Developing Fact Power

Knowing the basic facts is as important to mathematics as knowing words by sight is to reading. By now, your child should have begun to master many addition and subtraction facts. By the end of the year, your child will have mastered the remaining facts.

Learning the facts takes practice. It is not necessary to practice for a long time, but it is important to practice often. One good way to practice is to play the games described on the third page of this letter.

Later in this unit, children will extend their time-telling skills by learning to tell time to the nearest 5 minutes and by representing the time in digital notation, as it appears on a digital clock.

Math Tools

Your child will be using Fact Triangles to practice and review addition and subtraction facts. Fact Triangles are a “new and improved” version of flash cards; the addition and subtraction facts shown are made from the same three numbers, and this helps your child understand the relationships among those facts. The Family Note on Home Link 6-4, which you will receive later, provides a more detailed description of Fact Triangles.

Please keep this letter for reference as your child works through Unit 6.
**Vocabulary**

Important terms in Unit 6:

**fact family** A set of related facts linking two inverse operations, such as addition and subtraction. For example:

\[
\begin{align*}
3 + 4 &= 7 \\
4 + 3 &= 7 \\
7 - 3 &= 4 \\
7 - 4 &= 3
\end{align*}
\]

**function machine** An imaginary device that receives inputs and generates outputs. The machine usually pairs an input number with an output number by applying a rule such as “+5.”

**name-collection box** A diagram that is used for collecting equivalent names for a number.

**digital clock** A clock that shows the time with numbers of hours and minutes, usually separated by a colon.

**range** The difference between the maximum and minimum in a set of data. For example, in the set below, the range is 36 – 28 = 8.

**middle value** The number in the middle when the data are listed from smallest to largest. For example, in the data set below, 32 is the middle value:

\[
28 \ 28 \ 31 \ 32 \ 33 \ 35 \ 36
\]

**“What’s My Rule?” problem** A problem in which two of the three parts of a function (input, output, and rule) are known, and the third is to be found out.

**Do-Anytime Activities**

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

1. Using the Fact Triangles, cover the sum for addition practice. Cover one of the other numbers for subtraction practice. Make this brief and fun.

2. Have your child tell you a number story that fits a given number model, such as \(3 + 5 = 8\).

3. Go to your local library and check out the book *12 Ways to Get to 11* by Eve Merriam, an entertaining book that presents addition facts.

4. Fill in name-collection boxes. Begin with a number, such as 20, and find at least five equivalent names.
Building Skills through Games

In Unit 6, your child will practice addition, subtraction, and money skills by playing the following games.

**Addition Top-It**
Players turn over two cards and call out the sum. The player with the higher sum keeps all of the cards. The player with more cards at the end of the game wins.

**Fact Power Game**
Players take turns naming sums of addition facts on a game board. The player who correctly answers the greatest number of addition facts wins the game.

**Coin Exchange**
Players put 20 pennies, 10 nickels, and 2 quarters in a pile. At each turn, a player rolls 2 dice and collects the amount of money equal to the number of dots on the dice. Players make exchanges whenever possible. The game ends when there are no more quarters. The player who has the greatest amount of money wins.

As You Help Your Child with Homework

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

**Home Link 6•1**

1. \( \frac{5}{14} \) (yellow); \( 6 + 6 = 12 \) (blue);
   \( 7 + 7 = 14 \) (yellow)
   \( \frac{3}{8} \) (red); \( 12 = 3 + 9 \) (blue); \( \frac{7}{12} \) (blue);
   \( \frac{5}{15} \) (red); \( 5 + 5 = 10 \) (green); \( \frac{6}{15} \) (red);
   \( 4 + 6 = 10 \) (green)

2. Sample answer: Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø

**Home Link 6•2**

1. \( 9 + 1, 1 + 9, 8 + 2, 2 + 8, 3 + 7, 7 + 3, 6 + 4, 4 + 6, 5 + 5, 10 + 0, 0 + 10 \)

**Home Link 6•3**

1. \( 7, 5, 12 \)
   \( 7 + 5 = 12 \) \( 5 + 7 = 12 \)
   \( 12 - 7 = 5 \) \( 12 - 5 = 7 \)

2. \( 6, 9, 15 \)
   \( 6 + 9 = 15 \) \( 9 + 6 = 15 \)
   \( 15 - 6 = 9 \) \( 15 - 9 = 6 \)

3. 30; 24

**Home Link 6•4**

Your child should practice addition and subtraction facts using Fact Triangles.
Home Link 6•5
1. 9, 3, 12
   \[9 + 3 = 12 \quad 3 + 9 = 12\]
   \[12 - 9 = 3 \quad 12 - 3 = 9\]
2. All names should be equal to 14.
3. Your child should cross out \(5 + 5 + 5, 2 + 10\),
   and tally marks totaling 10.
4. Sample answer: |||| • •

Home Link 6•6
1-4 The lengths recorded should match the lengths
of the objects chosen by your child.
5. 10 \hspace{1cm} 6. 9

Home Link 6•7
Your child should practice addition and subtraction
facts using Fact Triangles.

Home Link 6•8
1. Sample answers:
   \[\text{D D D D P P P P; D D N N N P P P P}\]
2. Sample answers:
   \[\text{D D D D D D D P P P; D D N N N N N N N N N P P P}\]
4. 9 \hspace{1cm} 5. 9 \hspace{1cm} 6. 5

Home Link 6•9
1. \(50\text{¢ or $0.50}\)
2. \(82\text{¢ or $0.82}\)
3. \(43\text{¢ or $0.43}\)
4. \(66\text{¢ or $0.66}\)
5. \(74; 75; 77\)

Home Link 6•10
1. \hspace{1cm} 2. \hspace{1cm} 3.

Home Link 6•11
Your child should practice addition and subtraction
facts using Fact Triangles.

Home Link 6•12
1. 25 children \hspace{1cm} 2. 18
3. 5 \hspace{1cm} 4. 13
5. All names should be equal to 12.