

## Placement

There are two placement tests. Placement Test A is for students who have not gone through Level D of *Connecting Math Concepts*. Placement Test B is for students who have completed Level D. Reproducible copies of the tests appear on pages 11–13.

### Administering the Placement Test

Administer the placement test that is appropriate for the class. If none of the students went through Level D, administer Placement Test A. If some of the students went through Level D, administer Placement Test A. If all or nearly all of the students went through Level D, administer Placement Test B. If possible, complete the testing on the first day of instruction.

Pass out a test form to each student. Present the wording in the test administration script.

**Note:** What you say is shown in blue type.

When observing the students, make sure that they are working on the correct part or correct item of the test. Do not prompt them in a way that would let them know the answer to the item.

#### TEST A ADMINISTRATION SCRIPT: FOR NEW STUDENTS ONLY

- Find part 1.  
You're going to write numerals that I dictate. You're going to line them up the same way you would if you were adding them. You can see 7 thousand, 3 hundred 24 is already written. That shows where you'd begin a thousands numeral.  
Numeral A. 2 thousand, 6 hundred 50. Write it.  
Numeral B. 11 thousand, 9 hundred 3. Write it.  
Numeral C. 7 hundred 9. Write it.  
Numeral D. 20 thousand, 45. Write it.
- You'll work the rest of the parts on your own. For part 3, read each problem. Write the number problem and the answer.
- For the rest of the parts, just follow the directions for working each item. Raise your hand when you're finished.
- (Collect test forms.)

#### TEST B ADMINISTRATION SCRIPT: FOR CONTINUING STUDENTS ONLY

- This is a test. Follow the directions for working each part. Raise your hand when you're finished.
- (Collect test forms.)

## Placement Criteria

The criteria for passing Test A are:

|           | Pass                    | Fail  |
|-----------|-------------------------|---|
| Part 1    | 0–1 errors              | 2 or more errors                            |
| Part 2    | 0–1 errors              | 2 or more errors                            |
| Part 3    | 0–1 errors              | 2 or more errors                            |
| Part 4    | 0 errors                | 1 or more errors                            |
| Part 5    | 0–2 errors              | 3 or more errors                            |
| OVERALL   | 8 or fewer errors       | 9 or more errors                            |
| PLACEMENT | CMC Level E<br>Lesson 1 | CMC Level D<br>Administer<br>placement test |

Is Level E appropriate for your classroom? A rule of thumb is that three-fourths or more of the students in the class should pass the placement test. If more than one-fourth of the students fail the placement test, it may be difficult to present Level E to the entire class. A recommendation is to place the lower performers in Level D.

The criteria for passing Test B are:

|           | Pass                     | Fail                    |
|-----------|--------------------------|-------------------------|
| Part 1    | 0 errors                 | 1 or more errors        |
| Part 2    | 0–1 errors               | 2 or more errors        |
| Part 3    | 0 errors                 | 1 or more errors        |
| Part 4    | 0–1 errors               | 2 or more errors        |
| Part 5    | 0 errors                 | 1 or more errors        |
| Part 6    | 0–2 errors               | 3 or more errors        |
| Part 7    | 0 errors                 | 1 or more errors        |
| OVERALL   | 5 or fewer errors        | 6 or more errors        |
| PLACEMENT | CMC Level E<br>Lesson 16 | CMC Level E<br>Lesson 1 |

If more than one quarter of the students fail test B, begin instruction at Lesson 1 of Level E.

If three-fourths or more of the students pass the placement test, begin instruction at Lesson 16 of Level E.

**Note:** Students who failed the test need additional teaching and practice if they are to keep pace with classmates who start at Lesson 16. Try to provide that additional work, or place these students in a group that is working on material that is appropriate for these students (possibly at Lesson 1 of Level E).

**Placement Test A** (for new students)

Name \_\_\_\_\_ Score \_\_\_\_\_

**Part 1** Write the numbers your teacher says.

|    |    |   |   |   |
|----|----|---|---|---|
|    | 7, | 3 | 2 | 4 |
| a. |    |   |   |   |
| b. |    |   |   |   |
| c. |    |   |   |   |
| d. |    |   |   |   |

**Part 2** Work each item.

a. 
$$\begin{array}{r} 411 \\ - 306 \\ \hline \end{array}$$

b. 
$$\begin{array}{r} 1075 \\ \times 6 \\ \hline \end{array}$$

c. 
$$\begin{array}{r} 417 \\ 94 \\ + 159 \\ \hline \end{array}$$

d. 
$$\begin{array}{r} 380 \\ \times 9 \\ \hline \end{array}$$

**Part 3** Figure out the answer to each question. Show your work.

- There are 37 students on the playground. 16 of the students are boys. How many girls are on the playground?
- Phyllis had 48 dogs. She bought another 103 dogs. How many dogs does Phyllis have now?
- A man had 59 stamps in his collection. He traded some stamps for coins. Now he has 45 stamps. How many stamps did he trade?
- A truck started out with 2190 pounds of gravel. It delivered 2000 pounds of gravel. How many pounds of gravel were still on the truck?

