Legacy Traditional Schools

FIRST GRADE Parent Guide and Resources for

enVision® Mathematics

Kids See the Math. Teachers See Results.

General Guidelines

1. Math instruction now focuses more on **problem-solving, reasoning, and understanding** in addition to efficient computation.
2. Learning tasks are designed to develop concepts, not just promote efficient computation, therefore a young child will build **deep understanding** that leads to **better skills and fluency**.
3. Struggle means your child is learning. When a student is putting in effort to think, the brain is creating new pathways and connections. We call this "cognitive sweat." In fact, the very first math standard for all K-12 students is to ***Make Sense of Problems and Persevere*** in solving them. Help your child build that perseverance by allowing him or her to work through a difficult problem-solving task without memorizing shortcuts.

Homework Tips

- Communicate with the teacher directly:
  - Write notes on homework
  - Note questions that were challenging
- **Parents should not be re-teaching** during every assignment. See the next section for suggestions about ways you can help when you do not understand all the math.
- Use the **many online tools** from the program to support student work at home.

Instead of Re-teaching, Try Questioning

Instead of attempting to re-teach a skill, try asking questions that help your child think through the solution on his or her own:

- What do you think might work to solve this? Why do you think that might work?
- What about this problem seems familiar?
- What is easy about this problem? Why do you think that part is easy?
- What seems difficult about this? Why is it confusing or complicated?
- What is the question you are trying to answer? What do you need to know in order to answer it? Are you missing some important information?
- What might happen if you try the opposite of what you are doing now? It might not work, but it could give you some interesting ideas about how to solve it.
- If you gave this problem to your teacher, what do you think he or she would do next?

After your child finds an answer, instead of telling him or her whether it is correct, try asking these kinds of questions:

- Why do you think that is a good answer? How do you know?
- Tell me how you got that answer. Why does that work?
- Why did you solve it that way?
- Is there another way you could solve it?

Online Resources

All of the following are available through Clever.

- Savvas Realize
- Schoology
- Learning Farm

Supporting Your Child At Home

Clever Login

1. Have the student log in to their Clever account using their Gmail login.
2. Scroll down and click on the Savvas EasyBridge App.



Schoology Login

1. Have the student log in to their Clever account using their Gmail login.
2. Scroll down and click on the Schoology App.



Examples

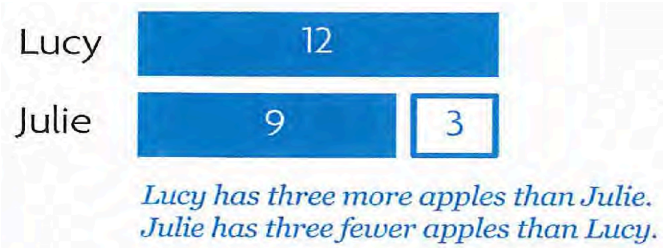
Here are just a few examples of the skills and strategies students will develop as they solve word problems in first grade.

Kindergarten Mathematics	Grade One Mathematics	Grade Two Mathematics
• Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (such as claps), acting out situations, verbal explanations, expressions, and equations • Solve word problems by adding or subtracting numbers up through 10 using objects and drawings	• Solve word problems by adding or subtracting numbers up through 20 • Solve addition and subtraction problems for different unknown numbers (for example, 20 - ? = 15, 9 + 4 = ?)	• Solve one- and two-step word problems by adding or subtracting numbers up though 100

Examples of First Grade Word Problems.

Addition +	6 bunnies sat on the grass. Some more bunnies hopped over. Then there were 14 bunnies. How many bunnies hopped over?
Subtraction -	14 bunnies were sitting on the grass. Some bunnies hopped away. Then there were 5 bunnies. How many bunnies hopped away?
Comparison	Lucy has 12 apples. Julie has 9 apples. How many more apples does Lucy have than Julie?

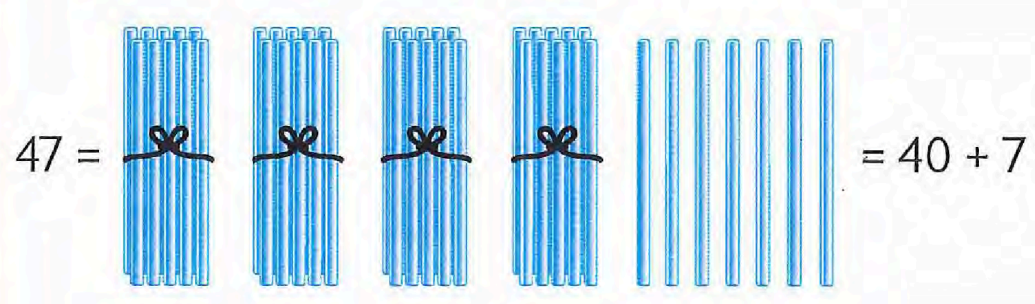
Your child will use pictures and diagrams to show addition and subtraction and to compare amounts.



