Taylors Elementary School
Expecting Excellence in Achievement, Actions and Attitudes
2008-2009 Fifth Grade Pacing Guide

Math

Unit 1: Place Value
Pacing: 16 Days
Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Standard 5-2: The student will demonstrate through the mathematical processes an understanding of the place value system; the division of whole numbers; the addition and subtraction of decimals; the relationships among whole numbers, fractions, and decimals; and accurate, efficient, and generalizable methods of adding and subtracting fractions.
Unit Essential Question: How you use place value to add and subtract decimals?
Unit 1 Concepts:
• Place Value • Adding and Subtracting Decimals

Unit 2: Multiplication and Division
Pacing: 18 Days
Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Standard 5-2: The student will demonstrate through the mathematical processes an understanding of the place value system; the division of whole numbers; the addition and subtraction of decimals; the relationships among whole numbers, fractions, and decimals; and accurate, efficient, and generalizable methods of adding and subtracting fractions.
Standard 5-3: the student will demonstrate through the mathematical processes an understanding of the use of patterns, relations, functions, model, structures, and algebraic symbols to represent quantitative relationships and will analyze change in various contexts.
Unit Essential Question: How do we multiply and divide whole numbers?
Unit 2 Concepts:
• Properties: Commutative, Associative, and Distributive
• Dividing Whole Numbers • Divisibility Rules

Unit 3: Number Theory and Fractions
Pacing: 22 Days
Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Standard 5-2: The student will demonstrate through the mathematical processes an understanding of the place value system; the division of whole numbers; the addition and subtraction of decimals; the relationships among whole numbers, fractions, and decimals; and accurate, efficient, and generalizable methods of adding and subtracting fractions.
Unit Essential Question: How can your understanding of numbers help you add and subtract fractions with like and unlike denominators?

Unit 3 Concepts:

- Prime and Composite Numbers
- Greatest Common Factor
- Lease Common Multiple
- Strategies to Add and Subtract Fractions
- Comparing Whole Numbers, Fractions, and Decimals

Unit 4: Elapsed Time and Temperature

Pacing: 16 Days

Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.

Standard 5-5: The student will demonstrate through the mathematical processes an understanding of the units and systems of measurement and the application of tools and formulas to determine measurements.

Unit Essential Question: How do we measure time and temperature?

Unit 4 Concepts:

- Elapsed Time
- Temperature

Unit 5: Measurement

Pacing: 22 Days

Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.

Standard 5-5: The student will demonstrate through the mathematical processes an understanding of the units and systems of measurement and the application of tools and formulas to determine measurements.

Unit Essential Question: How can we measure with different units?

Unit 5 Concepts:

- Length
- Conversions
- Volume

Unit 6: Expressions, Equations, and Functions

Pacing: 17 Days

Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.

Standard 5-3: the student will demonstrate through the mathematical processes an understanding of the use of patterns, relations, functions, model, structures, and algebraic symbols to represent quantitative relationships and will analyze change in various contexts.

Unit Essential Question(s): How do we represent and analyze patterns?
How do we show change over time?

Unit 6 Concepts:

- Patterns and Functions
- Algebraic Expressions and Equations
- Change over Time

Unit 7: Data Analysis and Probability

Pacing: 16 Days

Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.

Standard 5-6: The student will demonstrate through the mathematical processes an understanding of investigation design, the effect of data collection methods on a data set, the interpretation and application of the measures of central tendency, and the application of basic concepts of probability.

Unit Essential Question: How do we analyze data and apply concepts of probability?

Unit 7 Concepts:

- Mathematical Investigations
- Data Collection Methods
- Measures of Central Tendency
- Probability

Unit 8: *Geometry*
Pacing: 32 Days
Standard 5-1: The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Standard 5-4: The student will demonstrate through the mathematical processes an understanding of congruency, spatial relationships, and relationships among the properties of quadrilaterals.
Standard 5-5: The student will demonstrate through the mathematical processes an understanding of the units and systems of measurement and the application of tools and formulas to determine measurements.
Unit Essential Question: What is the spatial relationship among quadrilaterals?
Unit 8 Concepts:

- Quadrilaterals
- Multiple Transformations
- Symmetry
- Perimeter and Area

Science

Unit Topic: Ecosystems **Pacing:** 35 Days **Standard 5-2:** The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. **Unit Concepts:** Cell Membrane, Cytoplasm, Nucleus, Vacuole, Cell, Ecosystem, Biotic, Abiotic, Biosphere, Communities, Organisms, Populations, Terrestrial, Aquatic, Estuaries, Saltwater Marsh, Herbivores, Carnivores, Omnivores, Termites, Worms, Fungi, Predators, Prey, Parasites, Hosts, Limiting Factors **Unit Essential Question:** What effects do biotic and abiotic factors have on an ecosystem?	**Unit Topic:** Forces and Motion **Pacing:** 35 days **Standard 5-5:** The student will demonstrate an understanding of the nature of force and motion. (Physical Science) **Unit Concepts:** Force, Motion, Unbalanced Forces, Friction, Motion Graph **Unit Essential Question:** How do forces affect motion?
Unit Topic: Human Impact **Pacing:** 20 days **Standard 5-2:** The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. (Life Science) 5-3 The student will demonstrate an understanding of features, processes, and changes in Earth's land and oceans. (Earth Science) 5-4 The student will demonstrate an understanding of properties of matter. (Physical Science) **Unit Concepts:** Pollution **Unit Essential Question:** How do human activities affect the physical and biological features of the earth?	**Unit Topic:** Ocean Shore Zone **Pacing:** 20 days **Standard 5-3:** The student will demonstrate an understanding of features, processes, and changes in Earth's land and oceans. (Earth Science) **Unit Concepts:** Ocean Shore Zone Features, Water Movement **Unit Essential Question:** How does the movement of water affect the ocean shore zone?

