



End Chest Code Breaker

Solve the redstone and emerald symbol equations to find the four-digit combination that unlocks the obsidian vault.

Name: _____ Date: _____

1 THE KEY

$$\text{Pentagon} = 9 \quad \text{Hexagon} = 3 \quad \text{Cross} = \boxed{} \quad \text{Lightning Bolt} = \boxed{} \quad \text{Black Circle} = 12 \quad \text{Question Mark} = \boxed{}$$

Every symbol is a whole number from 1 to 15. 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.

$$5 \bigcirc = 70$$

$$4 \text{ lightning bolt} = 24$$

$$2 \text{ cross} = 8$$

3 CRACK THESE

$$1. \bigcirc \times \bullet \div \text{hexagon} = \boxed{}$$

$$2. \bigcirc \times \bullet + \text{hexagon} = \boxed{}$$

CODE 1

$$3. \text{hexagon} \times \bullet + \text{cross} = \boxed{}$$

$$4. 100 \text{ cross} + \bigcirc = \boxed{}$$

CODE 2

$$5. \bigcirc \times \bullet \div \text{lightning bolt} = \boxed{}$$

$$6. \text{lightning bolt} \times \text{pentagon} = \boxed{}$$

CODE 3

$$7. \bigcirc \times \text{hexagon} = \boxed{}$$

$$8. 10 \text{ cross} - \text{lightning bolt} = \boxed{}$$

CODE 4

$$9. (\bullet - \text{hexagon}) \times \text{pentagon} = \boxed{}$$

$$10. 100 \bullet + \text{cross} = \boxed{}$$

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 obsidian end chest.

Answer Key

Ender Chest Code Breaker · Grade 4 Crack the Code

The key

 pentagon = **9**
  hexagon = **3**
  cross = **4** (hidden)
  lightning bolt = **6** (hidden)
  circle = **12**
 ring = **14** (hidden)

Every symbol is a whole number from 1 to 15.

- | | | |
|-----|--|-------------|
| 1. | $\bigcirc \times \bullet \div \hexagon$ (ring x circle / hexagon) | 56 |
| 2. | $\bigcirc \times \bullet + \hexagon$ (ring x circle + hexagon) | 171 |
| 3. | $\hexagon \times \bullet + \plus$ (hexagon x circle + cross) | 40 |
| 4. | $100\plus + \bigcirc$ (100 x cross + ring) | 414 |
| 5. | $\bigcirc \times \bullet \div \lightning$ (ring x circle / lightning bolt) | 28 |
| 6. | $\lightning \times \pentagon$ (lightning bolt x pentagon) | 54 |
| 7. | $\bigcirc \times \hexagon$ (ring x hexagon) | 42 |
| 8. | $10\plus - \lightning$ (10 x cross - lightning bolt) | 34 |
| 9. | $(\bullet - \hexagon) \times \pentagon$ ((circle - hexagon) x pentagon) | 81 |
| 10. | $100\bullet + \plus$ (100 x circle + cross) | 1204 |

Vault code: **1 4 4 4**