McGraw-Hill My Math

Reteach

Chapter 6

McGraw Hill

Grade 4

Lesson 1   Reteach

Divide Multiples of 10, 100, and 1,000

You can use patterns or basic facts to help you divide multiples of 10, 100, and 1,000.

You need to find 1,800 ÷ 6.

Use a Multiplication Pattern	**Use a Basic Fact**
Think: $6 \times ? = 1,800$	Think: What is the basic fact?
	The basic fact for $1,800 \div 6$ is $18 \div 6$.
$6 \times 3 = 18 \quad \rightarrow \quad 18 \div 6 = 3$	$18 \div 6 = 3$
$6 \times 30 = 180 \quad \rightarrow \quad 180 \div 6 = 30$	$180 \div 6 = 30$
$6 \times 300 = 1,800 \rightarrow 1,800 \div 6 = 300$	$1,800 \div 6 = 300$

Complete each set of patterns.

1. $15 \div 3 =$ _____

     $150 \div 3 =$ _____

     $1,500 \div 3 =$ _____

2. $63 \div 9 =$ _____

     $630 \div 9 =$ _____

     $6,300 \div 9 =$ _____

3. $30 \div 5 =$ _____

     $300 \div 5 =$ _____

     $3,000 \div 5 =$ _____

4. $32 \div 8 =$ _____

     $320 \div 8 =$ _____

     $3,200 \div 8 =$ _____

Divide. Use patterns.

5. $800 \div 2 =$ _____

6. $600 \div 3 =$ _____

7. $4,200 \div 7 =$ _____

8. $150 \div 5 =$ _____

9. $270 \div 9 =$ _____

10. $3,600 \div 6 =$ _____

Lesson 2   Reteach

Estimate Quotients

Compatible numbers are numbers you can divide easily.
You can use compatible numbers to estimate quotients.

Estimate 3,463 ÷ 7.
3,463 ÷ **7**   Think: A basic fact that is close is 35 ÷ 7.
3,500 ÷ 7 = 500
So, 3,463 ÷ 7 is about 500.

Complete.

1. Estimate 1,785 ÷ 3.

Division fact: 18 ÷ 3 = _____

Estimate: 1,800 ÷ 3 = _____

2. Estimate 2,880 ÷ 3.

Division fact: 27 ÷ 3 = _____

Estimate: 2,700 ÷ 3 = _____

3. Estimate 5,726 ÷ 7.

Division fact: _____

Estimate: _____

4. Estimate 3,952 ÷ 8.

Division fact: _____

Estimate: _____

Estimate. Check your estimate.

5. 1,482 ÷ 3 _____

6. 6,512 ÷ 8 _____

7. 7,164 ÷ 9 _____

8. 2,207 ÷ 7 _____

9. 3,512 ÷ 4 _____

10. 2,587 ÷ 5 _____

11. 3,123 ÷ 6 _____

12. 4,132 ÷ 7 _____

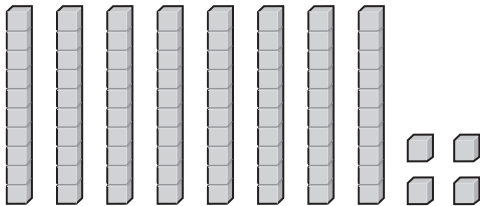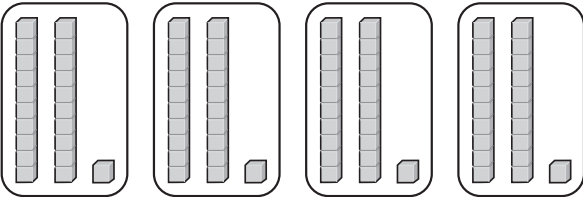**13.** 2,712 ÷ 3 _____

14. 1,789 ÷ 3 _____

15. 2,797 ÷ 4 _____

16. 6,432 ÷ 9 _____

Lesson 4   Reteach

Problem Solving: Make a Model

Mr. Jones buys 84 craft sticks so his students can make models. Each
student will receive 4 sticks. How many students are in the class?

Step 1 Understand	**What facts do you know?** • Mr. Jones bought 84 craft sticks. • Each student will receive 4 sticks. **What do you need to find?** • How many students are in the class?
Step 2 Plan	**Make a plan for solving the problem.** I will make a model to divide. I will use base-ten blocks to model $84 \div 4$.
Step 3 Solve	**Model 84.** **Divide the tens into four equal groups.** **Divide the ones into four equal groups.** So, there are _____ students in the class.
Step 4 Check	I can check by using multiplication. $21 \times 4 = 84$ So, I know that my answer is reasonable.

Lesson 4   Reteach

Problem Solving: Make a Model (continued)

Solve each problem by making a model.

