

Deep Space Signal Decoder

Decode the alien symbols by solving the math equations to find the launch sequence for the starship.

Name: _____ Date: _____

1 THE KEY

$$\diamond = \square \quad \bullet = 10 \quad \text{⚡} = 11 \quad \blacklozenge = 6 \quad \star = \square \quad \text{☾} = 4$$

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.

$$\star + \star = 18$$

$$\bullet - \blacklozenge = 3$$

3 CRACK THESE

$$1. \bullet \times \text{⚡} = \square$$

$$2. \star + \blacklozenge + \blacklozenge = \square$$

CODE 1

$$3. \blacklozenge \times \star + \text{☾} = \square$$

$$4. 5\star - \bullet = \square$$

CODE 2

$$5. 5\text{⚡} - \text{☾} = \square$$

$$6. 10\star + \blacklozenge = \square$$

CODE 3

$$7. 10\text{☾} + \blacklozenge = \square$$

$$8. \star \times \text{⚡} + \text{☾} = \square$$

CODE 4

$$9. \bullet \times \star = \square$$

$$10. \text{⚡} + \blacklozenge + \blacklozenge = \square$$

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 cargo hold of.

Answer Key

Deep Space Signal Decoder · Grade 3 Crack the Code

The key

 diamond = 7 (hidden)
  circle = 10
  lightning bolt = 11
  pentagon = 6
  star = 9 (hidden)
 moon = 4

Every symbol is a whole number from 1 to 12.

- | | | |
|-----|---|-----|
| 1. |  x  (circle x lightning bolt) | 110 |
| 2. |  +  +  (star + pentagon + diamond) | 22 |
| 3. |  x  +  (diamond x star + moon) | 67 |
| 4. | 5  -  (5 x star - circle) | 35 |
| 5. | 5  -  (5 x lightning bolt - moon) | 51 |
| 6. | 10  +  (10 x star + diamond) | 97 |
| 7. | 10  +  (10 x moon + pentagon) | 46 |
| 8. |  x  +  (star x lightning bolt + moon) | 103 |
| 9. |  x  (circle x star) | 90 |
| 10. |  +  +  (lightning bolt + diamond + pentagon) | 24 |

Vault code: **2 5 7 3**