## Two-Digit Addition and Subtraction and Review

In Unit 9, children solve real-world problems about comparing prices and buying items from a school store or vending machine. They also solve silly number stories about animals. To solve these problems, children add and subtract pairs of 1-digit numbers, decade numbers (such as 40,50 or 80 ), and 2 -digit numbers. After solving the problems, they compare numbers using the symbols $<,>$, and $=$.

Children continue to work on measurement concepts by using paper clips to measure objects and creating a paper-clip ruler to measure more efficiently. Second Grade Everyday Mathematics builds
 on this by introducing rulers with inches and centimeters as units.

Children also find equivalent names for numbers by solving broken-calculator puzzles. This activity requires children to determine how to display numbers when certain calculator keys do not work.

Example: Imagine your 3-key is broken.
How can you show the number 13 without using the 3-key?
$9+4$ or $15-2$
Children also review other topics from First Grade Everyday Mathematics in Unit 9, including place value and geometry.

## Do-Anytime Activities

To work with your child on the concepts taught in this unit and in previous units, try these activities:

1. Use Fact Triangles and any of the games introduced at school to help your child practice addition and subtraction facts.
2. Say a 2-digit number. Ask your child to mentally find 10 more and 10 less.
3. Have your child tell time to the hour or half-hour.
4. Find and describe geometric shapes in everyday objects with your child.
5. Have your child create the largest and smallest numbers possible when given 2 (or 3) digits.
6. Make up and solve broken-calculator puzzles.

## Building Skills through Games

Your child will play these games and others in Unit 9:

## Beat the Calculator

A "Calculator" (a player who uses a calculator) and a "Brain" (a player who does not use a calculator) race to see who will be first to solve addition facts.

## Time Match

Players find pairs of cards showing matching times on analog and digital clocks like in the game Concentration (also known as Memory). The player with the most matching cards wins.

## As You Help Your Child With Homework

As your child brings home assignments, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through the Home Links for this unit.

## Home Link 9-1

1-5. Answers vary.
6. $<;=;>;$

## Home Link 9-2

1. Answers vary.
2. 



## Home Link 9-3

1. 61
2. $7 ; 4$

## Home Link 9-4

1. Sample answers: $20+10=$; $10+10+10=$;

$$
29+1=
$$

2. Sample answers: $8+7=; 14+1=$; $16-1=$
3. Sample answers: $9+9=; 20-2=$;

$$
8+8+2=
$$

4. Sample answer:
|||l|||..............

## Home Link 9-5

1. 95 cents
2. 95 cents
3. Answers vary.

## Home Link 9-6

1. No
2. 2 ¢; Sample answers: $44+2=46 ; 46-44=2$
3. 20 ¢; Sample answers: $26+20=46$; $46-26=20$
4. $70 ¢ ; 44+26=70$
5. 24 ¢; Sample answers: $70-46=24$; $46+24=70$
6. $70 ; 22 ; 33$

## Home Link 9-7

1. $67 ; 47+20=67$
2. $74 ; 37+37=74$
3. $58 ; 22+26+10=58$
4. $50 ; 60 ; 30 ; 40$

## Home Link 9-8

1. rubber bands and box of crayons;

Sample answer: $56<88$
2. eraser and ball; Sample answer: $62<67$
3. Smaller

## Home Link 9-9

1. 


2.

3.

|  |  |  |
| :---: | :---: | :---: |
|  |  |  |
|  | 58 |  |
| 67 | 68 | 69 |

4. 


5. $4 ; 6 ; 40 ; 60$

## Home Link 9-10

1. Cube
2. Cylinder
3. Rectangular prism or cube
4. Pyramid
5. Cone or cylinder
6. 13 ribbons; $6+4+3=13$

## Home Link 9-11

1. 


2.

4. $96 ; 35 ; 20$

## End-of-Year Family Letter

Congratulations! By completing First Grade Everyday Mathematics your child has accomplished a great deal. Thank you for all of your support.

This Family Letter is provided for you to use as a resource throughout your child's school vacation. It includes a list of Do-Anytime Activities, game directions, fact practice tips, and a sneak preview of what your child will be learning in Second Grade Everyday Mathematics.

Enjoy your summer!


## Do-Anytime Activities

The following activities are for you and your child to do together over the summer to help review concepts your child learned in first grade. These activities build on the skills from this year and help prepare him or her for Second Grade Everyday Mathematics.

## Telling Time and Measuring Length

- Tell time to the hour and half hour on analog and digital clocks in a variety of situations.
- Set alarm clocks and timers on objects such as ovens, microwave ovens, and mobile phones.
- Record the time spent doing various activities.
- Measure lengths of objects and paths with nonstandard units such as paper clips, toothpicks, or arm spans.


## Collecting Data

- Collect data by asking questions:

Which is your favorite summer fruit-watermelons, strawberries, or peaches?

- Collect data by making observations:

How many people are wearing shorts, dresses, or swimsuits?

- Organize data in tally charts and in bar graphs, including keeping track of the weather.



## Beginning Geometry

- Look for and identify attributes of geometric shapes in the real world, such as street signs, boxes, cans, construction cones, and so on.
- Construct polygons (closed, straight-sided, flat shapes) using drinking straws and twist ties from plastic storage bags. Small-diameter straws, such as coffee stirrers, are easier to use and cut into 4 - or 6-inch pieces. If only larger straws are available, fold the ends of the twist ties to fit tighter. To build the polygons, put a twist tie into each end of the straw, then use it to connect two straws. Once you have connected straws for all of the sides, be sure to close the shape.

- Make 3-dimensional shapes from straws and twist ties. To build the polyhedrons, put two twist ties (or one folded twist tie) into the ends of straws so that each end can be connected to two other straws. Tip: Connect base straws first.


## Continuing Scrolls and Number-Grid Puzzles

- Fill in blank number grids and tape them together in order to continue number scrolls begun in first grade. Use these scrolls and number grids to explore the different patterns in the number grid, such as counts by 10 and the relationships between digits.
- Fill in the cells on a piece of a number grid to create letters,
 patterns, and designs.
- Create and solve puzzles from pieces of a number grid in which most of the numbers are missing.


## Facts and Games

Basic addition and subtraction facts are the building blocks for all future computation. Many strategies for solving basic facts can later be used to compute with larger numbers. Frequent practice with facts, especially doubles and combinations of 10 , helps maintain fact fluency, the ability to compute with appropriate, flexible, and efficient strategies.

Games provide an engaging and motivating setting for fact practice. Question your child's correct and incorrect conclusions and encourage him or her to explain his or her reasoning and self-correct answers.

The following section contains directions for games that can be played at home. The number cards used in some games can be made from $3^{\prime \prime}$ by $5^{\prime \prime}$ index cards or taken from a regular deck of playing cards.

## Roll and Record Doubles

Materials 1 die or number cards 1-10, paper for a record sheet

Players 2

## Directions

Draw a chart like the one below (or a larger one to record number cards). Roll the die or flip a card. Use that number to make a doubles fact. Shade the first open box above the double. Take turns until a column is filled.

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
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| 2 | 4 | 6 | 8 | 10 | 12 |

## Addition Top-It

Materials 4 each of number cards 0-9
Players 2 or more

## Directions

Shuffle the cards and place them in a pile, number-side down. Each player takes 2 cards from the top of the pile and says the sum of the numbers. The player with the greater sum takes all of the cards for that turn. Ties are broken by drawing again-winner takes all. The player with the most cards at the end of the game is the winner.

## Variations

- Rather than add, players subtract the smaller number from the larger number. The largest difference takes all of the cards.
- Each player turns over 3 cards and finds the sum.


## Fishing for 10

Materials 4 sets of number cards 0-10
Players 2-4

## Directions

Play this game as you would play Go Fish. Keep 5 cards in your hand. Fish for combinations of 10 rather than matching cards. Play until nobody can make another combination of 10 . Record some of your combinations of 10 .

Sample: $4+6=10$

## Salute!

Materials 4 each of number cards 0-10
Players 3

## Directions

One person begins as the Dealer. The Dealer gives one card to each of the other two Players. Without looking at the card, each Player holds it, number facing out, on his or her forehead. The Dealer says the sum of the two numbers. Players look at each other's cards. They use the number they see and the sum to figure out what the numbers on their own cards must be. They both say their numbers aloud and then look at their own cards. Rotate roles and repeat the game.

## Facts and Games (continued)

Your child can also practice addition and subtraction facts using Fact Triangles. Have your child sort the Fact Triangles into piles of facts they know well and facts that need continued practice. Help your child come up with strategies to use for the facts that need more practice.

$9-6=3$

## Looking Ahead: Second Grade Everyday Mathematics

Next year, your child will ...

- explore arrays as preparation for multiplication.
- read and write numbers up to 1,000 .
- create graphs to organize data and answer questions.
- continue to describe attributes of 2- and 3-dimensional shapes.
- continue to explore fractions.
- measure length to the nearest inch and centimeter.
- continue to develop fact strategies.

Again, thank you for all of your support this year. Have fun continuing your child's mathematics experiences over the summer.