1. Peyton's mom is making 120 ounces of fruit punch for the party. Each glass will hold 6 ounces of punch. How many glasses can she fill? _____

2. The art club has $225 to spend on art supplies. There are 9 students in the art club. If each student spends the same amount, how much can each student spend on art supplies? _____

3. Grady's Boy Scout troop made $528 selling boxes of popcorn. Each box of popcorn costs $8. How many boxes of popcorn did they sell? _____

4. Elizabeth scores a total of 425 points on her video game. She scores the same amount of points on each of the 5 levels. How many points does she score at each level? _____

5. Angelo earns $225 each spring planting flowers for his neighbors. Angelo plants flowers during April, May, and June. If he earns the same amount each month, how much will he earn each month? _____

6. Evan and his father make 380 pancakes for the charity breakfast. Each person receives 4 pancakes. How many people attend the charity breakfast? _____

7. Avery sent 132 texts last week to her 2 best friends. If she texted each friend about the same number of texts, how many texts did she send each friend? _____
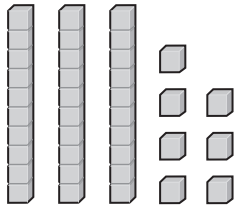
Lesson 5   Reteach

Divide with Remainders

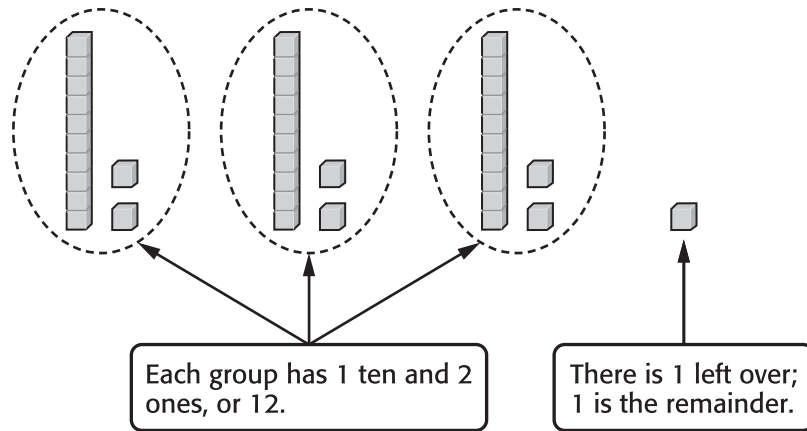Remember that sometimes a number does not divide evenly.
When this happens, there is a number left over, called the **remainder.**

Find 37 ÷ 3.

1 Model 37:

2 Divide 37 equally among 3 groups:

Each group has 1 ten and 2 ones, or 12.

There is 1 left over; 1 is the remainder.

So, 37 ÷ 3 = 12 R1

Divide. Check each answer.

1. 17 ÷ 4 = _____

2. 43 ÷ 5 = _____

3. 9 ÷ 2 = _____

4. 27 ÷ 5 = _____

5. 57 ÷ 9 = _____

6. 21 ÷ 4 = _____

7. 19 ÷ 9 = _____

8. 47 ÷ 8 = _____

9. 33 ÷ 4 = _____

10. 25 ÷ 3 = _____

11. 18 ÷ 5 = _____

12. 30 ÷ 7 = _____

13. 23 ÷ 6 = _____

14. 45 ÷ 8 = _____

15. 31 ÷ 6 = _____

Lesson 6   Reteach

Interpret Remainders

Interpret the Remainder

There are 26 people seated at tables. Each table seats 8 people. How many tables are full? How many people are sitting at a table that is not full? How many tables are needed for all 26 people?

Interpret the remainder to answer the questions.

1. How many tables will be full? Use only the quotient.	Divide to find the number of full tables. 26 ÷ 8 = **3** R2 There will be 3 full tables.
2. How many people will sit at a table that is not full? The remainder is the answer.	Look at the remainder. 26 ÷ 8 = 3 **R2** So, 2 people will sit at a table that is not full.
3. How many tables will be needed for all 26 people? Add 1 to the quotient.	Since there are 3 full tables and 1 table that is not full, there are 4 tables in all.

Circle the correct answer.

1. There are 27 people who volunteer to clean the park. They will form into groups of 4. How many groups of 4 can they make?

   Which of the following statements is true?

   A Six groups of 4 can be formed.
   B Everyone can be in a group of 4.
   C There are 2 volunteers left over.

2. There are 34 students going to the musuem. Each van can hold 8 students. How many vans do they need to transport all of the students?

   Which of the following statements is true?

   A They will need 4 vans.
   B They can fill 5 vans completely.
   C There will be 2 students in the 5th van.

Lesson 7   Reteach

Place the First Digit

Tens		Ones
5		3

$53 \div 2$ is 53 divided in 2 parts.

Step 1	**Set up the exercise with the number being divided**
$2\overline{)53}$	**on the inside and the divisor on the outside.**

Step 2   **Divide the tens, and write the amount in the tens box. Then, subtract.**

$$\begin{array}{r} 2 \\ 2\overline{)53} \\ -4 \\ \hline 1 \end{array}$$

Divide the 5 (50) by 2.

Think: What times 2 is close to, but not more than 50? $2 \times 20 = 40$

Put the 2 tens in the quotient.
Multiply the divisor by the quotient.
Subtract.

