## EXERCISE 1

## Fact Review

a. Later you're going to work division problems. Let's review some facts for those problems.
b. 5 goes into 45 how many times? (Pause and signal.) 9 .
c. 5 goes into 30 how many times? (Pause and signal.) 6.
d. 5 goes into 35 how many times? (Pause and signal.) 7.
e. (Repeat steps b-d until firm.)

## EXERCISE 2

## Facts: Facts with Zeroes

a. Open your workbook to Lesson 21. Find Part 1.

- When you divide any number into zero, the answer is always zero.
b. Look at problem A. My turn. How many times does 7 go into zero? Zero. How do you know? 7 times zero equals zero.
c. Look at problem B. My turn. How many times does 2 go into zero? Zero. How do you know? 2 times zero equals zero.
d. Look at problem C. Your turn. How many times does 9 go into zero? (Signal.) Zero.
- How do you know? (Signal.) 9 times zero equals zero.
e. Look at problem D. How many times does 5 go into zero? (Signal.) Zero.
- How do you know? (Signal.) 5 times zero equals zero.
f. Look at problem E. Your turn. How many times does 3 go into zero? (Signal.) Zero.
- How do you know? (Signal.) 3 times zero equals zero.


## EXERCISE 3

## Facts: Writing Division Problems from Dictation

a. Find Part 2 on your worksheet. l'll read some division problems. You write them.
b. Problem A. 5 goes into 35. Say the problem. (Signal.) 5 goes into 35.

- Write it. Don't work it yet.
c. Problem B. 5 goes into 30. Say the problem. (Signal.) 5 goes into 30.
- Write it.
d. Problem C. 5 goes into 45. Say the problem. (Signal.) 5 goes into 45.
- Write it.
e. Problem D. 5 goes into 40. Say the problem. (Signal.) 5 goes into 40 .
- Write it.
f. Now write the answers to those problems.
- (Check and correct. See Answer Key.)
g. (Review answers orally with the entire group.)


## $\rightarrow$ EXERCISE 4

## Reading Digits

a. Find Part 3 on your worksheet.
b. Touch problem A. $\checkmark$

- It says 5 goes into 6 hundred 38 .
c. My turn to read the first digit in 6 hundred 38. (Pause.) 6.
- My turn to read the first two digits in 6 hundred 38. (Pause.) 63.
d. Touch problem B. $\downarrow$
- We're dividing 5 into 4 thousand 6 hundred 27. Your turn to read the first digit in 4 thousand 6 hundred 27. (Signal.) 4.
- Your turn to read the first two digits in 4 thousand 6 hundred 27. (Signal.) 46.
e. Look at problem C. We're dividing 5 into 5 hundred 32. Your turn to read the first digit in 5 hundred 32. (Signal.) 5.
- Your turn to read the first two digits in 5 hundred 32. (Signal.) 53.
f. (Call on individual students. Each student is to read the first two digits of problems A-D.)


## EXERCISE 5

## Operations: Underlining Rule for Working Problems

a. (Continue with worksheet Part 3.) In problems A, B, and C, we're dividing 5 into a number with many digits. You have to figure out how many of the digits to use. Here's the rule. If the first digit is at least as big as 5 , you underline the first digit. If the first digit in not as big as 5 , you underline the first two digits.
b. Look at problem A again. It says that 5 goes into 6 hundred 38. Read the first digit we're dividing 5 into. (Signal.) 6 .

- Is 6 at least as big as 5 ? (Signal.) Yes.
- So underline the 6 .
c. Look at problem B. It says that 5 goes into 4 thousand 6 hundred 27 . What's the first digit we're dividing 5 into? (Signal.) 4.
- Is 4 at least as big as 5? (Signal.) No.
- So underline the first two digits. Read the first two digits. (Signal.) 46.
- 46 is at least as big as 5 . Underline 46.
d. Look at problem C. It says that 5 goes into 5 hundred 32. What's the first digit we're dividing 5 into? (Signal.) 5.
- Is 5 at least as big as 5 ? (Signal.) Yes.
- So what are you going to underline? (Signal.) 5.
- Underline it. $\downarrow$
e. I'll read the underlined problem. 5 goes into 5. Now you read the underlined problem.
(Signal.) 5 goes into 5.
f. (Repeat steps b-e until firm.)
g. Now we're going to divide 9 into a number. Look at problem D. What does problem D say? (Signal.) 9 goes into 4 hundred 67.
- What's the first digit we're dividing 9 into? (Signal.) 4.
- Is 4 at least as big as 9 ? (Signal.) No.
- So what are you going to underline? (Signal.) 46.
- (Repeat all steps in g until firm.)
- Underline 46.
h. I'll read the underlined problem. 9 goes into 46. Now you read the underlined problem. (Signal.) 9 goes into 46 .


