

PREDICTING FAIR-DIE ROLLS

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

1		
2		
3		
4		
5		
6		

WARM-UP

Fill in the tally chart for the coin-flip game.

Category	Tally	Count
Heads		
Tails		

1. A fair coin lands heads about as often as tails. Write your prediction for 20 flips.
2. Now add the real tallies: Heads 12, Tails 8.
3. Were the real counts close to your prediction? 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.

2 equal colours, 50 spins: about how many spins for each colour? = ?

? 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. Over many rolls of a fair die, every number turns up a similar number of times.

REFLECT

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