Here are just a few examples of how students will develop and use their understanding of place value in first grade.

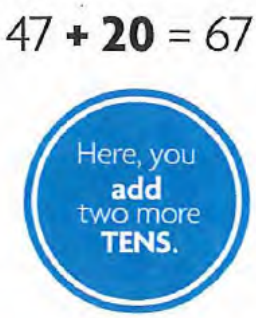
Kindergarten Mathematics	Grade One Mathematics	Grade Two Mathematics
• Count to 100 by ones and tens • Understand that numbers from 11 to 19 contain a ten and some leftover ones (For example, 14 = 10 + 4)	• Understand that 10 can be thought of as a bundle of ten ones – called a "ten" • Understand that the two digits of a two-digit number represent amounts of tens and ones (place value) • Add and subtract numbers through 100 using what students have learned about place value	• Understand that 100 can be thought of as a bundle of ten tens – called a "hundred" • Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (place value) • Add and subtract numbers through 1000 using what students have learned about place value

Students use models and pictures to show that 47 is the same as 47 ones, 4 tens + 7 ones, and to better understand the relative size of the units.



From there, students learn to think of ten as a unit and to break all the teen numbers down to a ten and some leftover ones.





Standards for Mathematical Practice for Parents

Mathematical Practice Standard	How a child can use the practice standards	Questions to ask
1. Make sense of problems and persevere in solving them.	•I can make my own plan for solving the problem and stick with it even if it is difficult. •I can check the reasonableness of my answer. •I can solve it a second way to make sure I am right!	•What plan can you make to solve this problem? •Can you draw a picture or act out the problem? •What information is in the problem and what are you trying to figure out?
2. Reason abstractly and quantitatively.	•I can use numbers and words to help make sense of problems. •I can think about what each number represents. •I can think about the relationships between the numbers in the problem. •I can think about what property might be used to solve the problem. •I can think about whether other operations might be used.	•Can you explain what the numbers in the problem mean? •How did you decide to use this operation?
3. Construct viable arguments and critique the reasoning of others.	•I can explain my thinking using objects, drawings or actions •I can consider the thinking of other students •I can ask questions to clarify my understanding •I can make connections to other strategies	•How can we be sure? •Is this like another problem you have solved before? •How could you prove that….?
4. Model with mathematics.	•I can recognize math in everyday life and use it to solve problems. •I can use pictures, words, objects, or symbols to solve. •I can use number lines, arrays, or other models to help myself as I solve the problem or to represent my solution.	•What model could you construct that might help you solve this problem? •Can you visualize the action in this problem?

Standards for Mathematical Practice for Parents

Mathematical Practice Standard	How a child can use the practice standards	Questions to ask
5. Use appropriate tools strategically.	•I can use math tools such as number lines, calculators, objects, tables, etc. to solve a problem. •I can use estimates when problem-solving.	•What tools could we use to solve this problem? •What information do you have that might help?
6. Attend to precision.	•I can be careful when I use math and clear when I share my ideas. •I always think about whether my answer is reasonable! •I try to be efficient and concise when I solve a problem. (this looks different at various grade levels) •I can test my solution by solving a different way or by modeling the solution and checking for reasonableness.	•How do you know your solution is reasonable? •How could you test your solution to see if it accurately answers the problem?
7. Look for and make use of structure.	•I can see and understand how numbers and shapes are put together as parts and wholes. •I look for patterns that can help me solve a problem. •I think about other problems I have solved before and whether they can help me with this problem. •I try to connect mathematical ideas.	•What do you notice when…? •What patterns do you find in…? •What are some other problems that are similar to this one?
8. Look for and express regularity in repeated reasoning.	•I can notice when calculations are repeated and use these ideas to create a strategy. •I think about whether patterns are always true in all situations. •I can create rules for patterns.	•Is this always true? •What do you notice about…? •What is happening in this situation?