# Year 10 – Easy Code Cracking: Problem‑Solving Worksheet

Use the tips and examples to crack each code. Show your working!

## Part A – Number-to-Letter Code (A=1, B=2, … Z=26)

Decode this message. Tip: Write the alphabet with numbers under each letter.

Ciphertext: 11-5-5-16-/-7-15-9-14-7-/-25-15-21-/-8-1-22-5-/-7-15-20-/-20-8-9-19

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## Part B – Caesar Cipher (Shift +3)

Shift +3 means A→D, B→E, C→F, … (move 3 letters forward). Decode:

Ciphertext: PHHW DW OXQFK

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## Part C – Caesar Cipher (Unknown Shift)

You don’t know the shift! Try each shift or use frequency clues (E is common, look for short words like A, I, or THE). Decode:

Ciphertext: AOPZ TLZZHNL OHZ ILLU LUJYFWALK BZPUN H JHLZHY ZOPMA

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## Part D – Polybius Square (Coordinates Code)

Use the 5×5 grid (I and J share a square). Each letter is row-column (e.g., 23 = Row 2, Col 3). Decode:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |
| 1 | A | B | C | D | E |
| 2 | F | G | H | I | K |
| 3 | L | M | N | O | P |
| 4 | Q | R | S | T | U |
| 5 | V | W | X | Y | Z |

Ciphertext: 23 15 31 31 34 / 52 34 42 31 14

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## Reflection

Which code did you find easiest? Which strategy helped you most?

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# Answer Key (Teacher Use Only)

## Part A

KEEP GOING YOU HAVE GOT THIS

## Part B

MEET AT LUNCH

## Part C

Shift used: +7

Plaintext: THIS MESSAGE HAS BEEN ENCRYPTED USING A CAESAR SHIFT

## Part D

HELLO WORLD (I/J share a box)