## - EXERCISE 6

Operations: Writing the Answer Above the Last Underlined Digit
a. (Continue with worksheet Part 3.) Look at problem D again. When you work this kind of problem, you start writing your answer above the last digit you underlined. What's the last digit you underlined? (Signal.) 6.

- So you're going to start writing your answer right above the 6 .
b. What does the underlined problem say? (Signal.) 9 goes into 46.
c. What number did you write above the 6 ? (Signal.) 5.
d. What number does 9 go into 5 times without a remainder? (Signal.) 45.
- Write 45 below 46 and subtract. $\boldsymbol{V}$
e. What's the remainder for the underlined problem? (Signal.) 1.
f. Work the underlined part of the other problems on your own. Remember to write your answer above the last digit you underlined.
- (Check and correct. See Answer Key.)
g. (Review answers orally with the entire group.)


## EXERCISE 7

## Story Problems: Practice

a. Find Part 4 on your worksheet.
b. Write the problems for the stories in Part 4, but don't work the problems. Just write them.

- (Check and correct. See Answer Key. Make sure the students write the problems beside the story and not on the line next to the box.)
c. (Review answers orally with the entire group.)


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## Story Problems: Writing a Word as Part of the Answer

a. (Continue with worksheet Part 4.) You're going to write the word that is part of the answer. I'll work some problems with you.

- Problem A. A student used 3 papers every lesson. She did 50 lessons. How many papers did the student use?
b. What does problem A want us to find out?
(Signal.) How many papers the student used.
- So the word that is part of the answer is papers. Write papers on the line below problem A.
c. Problem B. A seal balanced 5 balls in every show. It balanced 40 balls in shows. How many times was the seal in a show?
d. What does problem B want us to find out? (Signal.) How many times the seal was in a show.
- What word is part of the answer? (Signal.) Times.
- Write times on the line below problem B.
e. Problem C. Judy worked 3 hours every day. She worked 60 days. How many hours did Judy work?
f. What does problem C want us to find out? (Signal.) How many hours Judy worked.
- What word is part of the answer? (Signal.) Hours.
- Write hours on the line below problem C.
g. Write the word that is part of the answer on the line below the rest of the problems in Part 3.
- (Check and correct. See Answer Key.)
h. l'll read problem A again. A student used 3 papers every lesson. She did 50 lessons. How many papers did the student use?
i. Is the big number given in this problem? (Signal.) No.
- So what kind of problem is it? (Signal.) Multiplication.
j. Work the problem and figure the answer. Then copy the answer in the box.
k. The story problem asks: How many papers did the student use? Everybody, say the whole answer. (Signal.) 150 papers.
I. Work the rest of the problems in Part 4 on your own. Figure out the answers and then copy the answers in the box.
- (Check and correct. See Answer Key.)
$\mathbf{m}$. (Review answers orally with the entire group.)


## EXERCISE 9

## Preparation for

## Mastery Test: Facts

a. When we do the next lesson, you're going to have a test on division facts. Let's go over some facts together.
b. I'll say the problems and you give the answers. 3 goes into 15 how many times? Get ready. (Signal.) 5.
c. (Repeat step b for the following problems:)

| $5 \longdiv { 2 0 }$ | $3 \sqrt{6}$ | $5 \sqrt{25}$ | $9 \sqrt{36}$ |
| ---: | ---: | ---: | ---: |
| $3 \longdiv { 1 2 }$ | $9 \longdiv { 1 8 }$ | $3 \sqrt{9}$ | $9 \longdiv { 4 5 }$ |

d. Remember those facts for the test.