Think: You have 1 ten left over.

Step 3   **Bring down, divide the ones, and write in the amount. Then, subtract.**

$$\begin{array}{r} 2\ 6 \\ 2\overline{)5\ 3} \\ -4 \\ \hline 1\ 3 \\ -1\ 2 \\ \hline 1 \end{array}$$

Divide the 13 by 2.

Think: What times 2 is close to, but not more than 13? $2 \times 6 = 12$

Put the 6 ones in the quotient.
Multiply the divisor by the quotient.

Subtract.

Think: You have 1 one left over.

$53 \div 2 = 26$ R 1

Divide. Use estimation to check.

1. $41 \div 2 =$ _____   **2.** $67 \div 3 =$ _____

3. $54 \div 4 =$ _____   **4.** $89 \div 5 =$ _____

Lesson 9 Reteach

Divide Greater Numbers

Find 2)532.

hundreds	tens	ones
5	3	2

Step 1 **Divide the hundreds and write the amount in the hundreds box. Then, subtract.**

$$\begin{array}{r} 2 \\ 2\overline{)532} \\ -4 \\ \hline 1 \end{array}$$ Divide the 5 (500) by 2.

Step 2 **Bring down. Divide the tens, and write in the amount. Then, subtract.**

$$\begin{array}{r} 26 \\ 2\overline{)532} \\ -4 \\ \hline 13 \\ -12 \\ \hline 1 \end{array}$$ Divide the 13 (130) by 2.

Step 3 **Bring down. Divide the tens, and write in the amount. Then, subtract.**

$$\begin{array}{r} 266 \\ 2\overline{)532} \\ -4 \\ \hline 13 \\ -12 \\ \hline 12 \\ -12 \\ \hline 0 \end{array}$$ Divide the 12 by 2.

Divide. Use estimation to check.

1. 2)856 _____ **2.** 3)562 _____ **3.** 5)767 _____

4. 6)821 _____ **5.** 5)432 _____ **6.** 4)759 _____

Lesson 10   Reteach

Quotients with Zeros

Find $3\overline{)629}$. Follow the steps below.

Step 1 **Divide the hundreds.**	Step 2 **Divide the tens.**	Step 3 **Divide the ones.**
Think: $3 \times 200 = 600$ The first digit is in the hundreds place. $\begin{array}{r} 2 \\ 3\overline{)629} \\ -6 \\ \hline 0 \end{array}$ Multiply: $3 \times 2 = 6$ Subtract: $6 - 6 = 0$	Bring down the tens. There are not enough tens to divide. Trade 2 tens for 20 ones. $\begin{array}{r} 20 \\ 3\overline{)629} \\ -6 \\ \hline 02 \end{array}$ There are not enough tens to divide. Write a 0 in the quotient.	Bring down the ones. Divide the ones. $\begin{array}{r} 209 \text{ R2} \\ 3\overline{)629} \\ -6 \\ \hline 029 \\ -27 \\ \hline 2 \end{array}$ Multiply: $3 \times 9 = 27$ Subtract: $29 - 27 = 2$

Check your answer: $209 \times 3 = 627$ $627 + 2 = 629$

Divide. Use estimation to check.

1. $3\overline{)926}$ 3 0 □ R□ -9 0

2. $6\overline{)642}$ 1 □ □ -6 0

3. $7\overline{)143}$ □ □ R□ -14 0 □

4. $4\overline{)\$816}$

5. $3\overline{)316}$

6. $2\overline{)615}$

7. $3\overline{)628}$

8. $4\overline{)438}$

9. $7\overline{)765}$

10. $2\overline{)361}$

11. $3\overline{)\$210}$

12. $912 \div 9 =$ _____

13. $662 \div 3 =$ _____

14. $905 \div 3 =$ _____

Name _____ Date _____

Lesson 11   Reteach

Solve Multi-Step Word Problems

To solve some problems, you need to perform more than one operation. Read the following word problem:

Janelle's family owns 3 apartments. Two of the apartments are small, and the other apartment is large. Each month, Janelle's family collects $500 in rent for the large apartment and $1,300 total for all three apartments. How much does Janelle's family charge to rent one of their small apartments for one month?

You need to find the cost of rent for one small apartment for one month.

1 Subtract the rent for the large apartment from the total amount of rent collected.

$1,300
$- $500
$800 ← This is the amount of rent collected for *both* small apartments in one month.

2 Divide the difference by 2 to find the cost of rent for one small apartment.

$800 ÷ 2 = $400

So, Janelle's family charges $400 to rent one small apartment for one month.

Choose the correct operations to solve.

1. Martin's neighbors pay him $8 per week to walk their dog. He saves his money for 5 weeks. Martin buys a new bike helmet for $37. How much money will Martin have left?

_____

_____

2. There are 19 large cats at the zoo. Four of them are cheetahs. There are twice as many tigers as cheetahs, and the rest of the large cats are lions. How many lions are there?

_____

_____

_____