

Binary Code Worksheet

Convert between letters, numbers, and 8-bit binary

Grades 5–9 • 20 minutes • Intermediate • Answer key included

Use the ASCII values given to convert letters and numbers to 8-bit binary, and decode binary back to text or decimal. Show your work in the spaces provided.

Name: _____

Date: _____

1. Convert the letter A to 8-bit binary (A = ASCII 65)

2. Convert the letter H to 8-bit binary (H = ASCII 72)

3. Convert the number 42 to binary

4. Decode binary to decimal: 00001010

5. Decode binary to ASCII letter: 01000010

6. Decode binary to ASCII letter: 01011010

7. Convert the decimal number 255 to binary

8. What decimal number does 10000000 represent?

9. Decode this binary message: 01001000 01001001 (ASCII)

10. Decode: 01000011 01001111 01000100 01000101 (ASCII)

11. What is 5 + 3 in binary? (add, then convert the result)

12. Convert binary 01101001 to hexadecimal
