Lesson 105

Testing predictions with dice and spinners

PREDICTING FAIR-DIE ROLLS

1. A fair die has **6** equal faces, so each number has the same chance.
2. Share **30** rolls evenly: **30 ÷ 6 = 5**. Predict about **5** of each number.
3. Count the tally marks: the scores are close to **5** each, so the prediction holds.

1	𝍸	
2	𝍸	
3	𝍸 |	
4	𝍸	
5	𝍸	
6	𝍸	

WARM-UP

Niamh tests a prediction with a coin. Help her fill in the tally chart.

Category	Tally	Count
Heads		
Tails		

1. Niamh will flip a fair coin 20 times. What should she predict for heads and for tails?
2. Her real flips were Heads 12 and Tails 8. Fill in the tally chart.
3. How far off was her prediction for heads? Is that close for only 20 flips? Write one sentence.

PRACTICE

1. Rory plays a board game with one fair six-sided die and plans to roll it **18** times. Predict how many times each number should turn up.
2. Sean's simple game spinner has **2** equal colours, red and blue, and he spins it **50** times. Predict how many spins land on red.

ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

a. On a fair six-sided die, each number is equally likely on one roll. ☐

b. Twelve rolls of a fair die give each number the same count. ☐

c. Five sixes in a row come up when a fair die is rolled ten times. ☐

d. On a spinner with equal segments, one colour is favoured over the others. ☐

REFLECT Did more rolls or spins bring your results closer to your prediction?

DATA & CHANCE