. I can use coordinates to determine the side lengths of polygons.
Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful contexts. I can solve real world problems.
Performance Tasks: Unit 2: Quick Quiz 2, Daily Quick Practice Assessments	Notes:

Unit Name: **Operations with Whole Numbers, Fractions, and Decimals**	**Length**: 24 days
Standards: CC.6.NS.1, CC.6.NS.2, CC.6.NS.3, CC.6.NS.4	**Outcomes:** Unit 3 builds upon the concept of place value and its relationship to multiplication and division of whole numbers and decimals.
Essential Questions: How can you use place value to help you solve a multidigit division problem? How can estimating aid in solving division problems? Is there a pattern when multiplying by 0.1 or 0.01? How can this pattern aid in multiplication and division problems? What would you need to know to be able to compare fractions and decimals? What is a common denominator and how can it aid in adding and subtracting fractions? Are there predictable patterns that happen when you multiply or divide by fractions less than or greater than 1? How does this aid in solving multiplications and division problems involving fractions?	**Learning Targets:** Students will be able to identify reciprocals. Students will be able to divide fractions by whole numbers. Students will be able to divide fractions by fractions. Students will be able to divide fractions and mixed numbers. Students will be able to solve world problems using the division of fractions. Students will be able to add decimals. Students will be able to subtract decimals. Students will be able to multiply decimals. Students will be able to divide decimals. Students will be able to solve word problems containing decimal numbers.
Topic 1: **Multiplication and Division of Whole Numbers and Decimals**	**Length:** 7 days
Standard(s): CC.6.NS.2, CC.6.NS.3	**Academic Vocabulary:** dividend, divisor, quotient, remainder, ungrouping
Lesson Frame: Place Value and Whole Number	I can explain the meaning of place value. I can solve multi digit division with whole numbers
Lesson Frame: Estimated Multipliers in Division	I can use appropriate strategies to estimate and adjust multipliers in division problems. I can solve subtraction problems using regrouping strategies.
Lesson Frame: Multiplying by a Decimal	I can observe patterns in multiplication by 0.1 and 0.01. I can multiply by a decimal.
Lesson Frame: Decimal Divisors	I can observe patterns in division by 0.1 and 0.01. I can divide by a decimal.
Lesson Frame: Multiplication or Division	I can can identify whether a situation requires multiplication or division. I can place the decimal points in products and quotients.
Performance Tasks: Unit 3: Quick Quiz 1, Daily Quick Practice Assessments	Notes:
Topic 2: **Relating, Composing, and Decomposing Decimals and Fractions**	**Length:** 5 days
Standard(s): CC.6.NS.3, CC.6.NS.4	**Academic Vocabulary:** numerator, denominator, equivalent fractions, simplifying, unsimplifying, common factor, and common denominator, least common multiple
Lesson Frame: Comparing, Adding, and Subtracting with the Same Unit	I can compare fractions and decimals I can add and subtract fractions, mixed numbers, and decimals.

Lesson Frame: Equivalent Fractions or Decimals	I can write equivalent fractions and decimals. I can add, subtract, and compare fractions and decimals with different unit fractions or different numbers of decimal places.
Lesson Frame: Finding a Common Unit Fraction	I can find common denominators when the denominators have no common factors and are not multiples.
Lesson Frame: Mixed Problem Solving	I can discuss different strategies for finding a common denominator. I can write equations to solve real world problems involving fractions and decimals.
Performance Tasks: Unit 3: Quick Quiz 2, Daily Quick Practice Assessments	Notes:
Topic 3: **Multiplying Fractions and Dividing with Fractions and Whole Numbers**	**Length:** 4 days
Standard(s): CC.6.NS.1, CC.6.NS.3, CC.6.NS.4	**Academic Vocabulary:** reciprocal
Lesson Frame: Multiplying with Fractions	I can multiply fractions and whole numbers. I can multiply mixed numbers. I can multiply fractions.
Lesson Frame: Dividing with Fractions and Whole Numbers	I can divide fractions and whole numbers.
Lesson Frame: Is It Multiplying or Dividing?	I can identify problems as multiplication or division situations.
Performance Tasks: Unit 3: Quick Quiz 3, Daily Quick Practice Assessments	Notes:
Topic 4: **Dividing a Fraction by a Fraction**	**Length:** 6 days
Standard(s): CC.6.NS.1, CC.6.NS.3	**Academic Vocabulary:** inverse operations, unsimplify
Lesson Frame: Dividing Numerators and Denominators	I can relate division to finding an unknown factor in a multiplication problem. I can divide fractions by dividing numerators and dividing denominators.
Lesson Frame: Dividing by Unsimplifying	I can understand the idea of dividing by unsimplifying. I can connect dividing by unsimplifying to multiplying by the reciprocal.
Lesson Frame: Dividing by Multiplying by the Reciprocal	I can divide fractions by multiplying by the reciprocal.
Lesson Frame: Is it Multiplying or Dividing?	I can understand that numbers change in predictable ways when multiplied and divided by fractions less than 1 and fractions greater than 1.
Lesson Frame: Mixed Practice with Decimals and Fractions	I can understand and apply decimal and fraction operations.

Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful contexts.
Performance Tasks: Unit 3: Quick Quiz 4, Daily Quick Practice Assessments	Notes:

Unit Name: **Surface Area of Prisms and Pyramids**	**Length:** 10 days
Standards: CC.6.G.1, CC.6.G.4, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.6	**Outcomes:** Hands-on activities help students explore the properties of prisms and pyramids. They use the area concepts they learned in Unit 2 to find the surface area of these figures.
Essential Questions: What is a net and how can it be used to model a prism? How can a net aid in finding the surface area of a prism? How can the formula for finding the area of a triangle aid in finding the surface area of a pyramid?	**Learning Targets:** Students will be able to use nets to model rectangular prisms. Students will be able to use nets to model non rectangular prisms. Students will be able to use nets to model pyramids. Students will be able to find the surface area of prisms. Students will be able to find the surface area of pyramids.
Topic 1: **Nets and Surface Area of Prisms**	**Length:** 4 days
Standard(s): CC.6.G.1, CC.6.G.4, CC.6.EE.2, CC.6.EE.2c	**Academic Vocabulary:** face, lateral face, edge, vertex, base, congruent, prism, rectangular prism, net, surface area, cube
Lesson Frame: Nets and Surface Area for Rectangular Prisms	I can use nets to model rectangular prisms.
Lesson Frame: Nets and Surface Area for Non rectangular Prisms	I can use nets to model non rectangular prisms.
Lesson Frame: Surface Area for Prisms	I can find the surface area of prisms.
Performance Tasks: Unit 4: Quick Quiz 1, Daily Quick Practice Assessments	Notes:
Topic 2: **Nets and Surface Area of Pyramids**	**Length:** 4 days
Standard(s): CC.6.G.1, CC.6.G.4, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.6	**Academic Vocabulary:** pyramid, face, edge, vertex, base, slant height, congruent
Lesson Frame: Nets for Pyramids	I can use nets to model pyramids.
Lesson Frame: Surface Area of Pyramids	I can find the surface area of pyramids.
Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful contexts.
Performance Tasks: Unit 4: Quick Quiz 2, Daily Quick Practice Assessments	Notes:

Unit Name: **Expressions and Equations**	**Length:** 24 days
Standards: CC.6.EE.2, CC.6.EE.2b, CC.6.EE.2c, CC.6 EE.1, CC.6.EE.2a, CC.6.EE.4, CC.6.G.1, CC.6.G.4, CC.6.EE.3, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9, CC.6.EE.5, CC.6.EE.7, CC.6.EE.8	**Outcomes:** Students write and evaluate algebraic expressions and analyze their underlying structures. They also learn to use the properties of arithmetic to recognize and write equivalent expressions. Students learn to find solutions for equations and inequalities.
Essential Questions: What are some ways that one can simplify a numerical expression that will involve exponents? What are ways to read and write algebraic expressions?	**Learning Targets:** Students will write and simplify numerical expressions involving exponents. Students will use graphs, tables, and equations to represent and analyze relationships between dependent and independent variables. Students will write and evaluate algebraic expressions, and use properties of operations to recognize and generate equivalent expressions. Students will solve problems by writing and solving equations of the form x + a + b and ax + b. Write inequalities of the form x < c or x > c to represent real world or mathematical situations, and graph the solutions on a number line.
Topic 1: **Writing, Interpreting, and Analyzing Expressions**	**Length:** 6 days
Standards: CC.6.EE.2, CC.6.EE.2b, CC.6.EE.2c, CC.6 EE.1, CC.6.EE.2a, CC.6.EE.4, CC.6.G.1, CC.6.G.4, CC.6.EE.3, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9, CC.6.EE.5, CC.6.EE.7, CC.6.EE.8	**Academic Vocabulary:** column, row, Factor Puzzle, factors, product
Lesson Frame: Expressions and Order of Operations	I can use the order of operations to simplify numerical expression.
Lesson Frame: Expressions with Exponents	I can use expressions with exponents to represent figures.
Lesson Frame: Interpreting and Analyzing Expressions	I can translate algebraic expressions and words.
Lesson Frame: Modeling and Simplifying Expressions	I can identify and write expressions for dot diagrams.
Lesson Frame: Expressions for Area and Surface Area	I can write expressions for areas of complex figures.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 5-1	Notes:
Topic 2: **Equivalent Expressions**	**Length:** 6 days
Standards: CC.6.EE.2, CC.6.EE.2b, CC.6.EE.2c, CC.6 EE.1, CC.6.EE.2a, CC.6.EE.4, CC.6.G.1, CC.6.G.4, CC.6.EE.3, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9, CC.6.EE.5, CC.6.EE.7, CC.6.EE.8	**Academic Vocabulary:** equivalent expressions, Associative Property of Addition, Commutative Property of Addition, coefficient, like terms, Associative Property of Multiplication, Commutative Property of Multiplication, simplify
Lesson Frame: Equivalent Expressions	I can connect real world situations, models, and expressions.

Lesson Frame: The Commutative and Associative Properties	I can simplify expressions by combining like terms.
Lesson Frame: Practice with Expressions	I can simplify and evaluate expressions.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 5-2	Notes:
Topic 3: **Representing and Describing Quantitative Relationships**	**Length:** 5 days
Standards: CC.6.EE.2, CC.6.EE.2b, CC.6.EE.2c, CC.6 EE.1, CC.6.EE.2a, CC.6.EE.4, CC.6.G.1, CC.6.G.4, CC.6.EE.3, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9, CC.6.EE.5, CC.6.EE.7, CC.6.EE.8	**Academic Vocabulary:** double number line, dependent and independent variables
Lesson Frame: Relating Two Quantities	I can recognize quantities that vary together.
Lesson Frame: Motion at a Constant Speed	I can use different representations to find or estimate distances traveled in given amount of time.
Lesson Frame: Relating Equations, Tables, and Graphs	I can make a table and a graph based on an equation.
Lesson Frame: Writing Equations	I can write and relate cost equations to situations.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 5-3	Notes:
Topic 4 : **Solving Equations and Equalities**	**Length:** 5 days
Standards: CC.6.EE.2, CC.6.EE.2b, CC.6.EE.2c, CC.6 EE.1, CC.6.EE.2a, CC.6.EE.4, CC.6.G.1, CC.6.G.4, CC.6.EE.3, CC.6.NS.4, CC.6.EE.6, CC.6.EE.9, CC.6.EE.5, CC.6.EE.7, CC.6.EE.8	**Academic Vocabulary:** inequality, solution of an inequality,solution, solve, inverse operations, multiplicative inverse
Lesson Frame: Solutions of Equations and Inequalities	I can solve equations by reasoning about which value of the variable will make the sides equal.
Lesson Frame: Addition and Subtraction Equations	I can model and solve addition and subtraction equations.
Lesson Frame: Multiplication and Division Equations	I can model and solve multiplication and division equations.
Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful contexts.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 5-4, UNIT 5 TEST	Notes:

Unit Name: **Volume of a Rectangular Prism**	**Length:** 8 days
Standards: CC.6.G.1, CC.6.G.2, CC.6.G 4, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.6	**Outcomes:** Students bring their prior knowledge to this unit as they explore volume for prisms that have fractional edge lengths.
Essential Questions: How can students find the volume of specific prisms using appropriate formulas? How can students solve real world problems that involve volume by using their prior knowledge?	**Learning Targets:** Students will find the volume of a right triangular prism with fractional lengths by packing it with unit cubes of the appropriate unit fraction edge lengths. Students will solve real world and mathematical problems involving volume. Students will show that counting unit cubes is the same as multiplying the edge lengths of the prism. Students will apply the formulas V=lwh and V=Bh to find volumes of right rectangular prisms with fractional edge lengths.
Topic 1: **Volume Formulas for Rectangular Prisms**	**Length:** 8 days
Standards: CC.6.G.1, CC.6.G.2, CC.6.G 4, CC.6.EE.2, CC.6.EE.2c, CC.6.EE.6	**Academic Vocabulary:** volume, unit cube, centimeter cube, inch cube, cubic unit, cubic centimeters, cubic inch
Lesson Frame: What is Volume?	I can express volume using an exponent.
Lesson Frame: Fractional Unit Cubes	I can find the volume of prisms with fractional edge lengths by packing them with cubes of appropriate unit fraction edge lengths.
Lesson Frame: Compose Rectangular Prisms with Fractional Edge Lengths	I can compose a rectangular prism with fractional edge lengths by layers.
Lesson Frame: Volume of Prisms with Fractional Edge Lengths	I can solve real world problems involving volume.
Lesson Frame: Write and Solve Equations about Volume	I can understand how the variables of the volume formula are related.
Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful contexts.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 6-1, UNIT 6 TEST	Notes:

Unit Name: **Ratios and Rates with Fractions, Decimals, and Percents**	**Length:** 20 days
Standards: CC.6.RP.1, CC.6.RP.2,, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.EE.6, CC.6.EE.7, CC. 6.RP.3c, CC.RP.3d, CC.6.EE.9, CC.6.G.1, CC.6.G.4	**Outcomes:** Unit 7 builds upon the concepts of rates, ratios, and proportions introduced in Unit 1. The concept of unit rate is extended to all ratios, and unit rates are used to solve proportions, including those with non whole-number solutions.
Essential Questions: How can one solve proportions with non-whole number solutions? How can one use ratio reasoning to convert measurement units?	**Learning Targets:** Students will solve proportions with non-whole number solutions. Students will represent ratios in fraction form. Students will solve proportions involving both part-to-part and part-to-whole ratios. Students will find a percent of a quantity as a rate per 100 and solve problems involving finding the whole given a part and the percent. Students will use equations to represent proportional relationships. Students will use ratio reasoning to convert measurement units.
Topic 1: **Ratios, Fractions, Unit Rates, and Cross-Multiplying**	**Length:** 5 days
Standards: CC.6.RP.1, CC.6.RP.2,, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.EE.6, CC.6.EE.7, CC. 6.RP.3c, CC.RP.3d, CC.6.EE.9, CC.6.G.1, CC.6.G.4	**Academic Vocabulary:** compare ratios, unit rate strategy, cross multiplication
Lesson Frame: Comparing Ratios	I can use tables of equivalent ratios to compare ratios.
Lesson Frame: Unit Rates	I can use unit rates to describe and compare ratios.
Lesson Frame: Ratios, Fractions, and Fraction Notation	I can write ratios in fractional notation.
Lesson Frame: Understanding Cross-Multiplication	I can understand why the cross-multiplication method works.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 7-1	Notes:
Topic 2: **Ratios with Tape Diagrams and Equations**	**Length:** 4 days
Standards: CC.6.RP.1, CC.6.RP.2,, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.EE.6, CC.6.EE.7, CC. 6.RP.3c, CC.RP.3d, CC.6.EE.9, CC.6.G.1, CC.6.G.4	**Academic Vocabulary:** tape diagram, multiplicative comparison
Lesson Frame: Describing Ratios with Tape Diagrams	I can use tape diagrams to solve proportions.
Lesson Frame: Ratios and Multiplicative Comparisons	I can describe ratios using equations.

