

Florida Standards for Basic Facts

By the end of kindergarten, students should be able to:

-Represent quantities with numbers up to 20, verbally, in writing, and with manipulatives.

-Solve problems including those involving sets by counting, by using cardinal and ordinal numbers, by comparing, by ordering, and by creating sets up to 20.

-Solve word problems involving simple joining and separating situations.

By the end of first grade, students should be able to:

-Model addition and subtraction situations using the concepts of “part-whole,” “adding to,” “taking away from,” “comparing,” and “missing addend.”

-Identify, describe, and apply addition and subtraction as inverse operations.

-Create and use increasingly sophisticated strategies, and use properties such as Commutative, Associative, and Additive Identity, to add whole numbers.

-Using counting strategies, number patterns, and models as a means for solving basic addition and subtraction fact problems.

By the end of second grade, students should be able to:

-Recall basic addition and related subtraction facts.

Internet Resources

www.mathcouncil.com

- Hillsborough County Elementary Mathematics Website

www.floridastandards.org

- Complete list of Florida Standards with remarks and explanations of standards.

www.mathplayground.com

- Manipulatives, games, interactive demonstration videos

www.coolmath4kids.com

- Math games, lessons

www.mathstory.com

- Math poems, math songs, math stories



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THE BASICS ABOUT ADDITION AND SUBTRACTION FACTS



*A family's guide to
helping your child learn
and understand basic
facts.*

FAQ's

Should I prepare my child by having them memorize their facts early?

Research from John A. Van de Walle (2004) states that prematurely drilling children on their basic facts solely by memorization such as timed test and flash cards before the child has had the opportunity to understand the meaning of the operation will hinder their ability to retain the facts in long term memory and apply the concepts later in more rigorous situations.

So... Then how should you use flash cards at home?

One way to use flash cards is to check which facts your child already knows. You can create two piles, one pile of facts your child knows (mastered facts) and one pile of "new" facts. Pick no more than two "new" facts at a time for your child to work on. Help your child master these "new" facts by showing them strategies such as drawing pictures to represent the fact, using actual items to model the fact, or use the fact in an every day situation. Once your child has an understanding of the two "new" facts, add them to the mastered fact pile which can be used to practice for quick recall.

Isn't speed important in doing math?

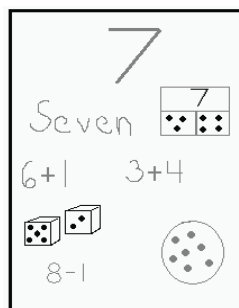
The ultimate goal of mastering basic facts is for children to have quick, accurate, and automatic recall as well as an understanding of the principle used.

Research states that:

Students need to have a deep understanding of numbers and their relationship to each other before the memorization of facts. A foundation of number sense will aid students in developing strategies to recall the answers to facts efficiently. Through the usage of basic fact recall strategies, students will have a variety of tools to become great mathematical problem solvers. Included in this brochure is an example of one activity designed to build number sense as well as one designed to aid in fact recall. Your child will learn numerous strategies similar to these throughout their school year. We hope that you will practice these strategies at home with your child.

Number Sense at Home

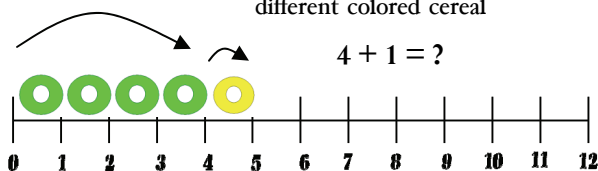
An important component to building number sense is being able to understand numbers in many forms. Something you can do at home is to represent a number as many different ways as possible. Here is an example of representing the number 7 on paper. Students may also use objects such as cereal, buttons, etc to represent numbers.



Basic Fact Strategy Using a Number Line to Count On and Count Back

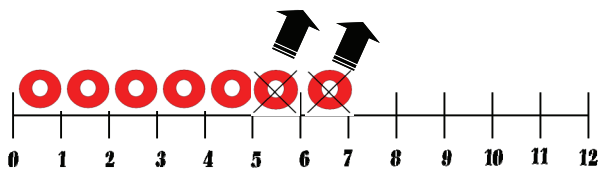
-Create a number line with sections the size of pieces of cereal.

-Use your number line to add by **counting on** with different colored cereal



-You can also use your number line to subtract by **counting back** and removing cereal

$$7 - 2 = ?$$



Building Number Sense at Home:

-Make a walk-on number line with chalk outside and count up to solve basic subtraction facts

-Count sets of household objects (How many raisins can you fit on a spoon?)

-Work on identifying numerals (Make numbers with play-doh.)

-Identify quantities by labeling them with numerals (Group shoes and label them with the numeral on an index card.)

-Focus on a single number for the entire week (What comes in threes? Wheels on a tricycle...)

-Discuss numbers you see in the real-world (Point out the speed limit on the interstate.)

-Play number games: Show an amount of objects such as four pennies and say, "I wish I had six." How many more do I need? (Use popsicle sticks, cotton balls, etc to model.)

-Focus on part-part-whole relationships.

Whole		part + part = <u>whole</u>
Part	Part	whole - part = <u>part</u>
		part + <u>?</u> = whole

-Use word problems to focus on part-part-whole

-Check out books from the library that involve numbers

(Two of Everything, Quack and Count,
Subtraction Action, Ten Little Fish)