**Part 4** Work each item.

a.  $\frac{10}{3} - \frac{8}{3} =$

b.  $\frac{2}{12} + \frac{9}{12} =$

c.  $\frac{9}{10} - \frac{7}{10} =$

**Part 5** Work each item.

a.  $8 \times 7 =$

b.  $9 \overline{)68}$

c.  $4 \overline{)0}$

d.  $0 \times 56 =$

e.  $7 \times 6 =$

f.  $7 \overline{)42}$

g.  $9 \times 8 =$

h.  $1 \overline{)9}$

i.  $14 \times 1 =$

j.  $\overline{)45}$

**Placement Test B** (for students continuing from Level D) Name \_\_\_\_\_ Score \_\_\_\_\_

**Part 1** Work each item

a. 
$$\begin{array}{r} 88 \\ \times 47 \\ \hline \end{array}$$

b. 
$$\begin{array}{r} 156 \\ \times 42 \\ \hline \end{array}$$

**Part 2** Complete the table.

| Multiplication             | Division                  |
|----------------------------|---------------------------|
| a. $4 \times \square = 12$ | $\square \overline{) 12}$ |
| b. $9 \times \square = 54$ | $\square \overline{) 54}$ |

**Part 3** Answer each question.

This table shows the number of deer and squirrels that live in Hill Park and River Park.

a. How many deer live in River Park? \_\_\_\_\_

b. What's the total number of squirrels for both parks? \_\_\_\_\_

c. In which park do fewer squirrels live? \_\_\_\_\_

d. What is the total number for both animals in both parks? \_\_\_\_\_

|                      | Deer | Squirrels | Total for both animals |
|----------------------|------|-----------|------------------------|
| Hill Park            | 23   | 19        | 42                     |
| River Park           | 40   | 86        | 126                    |
| Total for both parks | 63   | 105       | 168                    |

**Part 4** Write the fraction for each lettered arrow.

a
b
c

**Part 5** Complete the table.

| Fraction Equation           | Division   |
|-----------------------------|--|
| a. $\frac{24}{3} = \square$ | $3 \overline{) 24}$ <span style="float: right;"><math>\square</math></span>            |
| b. $\frac{28}{7} = \square$ | $\square \overline{) \square}$ <span style="float: right;"><math>\square</math></span> |

**Part 6** Complete the table.

|       |    |    |    |
|-------|----|----|----|
|       |    | 47 | 98 |
|       | 28 | 72 |    |
| Total |    |    |    |

**Part 7** Figure out the answer to each question. Show your work.

- Robert is 25 pounds heavier than Adam. Robert weighs 96 pounds. How many pounds does Adam weigh?
- The chess club has 31 fewer members than the band. There are 68 people in the chess club. How many people are in the band?

## Placement Test A Answer Key

**Part 1** Write the numbers your teacher says.

|    |    |    |   |     |
|----|----|----|---|-----|
|    | 7, | 3  | 2 | 4   |
| a. | 2, | 6  | 5 | 0   |
| b. | 1  | 1, | 9 | 0 3 |
| c. |    |    | 7 | 0 9 |
| d. | 2  | 0, | 0 | 4 5 |

**Part 2** Work each item.

$$\begin{array}{r} 411 \\ - 306 \\ \hline 105 \end{array}$$

$$\begin{array}{r} 1075 \\ \times \quad 6 \\ \hline 6450 \end{array}$$

$$\begin{array}{r} 417 \\ 94 \\ + 159 \\ \hline 670 \end{array}$$

$$\begin{array}{r} 380 \\ \times \quad 9 \\ \hline 3420 \end{array}$$

**Part 3** Figure out the answer to each question. Show your work.

- There are 37 students on the playground. 16 of the students are boys. How many girls are on the playground?
- Phyllis had 48 dogs. She bought another 103 dogs. How many dogs does Phyllis have now?
- A man had 59 stamps in his collection. He traded some stamps for coins. Now he has 45 stamps. How many stamps did he trade?
- A truck started out with 2190 pounds of gravel. It delivered 2000 pounds of gravel. How many pounds of gravel were still on the truck?