Lesson Frame: Solve Ratio and Rate Problems	I can recognize problems that are not proportion problems.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 7-2	Notes:
Topic 3: **Percent**	**Length:** 5 days
Standards: CC.6.RP.1, CC.6.RP.2,, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.EE.6, CC.6.EE.7, CC. 6.RP.3c, CC.RP.3d, CC.6.EE.9, CC.6.G.1, CC.6.G.4	**Academic Vocabulary:** percent
Lesson Frame: The Meaning of Percent	I can understand the meaning of percent.
Lesson Frame: Percent of a Number	I can learn methods for calculating a percent of a number.
Lesson Frame: Percent Calculations	I can find the percent of a number.
Lesson Frame: Solve Percent Problems	I can calculate the percent one number is of another.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 7-3	Notes:
Topic 4 **Relate Different Measurement Units**	**Length:** 4 days
Standards: CC.6.RP.1, CC.6.RP.2, CC.6.RP.3, CC.6.RP.3a, CC.6.RP.3b, CC.6.EE.6, CC.6.EE.7, CC. 6.RP.3c, CC.RP.3d, CC.6.EE.9, CC.6.G.1, CC.6.G.4	**Academic Vocabulary:** liquid volume, bar graph, circle graph
Lesson Frame: Convert Units of Length	I can convert units of length in order to calculate area.
Lesson Frame: Convert Units of Liquid Volume, Mass, and Weight	I can convert units of liquid volume, mass, and weight within the same measurement system.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 7-4, UNIT 7 TEST	Notes:

Unit Name: **Analyzing Statistics**	**Length:** 19 days
Standards: CC.6.SP.1, CC.6.SP.4, CC.6.SP.5, CC.6.SP.5a, CC.6.SP.2, CC.6.SP.3, CC.6.SP.5c, CC.6.SP.5d, CC.6.SP.5b	**Outcomes:** Students begin to think statistically as they make sense of data. They explore measures of center and variability as ways to describe data.
Essential Questions: How can one find the mean and median of data displayed in histograms, and make inferences about the displays? How can one interpret box plots and use examples/counterexamples to prove/disprove statements about those plots? How can students add values to dot plots to change the mean, median, or range of the data by a given amount?	**Learning Targets:** Students will understand that a set of data can be described by its center, spread, and overall shape. Students will recognize that a measure of center, such as mean and median, summarizes a set of data values with a single number. Students will recognize that a measure of variation, such as range, interquartile range, and mean absolute deviation, summarizes a set of data values with a single number. Students will display numerical data on dot plots, histograms, and box plots. Students will describe the nature of the attribute under investigation, including how it was measured and its units of measurement. Students will relate the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. Students will display and interpret real world data.
Topic 1: **Displaying Data**	**Length:** 3 days
Standard(s): CC.6.SP.1, CC.6.SP.4, CC.6.SP.5, CC.6.SP.5a	**Academic Vocabulary:** numerical data, dot plot, histogram, interval
Lesson Frame: Making Sense of Data	I can display, interpret, and summarize numerical data.
Lesson Frame: Dot Plots and Histograms	I can interpret and construct a dot plot and a histogram.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 8-1	Notes:
Topic 2 : **Summarizing Data: The Mean and the Median**	**Length:** 5 days
Standards: CC.6.SP.1, CC.6.SP.4, CC.6.SP.5, CC.6.SP.5a, CC.6.SP.2, CC.6.SP.3, CC.6.SP.5c, CC.6.SP.5d, CC.6.SP.5b	**Academic Vocabulary:** leveling out, fair share, mean, median, symmetric
Lesson Frame: Making Data Groups Equal	I can calculate the mean.
Lesson Frame: Use the Mean	I can use the mean to summarize and compare data in context.
Lesson Frame: The Mean as a Balance Point	I can understand that the mean is a balance point of a dot plot.
Lesson Frame: Find and Use the Median	I can find the median of a numerical set of data.

Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 8-2	Notes:
Topic 3: **Describing Variability in Data**	**Length:** 9 days
Standards: CC.6.SP.1, CC.6.SP.4, CC.6.SP.5, CC.6.SP.5a, CC.6.SP.2, CC.6.SP.3, CC.6.SP.5c, CC.6.SP.5d, CC.6.SP.5b	**Academic Vocabulary:** range, quartiles, first quartile, third quartile, box plot, interquartile range, mean absolute deviation, cluster, peak, gap, outlier
Lesson Frame: Variability in Data	I can calculate the range of a set of numerical data.
Lesson Frame: Box Plots	I can draw and interpret a box plot for a set of numerical data.
Lesson Frame: Mean Absolute Deviation	I can compare and interpret mean absolute deviations.
Lesson Frame: Clusters, Peaks, Gaps, and Outliers	I can choose an appropriate measure to describe a set of data.
Lesson Frame: Collect, Display, and Interpret Data	I can collect and analyze data.
Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful ways.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 8-3, UNIT 8 Assessment	Notes:

Unit Name: **Rational Numbers and the Coordinate Plane**	**Length:** 15 days
Standards: CC.6.NS.5, CC.6.NS.6, CC.6.NS.6a, CC.6.NS.6b, CC.6.NS.6c, CC.6.NS.7, CC.6.NS.7a, CC.6.NS.7.b, CC.6.NS.7c, CC.6.NS.7d, CC.6.NS.8	**Outcomes:** This unit extends our base-ten number system to include positive and negative rational numbers, using both number lines and the coordinate plane.
Essential Questions: How can students understand positive and negative numbers related to a number line? How can students understand opposite numbers on a number line? How can students write, interpret, and explain rational numbers and integers in real world situations?	**Learning Targets:** Students will understand that positive and negative numbers can describe quantities having opposite directions on a number line or opposite values. Students will locate and plot points that represent integers and other rational numbers on the number line and in all four quadrants of the coordinate plane. Students will write, interpret, and explain statements that compare integers and other rational numbers. Students will recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. Students will understand absolute value of a number and use this idea to compare numbers and to find distance in the coordinate plane. Students will solve real world and mathematical problems involving integers and rational numbers.
Topic 1: Discuss, Compare and Graph Integers	**Length:** 6 days
Standards: CC.6.NS.5, CC.6.NS.6, CC.6.NS.6a, CC.6.NS.6b, CC.6.NS.6c, CC.6.NS.7, CC.6.NS.7a, CC.6.NS.7.b, CC.6.NS.7c, CC.6.NS.7d, CC.6.NS.8	**Academic Vocabulary:** opposites, positive numbers, negative numbers, origin, integers, absolute value
Lesson Frame: Negative Numbers in the Real World	I can identify positive and negative numbers in real world situations.
Lesson Frame: Integers on a Number Line	I can locate and plot integers on a horizontal or vertical number line.
Lesson Frame: Compare and Order Integers	I can compare and order integers using number lines and in real world situations.
Lesson Frame: Integers and the Coordinate Plane	I can locate and plot integers in all four quadrants of the coordinate plane.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 9-1	Notes:
Topic 2: **Discuss, Compare, and Graph Rational Numbers**	**Length:** 6 days
Standards: CC.6.NS.5, CC.6.NS.6, CC.6.NS.6a, CC.6.NS.6b, CC.6.NS.6c, CC.6.NS.7, CC.6.NS.7a, CC.6.NS.7.b, CC.6.NS.7c, CC.6.NS.7d, CC.6.NS.8	**Academic Vocabulary:** rational number, reflected point
Lesson Frame: Rational Numbers on a Number Line	I can identify rational number opposites.
Lesson Frame: Compare and Order Rational Numbers	I can compare and order numbers using a number line.

Lesson Frame: Rational Numbers and the Coordinate Plane	I can identify the effect on coordinates for reflections in the coordinate plane.
Lesson Frame: Focus on Mathematical Practices	I can apply mathematical concepts and skills in meaningful contexts.
Performance Tasks: Daily Quick Practice Assessment, Quick Quiz 9-2, UNIT 9 Assessment	Notes: