

The Mecha-Kitty Blueprint Chamber

Determine the number values for the gear, paw print, circuit, and whiskers to calculate the four-digit combination for the automated feeding pod.

Name: _____ Date: _____

1 THE KEY

$$\text{?} = \square \quad \star = 2 \quad \heartsuit = 5 \quad \blacklozenge = 11 \quad \text{?} = \square \quad \blacktriangle = 6$$

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.

$$\bigcirc + \bigcirc = 24$$

$$3 \bullet = 24$$

3 CRACK THESE

$$1. \star \times \blacktriangle - \bigcirc = \square$$

$$2. \blacklozenge \times \heartsuit = \square$$

CODE 1

$$3. \bullet \times \heartsuit = \square$$

$$4. \bullet \times \blacktriangle + \star = \square$$

CODE 2

$$5. 10\star + \blacktriangle = \square$$

$$6. 5\heartsuit - \bullet = \square$$

CODE 3

$$7. 5\bullet - \bigcirc = \square$$

$$8. 10\bullet + \bigcirc = \square$$

CODE 4

$$9. \heartsuit + \star + \bigcirc = \square$$

$$10. \blacktriangle + \heartsuit + \bullet = \square$$

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 automated feeding pod.

Answer Key

The Mecha-Kitty Blueprint Chamber · Grade 3 Crack the Code

The key

 circle = **8** (hidden)
  star = **2**
  heart = **5**
  hexagon = **11**
  ring = **12** (hidden)
 triangle = **6**

Every symbol is a whole number from 1 to 12.

- | | | |
|-----|---|-----------|
| 1. |  ×  -  (star x triangle - ring) | 0 |
| 2. |  ×  (hexagon x heart) | 55 |
| 3. |  ×  (circle x heart) | 40 |
| 4. |  ×  +  (circle x triangle + star) | 50 |
| 5. | 10  +  (10 x star + triangle) | 26 |
| 6. | 5  -  (5 x heart - circle) | 17 |
| 7. | 5  -  (5 x circle - ring) | 28 |
| 8. | 10  +  (10 x circle + ring) | 92 |
| 9. |  +  +  (heart + star + ring) | 19 |
| 10. |  +  +  (triangle + heart + circle) | 19 |

Vault code: **5 0 7 2**