21 girls

151 dogs

14 stamps

190 pounds

**Part 4** Work each item.

$$a. \frac{10}{3} - \frac{8}{3} = \frac{2}{3}$$

$$b. \frac{2}{12} + \frac{9}{12} = \frac{11}{12}$$

$$c. \frac{9}{10} - \frac{7}{10} = \frac{2}{10}$$

**Part 5** Work each item.

$$a. 8 \times 7 = 56$$

$$b. 9 \overline{)68} \begin{array}{l} 7 \\ 5 \\ 9 \end{array}$$

$$c. 4 \overline{)0} \begin{array}{l} 0 \end{array}$$

$$d. 0 \times 56 = 0$$

$$e. 7 \times 6 = 42$$

$$f. 7 \overline{)42} \begin{array}{l} 6 \end{array}$$

$$g. 9 \times 8 = 72$$

$$h. 1 \overline{)9} \begin{array}{l} 9 \end{array}$$

$$i. 14 \times 1 = 14$$

$$j. 7 \overline{)45} \begin{array}{l} 6 \\ 3 \\ 7 \end{array}$$

# Placement Test B Answer Key

**Part 1** Work each item

a. 
$$\begin{array}{r} 88 \\ \times 47 \\ \hline 616 \\ + 3520 \\ \hline 4136 \end{array}$$

b. 
$$\begin{array}{r} 156 \\ \times 42 \\ \hline 312 \\ + 6240 \\ \hline 6552 \end{array}$$

**Part 2** Complete the table.

| Multiplication       | Division  |
|----------------------|---|
| a. $4 \times 3 = 12$ | $4 \overline{)12} \begin{matrix} 3 \\ \end{matrix}$ |
| b. $9 \times 6 = 54$ | $9 \overline{)54} \begin{matrix} 6 \\ \end{matrix}$ |

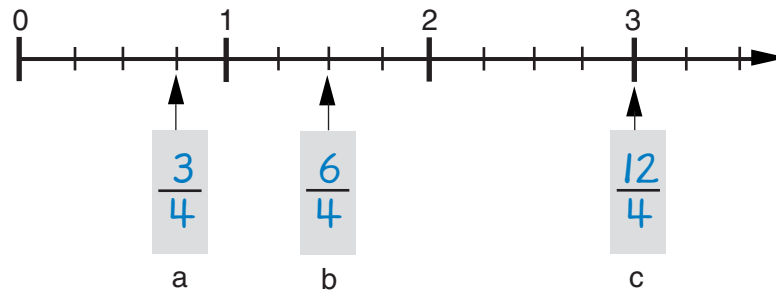
**Part 3** Answer each question.

This table shows the number of deer and squirrels that live in Hill Park and River Park.

- How many deer live in River Park? 40 deer
- What's the total number of squirrels for both parks? 105 squirrels
- In which park do fewer squirrels live? Hill Park
- What is the total number for both animals in both parks? 168

|                      | Deer | Squirrels | Total for both animals |
|----------------------|------|-----------|------------------------|
| Hill Park            | 23   | 19        | 42                     |
| River Park           | 40   | 86        | 126                    |
| Total for both parks | 63   | 105       | 168                    |

**Part 4** Write the fraction for each lettered arrow.



**Part 5** Complete the table.

| Fraction Equation     | Division              |
|-----------------------|-----------------------|
| a. $\frac{24}{3} = 8$ | $3 \overline{) 24}$ 8 |
| b. $\frac{28}{7} = 4$ | $7 \overline{) 28}$ 4 |

**Part 6** Complete the table.

|       |    | Total |     |
|-------|----|-------|-----|
|       | 51 | 47    | 98  |
|       | 28 | 72    | 100 |
| Total | 79 | 119   | 198 |

**Part 7** Figure out the answer to each question. Show your work.

- a. Robert is 25 pounds heavier than Adam. Robert weighs 96 pounds. How many pounds does Adam weigh?
- b. The chess club has 31 fewer members than the band. There are 68 people in the chess club. How many people are in the band?

$$\begin{array}{r} \text{Dif} \quad A \quad R \\ 25 \longrightarrow 96 \quad - \frac{96}{25} \\ \hline 71 \text{ pounds} \end{array}$$

$$\begin{array}{r} \text{Dif} \quad C \quad B \\ 31 \longrightarrow 68 \quad + \frac{31}{68} \\ \hline 99 \text{ people} \end{array}$$