

# The Obsidian Chamber Code

Calculate the numerical value of each Minecraft block to solve the final redstone equation and unlock the chest.

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

## 1 THE KEY

$$\text{⚡} = 3 \quad \text{?} = \boxed{\phantom{00}} \quad \blacksquare = 8 \quad \text{?} = \boxed{\phantom{00}} \quad \star = 13 \quad \text{☾} = \boxed{\phantom{00}}$$

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.

$$\text{☾} \times \text{⚡} = 36$$

$$3 \text{♥} = 33$$

$$\star - \bullet = 6$$

## 3 CRACK THESE

$$1. \blacksquare \times \text{♥} - \bullet = \boxed{\phantom{00}}$$

$$2. (\star - \text{☾}) \times \text{⚡} = \boxed{\phantom{00}}$$

CODE 1

$$3. \text{♥} \times \blacksquare = \boxed{\phantom{00}}$$

$$4. \blacksquare \times \bullet = \boxed{\phantom{00}}$$

CODE 2

$$5. 10\star - \bullet = \boxed{\phantom{00}}$$

$$6. 10\blacksquare - \text{☾} = \boxed{\phantom{00}}$$

CODE 3

$$7. \bullet \times \text{⚡} + \text{♥} = \boxed{\phantom{00}}$$

$$8. (\text{☾} - \text{♥}) \times \text{⚡} = \boxed{\phantom{00}}$$

CODE 4

$$9. 3\bullet + 2\text{⚡} = \boxed{\phantom{00}}$$

$$10. 3\star + 2\text{☾} = \boxed{\phantom{00}}$$

## 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 chest sealed.

# Answer Key

The Obsidian Chamber Code · Grade 4 Crack the Code

## The key

⚡ lightning bolt = **3**    ● circle = **7** (hidden)    ■ square = **8**    ♥ heart = **11** (hidden)    ★ star = **13**  
 ☾ moon = **12** (hidden)

Every symbol is a whole number from 1 to 15.

- |     |                                               |            |
|-----|-----------------------------------------------|------------|
| 1.  | ■ × ♥ - ● (square x heart - circle)           | <b>81</b>  |
| 2.  | (★ - ☾) × ⚡ ((star - moon) x lightning bolt)  | <b>3</b>   |
| 3.  | ♥ × ■ (heart x square)                        | <b>88</b>  |
| 4.  | ■ × ● (square x circle)                       | <b>56</b>  |
| 5.  | 10★ - ● (10 x star - circle)                  | <b>123</b> |
| 6.  | 10■ - ☾ (10 x square - moon)                  | <b>68</b>  |
| 7.  | ● × ⚡ + ♥ (circle x lightning bolt + heart)   | <b>32</b>  |
| 8.  | (☾ - ♥) × ⚡ ((moon - heart) x lightning bolt) | <b>3</b>   |
| 9.  | 3● + 2⚡ (3 x circle + 2 x lightning bolt)     | <b>27</b>  |
| 10. | 3★ + 2☾ (3 x star + 2 x moon)                 | <b>63</b>  |

Vault code: **3 6 8 3**