

The Canine Cupboard Code

Solve the paw-print equations to figure out the number behind each dog toy and unlock the automatic treat dispenser.

Name: _____ Date: _____

1 THE KEY

$$\textcircled{?} = \square \quad \blacklozenge = 9 \quad \text{+} = 6 \quad \star = 12 \quad \textcircled{?} = \square \quad \heartsuit = 7$$

Every symbol is a whole number from 1 to 12. A number in front of a shape means multiply: 2 stars = 2 x star.

2 FIND THE MISSING VALUES

Some shapes in the key are missing. Use these to work them out, in order, and write them into the key.

$$\bullet + \bullet = 6$$

$$\bigcirc + \bigcirc + \bigcirc = 24$$

3 CRACK THESE

$$1. \star \times \text{+} - \blacklozenge = \square$$

$$2. \bigcirc \times \blacklozenge - \text{+} = \square$$

CODE 1

$$3. 2\bigcirc + \text{+} = \square$$

$$4. 3\text{+} - \star = \square$$

CODE 2

$$5. \bullet \times \bigcirc + \text{+} = \square$$

$$6. 5\blacklozenge - \star = \square$$

CODE 3

$$7. \star \times \blacklozenge + \bullet = \square$$

$$8. \heartsuit \times \blacklozenge = \square$$

CODE 4

$$9. 5\heartsuit - \text{+} = \square$$

$$10. 2\bullet + \text{+} = \square$$

4 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 bark-o-matic treat dispenser.

Answer Key

The Canine Cupboard Code · Grade 3 Crack the Code

The key

○ ring = 8 (hidden) ⬠ pentagon = 9 + cross = 6 ★ star = 12 ● circle = 3 (hidden) ♥ heart = 7

Every symbol is a whole number from 1 to 12.

- | | | |
|-----|--------------------------------------|-----|
| 1. | ★ × + - ⬠ (star x cross - pentagon) | 63 |
| 2. | ○ × ⬠ - + (ring x pentagon - cross) | 66 |
| 3. | 2○ + + (2 x ring + cross) | 22 |
| 4. | 3+ - ★ (3 x cross - star) | 6 |
| 5. | ● × ○ + + (circle x ring + cross) | 30 |
| 6. | 5⬠ - ★ (5 x pentagon - star) | 33 |
| 7. | ★ × ⬠ + ● (star x pentagon + circle) | 111 |
| 8. | ♥ × ⬠ (heart x pentagon) | 63 |
| 9. | 5♥ - + (5 x heart - cross) | 29 |
| 10. | 2● + + (2 x circle + cross) | 12 |

Vault code: **6 6 3 3**