Unit Topic: Geological Features of the Earth **Pacing:** 20 days **Standard 5-3:** The student will demonstrate an understanding of features, processes, and changes in Earth's land and oceans. (Earth Science) **Unit Concepts:** Constructive Processes, Destructive Processes, Ocean Floor Landforms **Unit Essential Question:** How do natural processes affect geological features?	**Unit Topic:** Properties of Matter **Pacing:** 25 days **Standard 5-4:** The student will demonstrate an understanding of properties of matter. (Physical Science) **Unit Concepts:** Matter, Mixtures, Separating Mixtures, Rate of Dissolving, and New Substances. **Unit Essential Question:** How can matter be changed?
Unit Topic: States of Matter **Pacing:** 10 days **Standard 5-4:** The student will demonstrate an understanding of properties of matter. (Physical Science) **Unit Concepts:** Matter, States of Matter **Unit Essential Question:** How are physical properties of solids, liquids, and gases alike and different?	

ELA and Social Studies

Unit 1: The Great Railroad Race: The Diary of Libby West by Kristiana Gregory
Grasshopper Summer Ann Turner
"Pioneer Girl" (reading basal)
"Black Cowboy, Wild Horses" (reading basal)

Pacing: 25 days
Standard 5-1: The student will read and comprehend a variety of literary texts in print and nonprint formats.
Standard 5-2: The student will read and comprehend a variety of informational texts in print and nonprint formats.
Standard 5-3: The student will use word analysis and vocabulary strategies to read fluently.
Standard 5-4: The student will create written work that has a clear focus, sufficient details, coherent organization, effective use of voice, and correct use of conventions of written Standard American English.
Standard 5-5: The student will write for a variety of purposes and audiences.
Standard 5-6: The student will access and use information from a variety of sources.

Unit 2: Letters from Rifka by Karen Hesse

Pacing: 30 days
Standard 5-1: The student will read and comprehend a variety of literary texts in print and nonprint formats.
Standard 5-2: The student will read and comprehend a variety of informational texts in print and nonprint formats.

Standard 5-3: The student will use word analysis and vocabulary strategies to read fluently.
Standard 5-4: The student will create written work that has a clear focus, sufficient details, coherent organization, effective use of voice, and correct use of conventions of written Standard American English.
Standard 5-5: The student will write for a variety of purposes and audiences.
Standard 5-6: The student will access and use information from a variety of sources.

Unit 3: Bully for You, Teddy Roosevelt by Jean Fritz
Meet Kit by Valerie Trip

Pacing: 32 days
Standard 5-1: The student will read and comprehend a variety of literary texts in print and nonprint formats.
Standard 5-2: The student will read and comprehend a variety of informational texts in print and nonprint formats.
Standard 5-3: The student will use word analysis and vocabulary strategies to read fluently.
Standard 5-4: The student will create written work that has a clear focus, sufficient details, coherent organization, effective use of voice, and correct use of conventions of written Standard American English.
Standard 5-5: The student will write for a variety of purposes and audiences.
Standard 5-6: The student will access and use information from a variety of sources.

Unit 4: Foster's War by Carolyn Reeder
Number the Stars Lois Lowry

Pacing: 38 days
Standard 5-1: The student will read and comprehend a variety of literary texts in print and nonprint formats.
Standard 5-2: The student will read and comprehend a variety of informational texts in print and nonprint formats.
Standard 5-3: The student will use word analysis and vocabulary strategies to read fluently.
Standard 5-4: The student will create written work that has a clear focus, sufficient details, coherent organization, effective use of voice, and correct use of conventions of written Standard American English.
Standard 5-5: The student will write for a variety of purposes and audiences.
Standard 5-6: The student will access and use information from a variety of sources.

Unit 5: Lost in the War Nancy Antle

Pacing: 25 days
Standard 5-1: The student will read and comprehend a variety of literary texts in print and nonprint formats.
Standard 5-2: The student will read and comprehend a variety of informational texts in print and nonprint formats.
Standard 5-3: The student will use word analysis and vocabulary strategies to read fluently.
Standard 5-4: The student will create written work that has a clear focus, sufficient details, coherent organization, effective use of voice, and correct use of conventions of written Standard American English.
Standard 5-5: The student will write for a variety of purposes and audiences.
Standard 5-6: The student will access and use information from a variety of sources.

Unit 6: The Great Gilly Hopkins Katherine Paterson
Indian in the Cupboard Lynne Reid Banks
"Mae Jemison: Space Scientist" (reading basal)

Pacing: 25 days

Standard 5-1: The student will read and comprehend a variety of literary texts in print and nonprint formats.

Standard 5-2: The student will read and comprehend a variety of informational texts in print and nonprint formats.

Standard 5-3: The student will use word analysis and vocabulary strategies to read fluently.

Standard 5-4: The student will create written work that has a clear focus, sufficient details, coherent organization, effective use of voice, and correct use of conventions of written Standard American English.

Standard 5-5: The student will write for a variety of purposes and audiences.

Standard 5-6: The student will access and use information from a variety of sources.