

The following are standards met during the course of
Grade 3 Trimester 3:

MATH



Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division

-Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each, or 7 groups of 5 objects each.

-Interpret whole-number quotients of whole numbers, e.g., interpret $56/8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

-Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

-Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$

Understand properties of multiplication and division and the relationship between multiplication and division

-Apply properties of operations as strategies to multiply and divide.² *Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)*

-Understand division as an unknown-factor problem. *For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.*

Multiply and divide within 100.

-Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

-Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

-Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*

Number And Operations In Base Ten: Use Place Value Understanding And Properties Of Operations To Perform Multi-digit Arithmetic

-Use place value understanding to round whole numbers to the nearest 10 or 100.

-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. (A range of algorithms may be used.)

-Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations. (A range of algorithms may be used.)

Number and Operations -- Fractions

Develop understanding of fractions as numbers.

-Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.

Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.

Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.

Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.

Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.

Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.

Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Measurement And Data: Solve Problems Involving Measurement And Estimation Of Intervals Of Time, Liquid Volumes, And Masses

-Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Recognize area as an attribute of plane figures and understand concepts of area measurement.

A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.

Measurement And Data: Geometric Measurement: Understand Concepts Of Area And Relate Area To Multiplication And To Addition

Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.

Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.

Using tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b+c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.

Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Measurement And Data: Geometric Measurement

Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side

length, and exhibiting rectangles with the same perimeter and different area or with the same area and different perimeter.

Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part is $\frac{1}{4}$ of the area of the shape.

LANGUAGE ARTS

Reading

- Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
- Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.
- Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.
- Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).
- By the end of the year, read and comprehend literature, including stories, dramas and poetry, at the high end of the grades 2-3 text complexity band independently and proficiently.
- Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- Determine the main idea of a text; recount the key details and explain how they support the main idea.
- Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence and cause/effect.
- Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
- Distinguish their own point of view from that of the author of a text.
- Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
- Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).

Phonics And Word Recognition

- Know and apply grade-level phonics and word analysis skills in decoding words.
- Identify and know the meaning of the most common prefixes and derivational suffixes.
- Decode words with common Latin suffixes.
- Decode multisyllable words.

- Read grade-appropriate irregularly spelled words.
- Read with sufficient accuracy and fluency to support comprehension. Read on-level text with purpose and understanding.
- Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Fluency

- Read with sufficient accuracy and fluency to support comprehension.
- Read grade-level text with purpose and understanding.
- Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.
- Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Writing

- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.
- Develop the topic with facts, definitions, and details.
- Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.
- Provide a concluding statement or section.

With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.

With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Speaking and Listening

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

- Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
- Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.

- Explain their own ideas and understanding in light of the discussion.
- Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally
- Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

Language

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.
- Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses.
- Produce simple, compound, and complex sentences
- Produce simple, compound, and complex sentences.
- Capitalize appropriate words in titles.
- Use commas in addresses.
- Use commas and quotation marks in dialogue.
- Form and use possessives.
- Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).
- Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.
- Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
- Recognize and observe differences between the conventions of spoken and written standard English.

Language: Vocabulary Acquisition And Use

Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.

- Use sentence-level context as a clue to the meaning of a word or phrase.
- Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).
- Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).
- Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.

Demonstrate understanding of word relationships and nuances in word meanings.

- Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).
- Distinguish shades of meaning among related words that describe states of mind or

degrees of certainty (e.g., knew, believed, suspected, heard, wondered).

SCIENCE

Life Science

Adaptations in physical structure or behavior may improve an organism's chance for survival.

- Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.
- Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.
- Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.
- Students know that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today.

Earth Science

Objects in the sky move in regular and predictable patterns. As a basis for understanding this concept:

- Students know the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons.
- Students know the way in which the Moon's appearance changes during the four-week lunar cycle.
- Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth.
- Students know the position of the Sun in the sky changes during the course of the day and from season to season.

Investigation and Experimentation

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:

- Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.
- Use numerical data in describing and comparing objects, events and instruments.
- Predict the outcome of a simple investigation and compare the result with the prediction.
- Collect data in an investigation and analyze those data to develop a logical conclusion.

SOCIAL STUDIES

Identify geographical features in their local region (e.g., deserts, mountains, valleys, hills, coastal areas, oceans, lakes).

Trace the ways in which people have used the resources of the local region and

modified the physical environment (e.g., a dam constructed upstream changed a river or coastline).

Research the explorers who visited here, the newcomers who settled here, and the people who continue to come to the region, including their cultural and religious traditions and contributions.

Describe the economies established by settlers and their influence on the present-day economy, with emphasis on the importance of private property and entrepreneurship.

Understand the role of rules and laws in our daily lives and the basic structure of the US Government

Describe the lives of American heroes who took risks to secure our freedoms (e.g. Benjamin Franklin, Thomas Jefferson, Abraham Lincoln, Fredrick Douglass, Harriet Tubman, Martin Luther King, Jr.)

Students demonstrate basic economic reasoning skills and an understanding of the economy of the local region.

Describe the ways in which local producers have used and are using natural resources, human resources, and capital resources to produce goods and services in the past and the present

Understand that some goods are made locally, some elsewhere in the United States, and some abroad.

Understand that individual economic choices involve trade-offs and the evaluation of benefits and costs.

Chronological and Spatial Thinking

- Students place key events and people of the historical era they are studying in a chronological sequence and within a special context; they interpret time lines.
- Students apply terms related to time, including *past, present, future, and generation*.
- Students explain how the present is connected to the past, identifying both similarities and differences between the two, and how some things change over time and some things stay the same.

RELIGION

Scripture/Christian Life

- Tells the stories of Jesus' birth, passion, death and resurrection.

Sacraments/Worship

- Names and simply describes the Seven Sacraments.
- Experiences reconciliation (sacramental and/or non-sacramental).
- Prays daily.

- Prays prayers of petition, blessing, sorrow and the Psalms.
- Explains the major seasons of the Liturgical Year.
- Celebrates the Holy Days of the church year.
- Experiences activities related to the Liturgical Seasons and Feasts (Advent, Christmas, Lent, Easter, Ordinary Time).
- Celebrates rituals and activities that express Christian belief, for example: The Jesse Tree, The Stations of the Cross, blessing with Holy Water.

Morality/Social Justice

- Knows and lives the Two Great Commandments.
- Tells the difference between temptation, accident and sin.
- Describe how sin hurts the whole community.

Christian Faith and Practice

- Tells the stories of 5 saints.
- Identifies the Pope and Bishops as leaders of the Catholic Church
- Describes the qualities of a saint.
- Identifies and becomes familiar with ways to serve the faith community (e.g. altar servers)