

Combined Events

Name:

Date:

INQUIRY

You roll a die AND flip a coin. How many total outcomes are there? How does this connect to probability?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Sample space	List of all possible outcomes.
AND rule	$P(A \text{ and } B) = P(A) \times P(B)$ for independent events.
OR rule	$P(A \text{ or } B) = P(A) + P(B)$ for mutually exclusive events.

Part A — Listing Outcomes

1. Roll a die and flip a coin. List all possible outcomes. How many total? [3 marks]

Part B — Calculating

2. P(rolling 6 AND heads) using the AND rule. [2 marks]

Show your working:

3. P(rolling even OR rolling 5). [2 marks]

Show your working:

Part C — Application

4. Two spinners: Spinner A (1,2,3), Spinner B (Red, Blue). Draw sample space. Find P(3 and Red). P(even number and Blue). [4 marks]

Show your working: