## Patterns and Rules

In Unit 7, children will concentrate on number patterns, computational skills, and the application of mathematics through the use of data. They will continue to use the 100 -grid to support their numeration skills. Children will also explore the patterns of doubling and halving numbers, which will help prepare them for multiplication and division.

Computational work will be extended to several 2-digit numbers and to the subtraction of 1 - and 2 -digit numbers from multiples of 10 .

Children will learn to find complements of tens; that is, they will answer such questions as "What must I add to 4 to get to 10 ? What must I add to 47 to get to 50 ?" or "How many tens are needed to get from 320 to 400 ?"

Children will also collect and work with real-life data about animals, adults, and themselves. For example, they will collect data by measuring the lengths of their standing long jumps and then find the median jump length for the class.


Please keep this Family Letter for reference as your child works through Unit 7.

## Vocabulary

Important terms in Unit 7:
median (middle number) The number in the middle of a list of data ordered from least to greatest or vice versa. For example, 35 is the middle number in the following ordered list.

$$
30,32,32,35,36,38,40
$$

frequency The number of times an event or value occurs in a set of data. For example, in the set of data above, 32 has a frequency of 2.

## Do-Anytime Activities

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

1. If you have a calculator at home, practice making (and breaking) tens.

For example:
Making tens: Enter 33. What needs to be done to display 50? $33+\ldots=50$
Breaking tens: Enter 60. What needs to be done to display 52? $\quad 60-\ldots=52$
Or, for more challenging practice, try the following:
Enter 27. What needs to be done to display 40?
Enter 90 . What needs to be done to display 66 ?
Try other similar numbers.
2. Make a game out of doubling, tripling, and quadrupling small numbers. For example, using the number 2 , first double it. What number do you get? Continue the doubling process five more times. Start again with the number 2 and triple it; then quadruple it. Discuss the differences among the final numbers.
3. Collect a simple set of data from family and friends. For example, how high can different people's fingertips reach while the people are standing flat on the floor? Order the data to find the median.

## Building Skills through Games

In Unit 7, your child will practice skills related to addition and subtraction as well as chance and probability by playing the following games:

## Array Bingo

Players roll the dice and find an Array Bingo card with the same number of dots. Players then turn that card over. The first player to have a row, column, or diagonal of facedown cards calls out "Bingo!" and wins the game.

## Soccer Spin

Players choose a spinner to use during the game. They choose a team to cheer for, Checks or Stripes. They then predict which team will win based on their spinner. They spin the spinner to check their prediction.


## As You Help Your Child with Homework

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

## Home Link 7•1

1. $202,204,206,208,210,212,214,216,218$
2. $500,505,510,515,520,525,530,535,540,545$
3. $550,560,570,580,590,600,610,620,630,640$

Home Link 7•2

1. 6; 7; 5; 9; 2
2. 6;7; 5; 9; 8
3. $32+38 ; 65+5 ; 10+60 ; 43+27 ; 19+51$; $51+19 ; 27+43$

## Home Link 7•3

1. Team A: 35; Team B: 25; A
2. Team A: 30; Team B: 35; B
3. Team A: 29; Team B: 40; B
4. Team A: 45; Team B: 59; B

## Home Link 7•4


2. $1,2,4,8,16,32,64$
3. $3,6,12,24,48,96,192$
4. 127 pennies, or $\$ 1.27$
5. 9
6. 32
7. 38

## Home Link 7*5

1. 8 pounds
2. 20 pounds
3. 5 pounds
4. 11,000 pounds
5. 199
6. 49
7. 107
8. 90

## Home Link 7•6

5. 42
6. 103
7. 25
8. 29

## Home Link 7*7

1. $\frac{3}{\text { points }} \frac{7}{\text { points }} \frac{9}{\text { points }} \frac{12}{\text { points }} \frac{15}{\text { points }} \frac{20}{\text { points }} \frac{21}{\text { points }}$
2. 56 in .66 in .68 in .70 in .73 in .
3. 142 cm 168 cm 173 cm 178 cm 185 cm

## Home Link 7*8

1. 2
2. 0
3. 46
4. 52
5. 9
6. 48
7. 49