## EXERCISE 10

## Timing Format

a. Find Part 5 on your worksheet.
b. See how fast you can work these problems. You have one and a half minutes. Get ready. Go.

- (After one and a half minutes, say:) Stop.
c. Put an $\mathbf{X}$ next to each problem you didn't finish. Now let's check the problems.
d. You're going to read each problem and say the answer. If you have the wrong answer, put an $\mathbf{X}$ next to the problem. Get ready. Go.


## EXERCISE 11

## Independent Work

- Do Parts 6 and 7. (The students can work these parts without supervision.)


## EXERCISE 12

## Workcheck

a. Count the number of facts you got wrong in Part 5.
b. Find the beginning of your worksheet for Lesson 21.
c. If you got 0 , 1 , or 2 wrong, you get 3 points. If you got 3 wrong, you get 1 point. If you got more than 3 wrong, you get 0 points.
d. Write the number of points you earned in the box labeled "Facts."
e. Now we'll check all of the problems in Parts 6 and 7.
f. (Read the answers from the Answer Key for Lesson 21, Parts 6 and 7.)
g. Find again find the beginning of your worksheet for Lesson 21.
h. If you got 0 , 1 , or 2 wrong, you get 5 points. If you got 3 or 4 wrong, you get 3 points. If you got more than 4 wrong, you get 0 points.
i. Write the number of points you earned in the box labeled "Problems."
j. (If Fact Game bonus points are to be added to the "Bonus" box in this lesson, do not do steps $k$ and I .)
k. Add up all the points in the boxes and put the answer in the box labeled "Total." These are the number of points you earned for this lesson.
I. Turn to the Point Summary Charts on the inside back cover of your workbook. Find the empty box below Lesson 21. Write the total number of points you earned in that box.

## EXERCISE 13

## Fact Game

a. (When you're ready to begin playing, divide the class into groups. Depending on the size of your class, there will be four or fewer students in each group plus a student who will be judge. For each group you will need one die or spinner numbered from 1 through 6 , a score sheet, and a pencil. Write the answers to the facts shown in step b on a blank sheet of paper. This paper will also serve as the group's score sheet.)
b. (Write the following problems on the board:)

1. $5 \sqrt{5}$
2. $5 \longdiv { 1 0 }$
3. $5 \longdiv { 1 5 }$
4. $5 \longdiv { 2 0 }$
5. $1 / 7$
6. $1 \sqrt{6}$
c. (Give each team a die or spinner and give each judge a pencil and a sheet of paper with the answers.)
d. We're going to play a game called the Fact Game. You can earn up to 2 bonus points each day we play.
e. These are the rules of the game. All of the teams play the game at the same time. Each team starts by having one player roll the die or spin the spinner. The number that comes up tells which problem on the board that player must give the answer for. For example, if a 4 comes up on the spinner or die, you read problem 4, 5 goes into 20 , and then give the answer. What do you do if a 2 comes up? (Signal.) Read problem 2 and give the answer.
f. If the answer is correct, the judge draws one line on the sheet of paper.
g. If the answer is incorrect, the judge crosses out two lines. (Be aware that when the first turn is taken there will be no lines to cross out.)
h. How many lines does a judge draw for the correct answer? (Signal.) One.

- How many lines does a judge cross out for the wrong answer? (Signal.) Two.


## Lesson 21

i. Take turns answering the problems until I say "Stop." You will play for five minutes.
j. After I say "Stop," the judge will count up the team's lines.
k. (Pick a team and model the game for the rest of the students.) I'll play the game with this team. Everybody else should watch how we play.
I. (After you finish demonstrating the game, say:) When I signal, start playing. I'll tell you to stop at the end of five minutes. If you have any questions, raise your hand. (Signal.)
$\mathbf{m}$. (Check each group during the game.)
n. (After five minutes are up, say:) Stop playing.
o. Judges, count the number of lines the team got and write the total at the top of the sheet of paper.
p. If your team got 30, 31, 32, 33, 34, 35, 36, 37,38 , or 39 lines, you get 1 point. If your team has 40 or more lines, you get 2
points. All judges get 2 points.


