

# Crack the Secret Code

Kindergarten | 2026-10-31 | Worksheet

An adult can read this aloud. Each shape stands for one letter. Find the shape in the key, then write or trace its letter in the box.

**Shape code: match each shape to the key. Each message is an animal or a thing you know.**

**N****H****C****A****S****T****U****01 Message****02 Message****03 Message****04 Message****05 Your turn: make a code**

Draw your own shape for the first letter of your name.

---

---

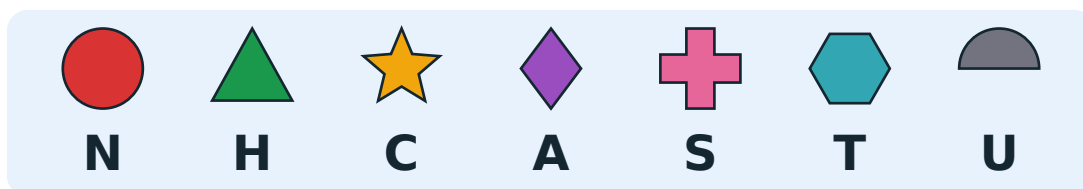
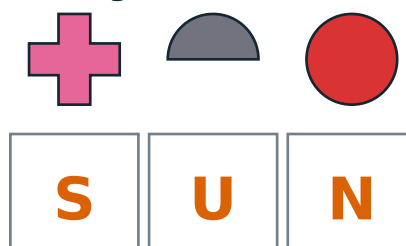
---



# Crack the Secret Code

Kindergarten | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

**01 Message****02 Message****03 Message****04 Message****05 Open task: checking criteria**

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



**Number key: find each number in the key and write its letter. All four words are things you can see outside or at home.**

|   |   |   |   |   |   |   |   |   |    |    |
|---|---|---|---|---|---|---|---|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| U | D | O | C | I | H | K | S | R | G  | F  |

11 9 3 10

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

2 1 4 7

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

**11      5      8      6**

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

8 3 4 7

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|



# Crack the Secret Code

Grade 1 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

|   |   |   |   |   |   |   |   |   |    |    |
|---|---|---|---|---|---|---|---|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| U | D | O | C | I | H | K | S | R | G  | F  |

**01 Message**

|    |   |   |    |
|----|---|---|----|
| 11 | 9 | 3 | 10 |
| F  | R | O | G  |

**02 Message**

|   |   |   |   |
|---|---|---|---|
| 2 | 1 | 4 | 7 |
| D | U | C | K |

**03 Message**

|    |   |   |   |
|----|---|---|---|
| 11 | 5 | 8 | 6 |
| F  | I | S | H |

**04 Message**

|   |   |   |   |
|---|---|---|---|
| 8 | 3 | 4 | 7 |
| S | O | C | K |

**05 Open task: checking criteria**

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



# Crack the Secret Code

Grade 2 | 2026-10-31 | Worksheet

Secret agents send messages in code. Use the key to change each code back into a letter and write it in the box below. Every code stands for exactly one letter.

**A = 1 code: each number is a letter's place in the alphabet (A = 1, B = 2 ... Z = 26).**

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

2 9 7 18 5 4 2 21 19

|  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|

## 02 Message

19 14 15 23 4 1 25

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|

## 03 Message

13 1 7 9 3 2 15 24

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

## 04 Message

16 12 1 25 20 1 7

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|

## 05 Your turn: make a code

Write a short message to a friend in the A = 1 code.

---



---



---



---



# Crack the Secret Code

Grade 2 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

|          |          |          |  |          |          |          |  |          |          |          |
|----------|----------|----------|--|----------|----------|----------|--|----------|----------|----------|
| 2        | 9        | 7        |  | 18       | 5        | 4        |  | 2        | 21       | 19       |
| <b>B</b> | <b>I</b> | <b>G</b> |  | <b>R</b> | <b>E</b> | <b>D</b> |  | <b>B</b> | <b>U</b> | <b>S</b> |

## 02 Message

|          |          |          |          |  |          |          |          |
|----------|----------|----------|----------|--|----------|----------|----------|
| 19       | 14       | 15       | 23       |  | 4        | 1        | 25       |
| <b>S</b> | <b>N</b> | <b>O</b> | <b>W</b> |  | <b>D</b> | <b>A</b> | <b>Y</b> |

## 03 Message

|          |          |          |          |          |  |          |          |          |
|----------|----------|----------|----------|----------|--|----------|----------|----------|
| 13       | 1        | 7        | 9        | 3        |  | 2        | 15       | 24       |
| <b>M</b> | <b>A</b> | <b>G</b> | <b>I</b> | <b>C</b> |  | <b>B</b> | <b>O</b> | <b>X</b> |

## 04 Message

|          |          |          |          |  |          |          |          |
|----------|----------|----------|----------|--|----------|----------|----------|
| 16       | 12       | 1        | 25       |  | 20       | 1        | 7        |
| <b>P</b> | <b>L</b> | <b>A</b> | <b>Y</b> |  | <b>T</b> | <b>A</b> | <b>G</b> |

## 05 Open task: checking criteria

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



# Crack the Secret Code

Grade 3 | 2026-10-31 | Worksheet

Secret agents send messages in code. Use the key to change each code back into a letter and write it in the box below. Every code stands for exactly one letter.

**Solve first: work out each addition or subtraction, then use the A = 1 key to find the letter.**

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

70-52   63-58   37-36   20-16   16-15   70-68   46-31   84-69   27-16

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|

## 02 Message

53-46   59-41   45-40   70-69   83-63   59-49   74-59   51-49

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

## 03 Message

63-61   44-26   12-11   37-15   43-38   81-69   70-61   78-63   25-11

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

## 04 Message

56-37   29-13   17-16   40-37   27-22

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

82-64   66-51   56-53   57-46   63-58   43-23

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

## 05 Your turn: make a code

Write a word in code using addition or subtraction facts for a partner to solve.

---



---



---



# Crack the Secret Code

Grade 3 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

70-52 63-58 37-36 20-16

16-15

70-68 46-31 84-69 27-16

|          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>R</b> | <b>E</b> | <b>A</b> | <b>D</b> | <b>A</b> | <b>B</b> | <b>O</b> | <b>O</b> | <b>K</b> |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

## 02 Message

53-46 59-41 45-40 70-69 83-63

59-49 74-59 51-49

|          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>G</b> | <b>R</b> | <b>E</b> | <b>A</b> | <b>T</b> | <b>J</b> | <b>O</b> | <b>B</b> |
|----------|----------|----------|----------|----------|----------|----------|----------|

## 03 Message

63-61 44-26 12-11 37-15 43-38

81-69 70-61 78-63 25-11

|          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>B</b> | <b>R</b> | <b>A</b> | <b>V</b> | <b>E</b> | <b>L</b> | <b>I</b> | <b>O</b> | <b>N</b> |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

## 04 Message

56-37 29-13 17-16 40-37 27-22

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| <b>S</b> | <b>P</b> | <b>A</b> | <b>C</b> | <b>E</b> |
|----------|----------|----------|----------|----------|

82-64 66-51 56-53 57-46 63-58 43-23

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| <b>R</b> | <b>O</b> | <b>C</b> | <b>K</b> | <b>E</b> | <b>T</b> |
|----------|----------|----------|----------|----------|----------|

## 05 Open task: checking criteria

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



# Crack the Secret Code

Grade 4 | 2026-10-31 | Worksheet

Secret agents send messages in code. Use the key to change each code back into a letter and write it in the box below. Every code stands for exactly one letter.

**Solve first: each code is a multiplication or division fact. Its answer is the letter's number in the A = 1 key.**

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

 $64 \div 4$     $60 \div 5$     $9 \div 9$     $2 \times 7$     $120 \div 6$ 
    
 $57 \div 3$     $45 \div 9$     $45 \div 9$     $2 \times 2$     $95 \div 5$ 
    

## 02 Message

 $57 \div 3$     $3 \times 5$     $6 \times 2$     $2 \times 11$     $35 \div 7$ 
    
 $81 \div 9$     $2 \times 10$ 
 

## 03 Message

 $5 \times 4$     $30 \div 6$     $6 \div 6$     $65 \div 5$     $92 \div 4$     $5 \times 3$     $9 \times 2$     $99 \div 9$ 
       
 $46 \div 2$     $3 \times 3$     $2 \times 7$     $114 \div 6$ 
   

## 04 Message

 $88 \div 8$     $15 \div 3$     $40 \div 8$     $96 \div 6$     $4 \times 5$     $2 \times 9$     $5 \times 5$     $27 \div 3$     $7 \times 2$     $63 \div 9$ 
         

## 05 Your turn: make a code

Code a word using multiplication facts. Swap with a partner and decode.

---



---



---



# Crack the Secret Code

Grade 4 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

 $64 \div 4$     $60 \div 5$     $9 \div 9$     $2 \times 7$     $120 \div 6$ 

|   |   |   |   |   |
|---|---|---|---|---|
| P | L | A | N | T |
|---|---|---|---|---|

 $57 \div 3$     $45 \div 9$     $45 \div 9$     $2 \times 2$     $95 \div 5$ 

|   |   |   |   |   |
|---|---|---|---|---|
| S | E | E | D | S |
|---|---|---|---|---|

## 02 Message

 $57 \div 3$     $3 \times 5$     $6 \times 2$     $2 \times 11$     $35 \div 7$ 

|   |   |   |   |   |
|---|---|---|---|---|
| S | O | L | V | E |
|---|---|---|---|---|

 $81 \div 9$     $2 \times 10$ 

|   |   |
|---|---|
| I | T |
|---|---|

## 03 Message

 $5 \times 4$     $30 \div 6$     $6 \div 6$     $65 \div 5$     $92 \div 4$     $5 \times 3$     $9 \times 2$     $99 \div 9$ 

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| T | E | A | M | W | O | R | K |
|---|---|---|---|---|---|---|---|

 $46 \div 2$     $3 \times 3$     $2 \times 7$     $114 \div 6$ 

|   |   |   |   |
|---|---|---|---|
| W | I | N | S |
|---|---|---|---|

## 04 Message

 $88 \div 8$     $15 \div 3$     $40 \div 8$     $96 \div 6$     $4 \times 5$     $2 \times 9$     $5 \times 5$     $27 \div 3$     $7 \times 2$     $63 \div 9$ 

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| K | E | E | P | T | R | Y | I | N | G |
|---|---|---|---|---|---|---|---|---|---|

## 05 Open task: checking criteria

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



# Crack the Secret Code

Grade 5 | 2026-10-31 | Worksheet

Secret agents send messages in code. Use the key to change each code back into a letter and write it in the box below. Every code stands for exactly one letter.

**Shift code: every letter was moved 3 places forward (A → D). Find the code letter in the blue row and write the letter above it. In 04, write the message in code yourself.**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | A | B | C |

## 01 Message

|   |   |   |   |  |   |   |  |   |   |   |   |
|---|---|---|---|--|---|---|--|---|---|---|---|
| P | H | H | W |  | D | W |  | Q | R | R | Q |
|   |   |   |   |  |   |   |  |   |   |   |   |

## 02 Message

|   |   |   |   |   |  |   |   |   |   |   |
|---|---|---|---|---|--|---|---|---|---|---|
| S | L | C | C | D |  | S | D | U | W | B |
|   |   |   |   |   |  |   |   |   |   |   |

## 03 Message

|   |   |   |  |   |   |   |  |   |   |  |   |   |   |
|---|---|---|--|---|---|---|--|---|---|--|---|---|---|
| W | K | H |  | P | D | S |  | L | V |  | U | H | G |
|   |   |   |  |   |   |   |  |   |   |  |   |   |   |

## 04 Write CODE in shift code:

|   |   |   |   |
|---|---|---|---|
| C | O | D | E |
|   |   |   |   |

## 05 Your turn: make a code

Write a short message with a shift of your choice. Tell a friend only what A becomes.

---



---



---



---



# Crack the Secret Code

Grade 5 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z  
D E F G H I J K L M N O P Q R S T U V W X Y Z A B C

## 01 Message

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| P | H | H | W | D | W | Q | R | R | Q |
| M | E | E | T | A | T | N | O | O | N |

## 02 Message

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| S | L | C | C | D | S | D | U | W | B |
| P | I | Z | Z | A | P | A | R | T | Y |

## 03 Message

|   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| W | K | H | P | D | S | L | V | U | H | G |
| T | H | E | M | A | P | I | S | R | E | D |

## 04 Write CODE in shift code:

|   |   |   |   |
|---|---|---|---|
| C | O | D | E |
| F | R | G | H |

## 05 Open task: checking criteria

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



# Crack the Secret Code

Grade 6 | 2026-10-31 | Worksheet

Secret agents send messages in code. Use the key to change each code back into a letter and write it in the box below. Every code stands for exactly one letter.

**Order of operations: brackets first, then powers, then  $\times$  and  $\div$ , then  $+$  and  $-$ .**  
**The value is the letter's number in the A = 1 key.**

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

$(25+11)\div 2$     $5^2-24$     $(6+4)\times 2$     $6^2-27$     $3^2+6$

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

## 02 Message

$2^3+11$     $2^3+9$     $2^3+13$     $5^2-24$     $(3+6)\times 2$     $2^3-3$

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

## 03 Message

$6^2-20$     $(3+2)\times 3$     $(20+26)\div 2$     $3^2-4$     $(34+2)\div 2$     $7^2-30$

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

## 04 Message

$(5+3)\div 4$     $2^2+14$     $(2+3)\div 5$     $(4+2)\div 2$     $2^3+3$     $5^2-20$     $6^2-16$     $5^2-6$

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

## 05 Your turn: make a code

Code a word using expressions with brackets or powers. Check each value twice.

