To the Teacher

Introduction to *Daily Skill-Builders*

The *Daily Skill-Builders* series began as an expansion of our popular *Daily Warm-Ups* series for grades 5–adult. Word spread, and eventually elementary teachers were asking for something similar. Just as *Daily Warm-Ups* do, *Daily Skill-Builders* turn extra classroom minutes into valuable learning time. Not only do these activities reinforce necessary skills for elementary students, they also make skill-drilling an engaging and informative process. Each book in this series contains 180 reproducible activities—one for each day of the school year!

How to Use *Daily Skill-Builders*

Daily Skill-Builders are easy to use—simply photocopy the day's activity and distribute it. Each page is designed to take approximately ten to fifteen minutes. Many teachers choose to use them in the morning when students are arriving at school or in the afternoon before students leave for the day. They are also a great way to switch gears from one subject to another. No matter how you choose to use *Daily Skill-Builders*, extra classroom minutes will never go unused again.

Building Skills for All Students

The *Daily Skill-Builders* activities give you great flexibility. The activities can be used effectively in a variety of ways to help all your students develop important skills, regardless of their level.

Depending on the needs of your students and your curriculum goals, you may want the entire class to do the same skill-builder, or you may select specific activities for different students. There are several activities for each topic covered in *Daily Skill-Builders,* so you can decide which and how many activities to use to help students master a particular skill.

If a student does not complete an activity in the allotted time, he or she may complete it as homework, or you may allow more time the next day to finish. If a student completes a skill-builder early, you may want to assign another. *Daily Skill-Builders* give you options that work for you.

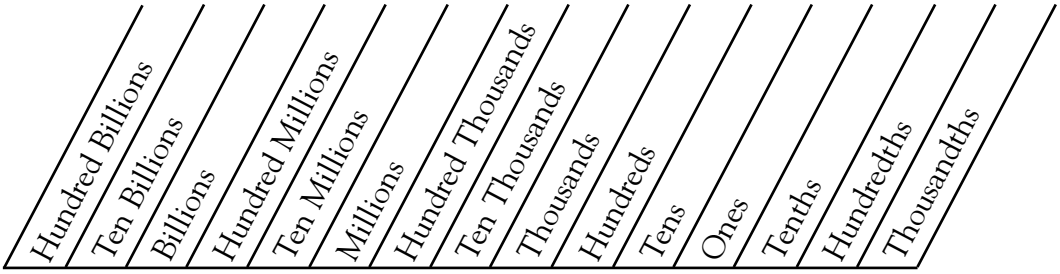
Students in one grade level vary in their abilities, so each *Daily Skill-Builders* book covers two grades. In a fourth-grade class, for example, some students may need the books for grades 3–4. Other students may need the greater challenge presented in the 4–5 books. Since all the books look virtually the same and many of the activities are similar, the students need not know that they are working at different levels.

No matter how you choose to use them, *Daily Skill-Builders* will enhance your teaching. They are easy for you to use, and your students will approach them positively as they practice needed skills.

Name _____

Places, Everyone!

Each digit in a number has a certain value depending on where it is in the number. This is called **place value.** You use place value to read numbers. In the three-digit number 149, for example, 1 is in the hundreds place, 4 is in the tens place, and 9 is in the ones place. There are 1 hundred, 4 tens, and 9 ones in the number.



The following numbers are written in word form. Write them as numbers on the line.

Example: One hundred ten = 110

1. Seventy-two million, three hundred fifty-two thousand, eight hundred and three _____
2. Ninety-eight and three hundredths _____
3. Five and three hundred eight thousandths _____
4. Two hundred eighteen thousand, nine hundred ninety-nine _____
5. Seven hundred eleven and six tenths _____
6. Forty-three million, seven hundred and two _____

Write the place value of each underlined digit on the line.

Example: 10<u>5</u> ones

7. 3<u>5</u>8,478,641 _____
8. 677.1<u>6</u> _____
9. 539.32<u>7</u> _____
10. <u>4</u>3,422.812 _____
11. 410,987.2<u>5</u> _____
12. 243,596.<u>3</u> _____
13. <u>7</u>25,978.03 _____
14. <u>1</u>,234,567,890 _____

Challenge: Now it is your turn. On the back of this sheet, create four large numbers and identify each place value.

Name _____

Hat Trick

Dale and Dana went to school with their mom. They were not happy because it was summer break, but their mom had work to do. While they were there, Dale hid his brother's hat in the boys' locker room. There were 295 numbered lockers. None of them were locked because it was summertime. Dana was furious. His mother, being a math teacher, said, "Dana, if you ask the right questions, you will find your hat quickly and easily."

Dana: "Is the locker number even or odd?"	Dale: "It's even."
Dana: "Is it greater or less than 150?"	Dale: "Greater."
Dana: "Is it greater or less than 250?"	Dale: "Greater."
Dana: "Is it divisible by 5?"	Dale: "No."
Dana: "Is it divisible by 8?"	Dale: "Yes."
Dana: "Is it greater than 256?"	Dale: "Yes."
Dana: "Do the digits add up to an even or odd number?"	Dale: "Odd."
Dana: "My hat is in locker 272!"	Dale: "How did you do that?"

Explain how Dana figured out the locker number on the lines below.

_____

_____

_____

_____

Name _____

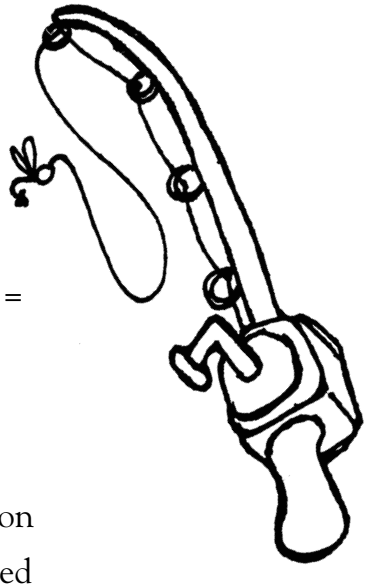
Reel Them In

Each digit in a number has a certain value depending on where it is in the number. This is called **place value.** When you add or subtract numbers, you must make sure that you line up the numbers that have the same place value.

Write each number in standard form.

Example: 1,000,000,000 + 700,000 + 500 + 60 + 2 = 1,000,700,562

1. 800,000 + 7000 + 900 + 20 =
2. 30,000,000 + 7,000,000 + 500,000 + 40,000 =
3. 3,000,000 + 20,000 + 7,000 + 300 + 60 + 7 =
4. 700,000 + 80,000 + 3,000 + 600 + 50 + 2 =
5. 1,000,000,000 + 400,000 + 500 + 6 =
6. 6,000,000 + 700,000 + 40,000 + 8,000 + 300 + 70 + 2 =
7. 50,000,000 + 600,000 + 80,000 + 6,000 + 200 + 90 =
8. 50,000 + 7,000 + 800 + 70 + 7 =
9. 8,000,000,000 + 600,000,000 + 50,000,000 + 2 =
10. 300,000 + 20,000 + 1,000 + 600 + 50 + 5 =
11. 9,000,000,000 + 700,000,000 + 7,000,000 + 600,000 + 9 =
12. 50,000 + 7,000 + 40 + 9 =



Draw a line to the correct value of each underlined digit.

13.	1,<u>6</u>54,123	30 million
14.	<u>4</u>13,798,212	9 hundred
15.	65,43<u>2</u>,127	7 billion
16.	6<u>3</u>2,987,654	600 thousand
17.	718,5<u>8</u>9,313	80 thousand
18.	41<u>7</u>,821,999,876	400 million
19.	543,<u>9</u>71	6 tens
20.	9,123,4<u>6</u>5	2 thousand

Name _____

You Have the Power

Instead of writing 100,000,000,000, you can write $10^{11} = 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$. The power of 10 will let you know how many zeros to have.

Example: 10^2, ten to the second power, means there will be two zeros.
$10^2 = 100$; $10 \times 10 = 100$

Write the correct number for each power of 10 below.

1. $10^6 =$
2. $10^5 =$
3. $10^7 =$
4. $10^9 =$

Now that you have mastered this, let's multiply the power of 10 by another number.

Example:
$6 \times 10^3 = 6{,}000$ because 6×10^3 is the same as 6×1000, which equals 6,000. It's much easier to write 10 to a power. Solve the next four problems.

5. $5 \times 10^4 =$
6. $3 \times 10^3 =$
7. $7 \times 10^5 =$
8. $2 \times 10^2 =$

Now try adding one more step to solve the last two problems.

Example:

(4×10^3)	+	(3×10^2)	+	(5×10^1)	+	(2×10^0)	=	
$(4 \times 1{,}000)$	+	(3×100)	+	(5×10)	+	(2)	=	
4,000	+	300	+	50	+	2	=	4,352

9. $(7 \times 10^4) + (6 \times 10^3) + (5 \times 10^2) + (3 \times 10^1) + (2 \times 10^0) =$

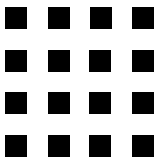
10. $(1 \times 10^5) + (8 \times 10^4) + (6 \times 10^3) + (3 \times 10^2) + (5 \times 10^1) + (7 \times 10^0) =$

Name _____

Squares Are Cool!

When you multiply a number by itself, you get a square number.

Example:

$4^2 = 4 \times 4 =$  $= 16$

If you take a square number and figure out what number has been multiplied by itself, you are finding its **square root.**

The square root of 16 ($\sqrt{16}$) is 4. What number times itself is 16? 4

Find the square roots of the following numbers.

1. $\sqrt{81}$	**2.** $\sqrt{36}$
3. $\sqrt{49}$	**4.** $\sqrt{64}$
5. $\sqrt{121}$	**6.** $\sqrt{400}$
7. $\sqrt{144}$	**8.** $\sqrt{100}$
9. $\sqrt{10{,}000}$	**10.** $\sqrt{169}$
11. $\sqrt{256}$	**12.** $\sqrt{196}$
13. $\sqrt{484}$	**14.** $\sqrt{225}$
15. $\sqrt{625}$	**16.** $\sqrt{900}$

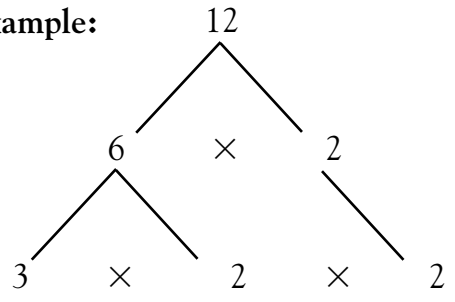
Name _____

The Numbers Are Prime

A **composite number** is one that can be evenly divided by a number other than itself and 1. A **prime number** is one that can be divided only by itself and 1. When a composite number is written as the product of prime numbers, this is called a **prime factorization** of a number.

Factor these composite numbers until you have a row of prime numbers. Then use exponents to simplify your answer.

Example:



Choose any pair of factors. If either is not prime, list two factors of that number (3 and 2 are factors of 6 in this example). Keep going until all your factors are prime. Use exponents to simplify your answer:

$3 \times 2 \times 2 = 3 \times 2^2$

1. 14

2. 18

3. 28

4. 32

5. 48

6. 50

7. 30

8. 46

9. 77

10. 56

11. 81

12. 72