

MATHEMATICS-HABITS OF MIND

Every student will continue to:

- *learn to value mathematics
- *become confident with mathematics
- *become an active rather than a passive learner
- *be able to communicate mathematically
- *be able to reason mathematically

<p>LEARNING THINKING STUDY SKILLS</p> <ul style="list-style-type: none"> ◆ Classify ◆ Compare/contrast ◆ Form conjectures ◆ Draw conclusions ◆ Organize and record information ◆ Formulate questions ◆ Extract essential information ◆ Observe and analyze data ◆ Solve problems ◆ Connect to prior knowledge ◆ Engage in math dialogue ◆ Justify math reasoning ◆ Communicate ideas through written and oral expressions using mathematical language ◆ Predict outcomes ◆ Demonstrate math knowledge through assessments ◆ Manage time ◆ Follow directions ◆ Check work ◆ Use resources ◆ Persevere 	<p>Learning Essentials In Second Grade: Communicating, reasoning, connecting, and representing ideas are essential to your child’s growth in mathematics. In second grade, students extend and solidify their understanding of number as well as their skills with addition and subtraction. Through problem solving with geometry, measurement, patters, and numbers they have many opportunities to record their mathematical thinking using pictures, numbers, and words.</p>		
	<p>Number Sense and Operations</p> <ul style="list-style-type: none"> ◆ Understand and represent numbers to 1000. Use the symbols $>$, $=$, $<$ to compare them. ◆ Classify numbers into groups (odds/evens) ◆ Name all U.S. coins and their values. ◆ Trade coins while maintaining value. Recognize amounts of money up to \$20.00 and represent amounts of money up to \$5.00. ◆ Use addition and related subtraction facts up to 20 to solve problems. Add and subtract three-digit numbers. ◆ Recognize addition and subtraction as inverse operations. ◆ Solve and write story problems using addition and subtraction up to 20. Explain and write strategies and reasoning. ◆ Identify and represent from models $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$. ◆ Estimate sums and differences. 	<p>Geometry</p> <ul style="list-style-type: none"> ◆ Draw and name 2-D shapes. ◆ Describe and compare two and three dimensional shapes according to their attributes. ◆ Recognize congruent and symmetrical shapes. ◆ Transform 2-D shapes by flipping, turning, and sliding them. 	<p>Patterns, Relations and Algebra</p> <ul style="list-style-type: none"> ◆ Explain and create simple patterns. Find patterns in hundred’s charts. ◆ Skip count forward to and backward from 100 by 2’s, 5’s and 10’s. ◆ Find the value of a symbol in a number sentence. ◆ Use coins to find number patterns.
		<p>Measurement</p> <ul style="list-style-type: none"> ◆ Identify parts of a day, days, of the week, months, and dates. ◆ Tell time to the $\frac{1}{4}$ hour using analog and digital clocks using A.M and P.M ◆ Compare the features of objects using length, weight, area, and volume. ◆ Measure objects using rulers in both inches (to the $\frac{1}{4}$ inch) and centimeters. 	<p>Data, Analysis, Statistics, and Probability</p> <ul style="list-style-type: none"> ◆ Use interviews, surveys, and observations to gather data. Represent the gathered data as tallies, bar graphs, pictographs, and charts. Draw conclusions about the data. ◆ Use Venn diagrams to sort objects shapes. ◆ Explore simple probability with experiments.

HOME/SCHOOL CONNECTION – GRADE 2

We have listed some activities that should be done at home to ensure a positive, successful math experience for your child in school. These activities can be done in informal situations for only a few minutes at a time.

- ◆ Give your child a group of objects to count, label, measure, compare, and put in order.
- ◆ Give your child a collection of coins to sort and count. Estimate the total cost of a shopping trip.
- ◆ Practice adding digits on passing license plates.
- ◆ Point out the use of numbers and shapes in the everyday environment.
- ◆ Be sure that you have an analog clock available for your child. Practice telling time: bedtime, dinnertime, baseball, and other scheduled events.
- ◆ Practice basic addition and subtract facts up to 20.
- ◆ Play board games that use dice
- ◆ Estimate: How many crayons are on the table? How many toys can you pick up in a minute?