---



---



---



---



# Crack the Secret Code

Grade 6 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

$(25+11)\div 2$     $5^2-24$     $(6+4)\times 2$     $6^2-27$     $3^2+6$

**R****A****T****I****O**

## 02 Message

$2^3+11$     $2^3+9$     $2^3+13$     $5^2-24$     $(3+6)\times 2$     $2^3-3$

**S****Q****U****A****R****E**

## 03 Message

$6^2-20$     $(3+2)\times 3$     $(20+26)\div 2$     $3^2-4$     $(34+2)\div 2$     $7^2-30$

**P****O****W****E****R****S**

## 04 Message

$(5+3)\div 4$     $2^2+14$     $(2+3)\div 5$     $(4+2)\div 2$     $2^3+3$     $5^2-20$     $6^2-16$     $5^2-6$

**B****R****A****C****K****E****T****S**

## 05 Open task: checking criteria

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



# Crack the Secret Code

Grade 7 | 2026-10-31 | Worksheet

Secret agents send messages in code. Use the key to change each code back into a letter and write it in the box below. Every code stands for exactly one letter.

**Code breaker: each message uses a different, unknown shift. The first word of every message is given as a clue. Use it to find how far the letters moved, then decode the rest.**

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

**01 Message** First word: THE

Y M J T B Q K Q N J X F Y I F B S

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

**02 Message** First word: THE

C Q N T N H R B D W M N A C Q N

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

V J C

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

**03 Message** First word: MEET

A S S H A S P M H V S C Z R

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

P F W R U S

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

**04 Message** First word: BRING

V L C H A S I O L V Y M N C X Y U M

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

**05 Your turn: make a code**

Write a message with a secret shift. Give your partner the first word as a clue.

---



---



---



---



# Crack the Secret Code

Grade 7 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

01 Message First word: THE

Shift used: 5 places forward

Y M J T B Q K Q N J X F Y I F B S  
 T H E O W L F L I E S A T D A W N

02 Message First word: THE

Shift used: 9 places forward

C Q N T N H R B D W M N A C Q N  
 T H E K E Y I S U N D E R T H E

V J C  
 M A T

03 Message First word: MEET

Shift used: 14 places forward

A S S H A S P M H V S C Z R  
 M E E T M E B Y T H E O L D

P F W R U S  
 B R I D G E

04 Message First word: BRING

Shift used: 20 places forward

V L C H A S I O L V Y M N C X Y U M  
 B R I N G Y O U R B E S T I D E A S

05 Open task: checking criteria

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.



# Crack the Secret Code

Grade 8 | 2026-10-31 | Worksheet

Secret agents send messages in code. Use the key to change each code back into a letter and write it in the box below. Every code stands for exactly one letter.

**Each letter's number  $n$  ( $A = 1$ ) was coded as  $c = 3n + 2$ . Undo the rule:  $n = (c - 2) \div 3$ . In 04 the rule is different: use the two clues to find it first.**

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

59 38 47 50 17

## 02 Message

23 56 5 50 26 29 62

## 03 Message

20 29 44 14 74

## 04 Message

Clues: B is coded as 7, and E is coded as 19. Rule:  $c = \underline{\hspace{1cm}} n + \underline{\hspace{1cm}}$

47 35 55 19 3 71

## 05 Your turn: make a code

Invent your own rule  $c = an + b$  and code a short word. Give two clues instead of the rule.

---



---



---



---



# Crack the Secret Code

Grade 8 | 2026-10-31 | Answer key

Orange letters are the decoded answers. Check: every code in the message must match the same letter each time it appears.

|          |          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> | <b>I</b> | <b>J</b> | <b>K</b> | <b>L</b> | <b>M</b> |
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| <b>N</b> | <b>O</b> | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
| 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       |

## 01 Message

59 38 47 50 17

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| <b>S</b> | <b>L</b> | <b>O</b> | <b>P</b> | <b>E</b> |
|----------|----------|----------|----------|----------|

## 02 Message

23 56 5 50 26 29 62

|          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| <b>G</b> | <b>R</b> | <b>A</b> | <b>P</b> | <b>H</b> | <b>I</b> | <b>T</b> |
|----------|----------|----------|----------|----------|----------|----------|

## 03 Message

20 29 44 14 74

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| <b>F</b> | <b>I</b> | <b>N</b> | <b>D</b> | <b>X</b> |
|----------|----------|----------|----------|----------|

## 04 Message

Clues: B is coded as 7, and E is coded as 19. Rule:  $c = 4n - 1$

47 35 55 19 3 71

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| <b>L</b> | <b>I</b> | <b>N</b> | <b>E</b> | <b>A</b> | <b>R</b> |
|----------|----------|----------|----------|----------|----------|

## 05 Open task: checking criteria

A partner can decode the new message with the stated key or clue, and each code stands for only one letter. Many different answers are correct.

