

WORKSHEET

Probability of a Simple Event

Year 8 Mathematics

Name: _____	Class: _____	Date: _____
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$$\text{Reminder: } P(E) = \frac{\text{number of favourable outcomes}}{\text{total number of possible outcomes}}$$

Section A — Warm Up

1. Match each event to the correct word on the probability scale: impossible, unlikely, even chance, likely, certain.

(a) Picking a red ball from a bag of only red balls. → _____

(b) Tossing a fair coin and it landing on Heads. → _____

(c) Rolling a 7 on an ordinary 6-sided die. → _____

(d) It raining at least once in Brunei during the rainy season. → _____

2. A fair six-sided die is rolled once. Write down the sample space (list all possible outcomes).

Section B — Applying the Formula

3. A fair six-sided die is rolled once. Find the probability of:

(a) P(rolling a 3)

(b) P(rolling an even number)

(c) P(rolling a number greater than 4)

(d) P(rolling a number less than 7)

4. A bag contains 4 red counters, 3 yellow counters and 3 green counters. A counter is picked at random. Find the probability of picking:

(a) a red counter

(b) a yellow counter

(c) a counter that is NOT green

5. A spinner is divided into 8 equal sections: 3 blue, 4 red and 1 white. The spinner is spun once. Find the probability that it lands on:

(a) blue

(b) white

(c) red or blue

Section C — Challenge

6. In a class of 30 pupils, the probability of choosing a pupil who wears glasses is $\frac{2}{5}$. How many pupils in the class wear glasses? [2 marks]

7. A box contains only red and blue pens. There are 15 pens in total. The probability of picking a blue pen at random is $\frac{1}{3}$. How many red pens are in the box? Show your working. [3 marks]