

# Robo-Decoder Challenge

Use your addition and subtraction skills to find the number value of each robot part so you can open the locked storage trunk.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## 1 THE KEY

$$+ = 9 \quad \blacksquare = 1 \quad \bigcirc = 8 \quad \blacktriangle = 2$$

Every symbol is a whole number from 1 to 9.

## 2 CRACK THESE

1.  $20 - \bigcirc = \square$

2.  $+ + \bigcirc + \blacksquare = \square$

CODE 1

3.  $+ + 2 = \square$

4.  $\blacktriangle + + = \square$

CODE 2

5.  $\blacktriangle + \bigcirc = \square$

6.  $\bigcirc - \blacktriangle = \square$

CODE 3

7.  $\blacktriangle + + \blacksquare = \square$

8.  $\bigcirc + 3 = \square$

CODE 4

9.  $\square + \blacksquare = 10$  Draw the shape:  $\square$

10.  $\square + \bigcirc = 10$  Draw the shape:  $\square$

## 3 THE VAULT CODE

Write the ONES digit of your answers to problems 2, 4, 6, 8 (the ones tagged CODE 1-4), in that order. That opens the locked storage trunk.

# Answer Key

Robo-Decoder Challenge · Grade 1 Crack the Code

The key

 cross = 9     square = 1     ring = 8     triangle = 2

Every symbol is a whole number from 1 to 9.

1.    20 -  (20 - ring)

2.     +  +  +  (cross + ring + square)

3.     + 2 (cross + 2)

4.     +  (triangle + cross)

5.     +  (triangle + ring)

6.     -  (ring - triangle)

7.     +  +  (triangle + cross + square)

8.     + 3 (ring + 3)

9.     +  = 10 (? + square)

10.  +  = 10 (? + ring)
- 12

18

11

11

10

6

12

11

cross

triangle

Vault code: 8 1 6 1