

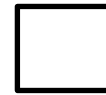
Objective: To draw and interpret sample space diagrams



Met

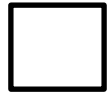


Partially  
Met



Not Met

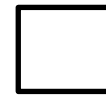
Work on the following sections:



Section 1



Section 2



Extension

## Section 1

Caroline has a black bag, a yellow bag and a red bag. She has black shoes, red shoes and grey shoes.

- Draw a sample space diagram to show the possible combinations of hats and shoes she can wear.
- What is the probability that Caroline will wear red shoes with a red bag?
- What is the probability hat Caroline will wear grey shoes?

## Section 2

Two spinners are going to be spun and their product noted.

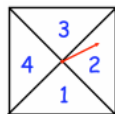
Spinner A has the numbers 2, 4, 6 and 8 on.

Spinner B has the numbers 1, -2, 3 and -4 on.

- Draw a sample space for all of the possible outcomes
- What is the probability that outcome will be odd?
- What is the probability that the outcome will be less than 2?

## Extension

Jessica is playing a game with a fair four sections spinner and a fair coin. She spins the spinner and flips the coin.



Spinner



Coin

If the coin lands on heads, Jessica applies **rule 1** to the number on the spinner  
If the coin lands on tails, Jessica applies **rule 2** to the number on the spinner

The table below shows some information about the scores that Jessica can get.

		Spinner			
		1	3	4	6
Coin	Heads	1	9		36
	Tails	3	7	9	13

- What could **rule 1** be?
- What could **rule 2** be?
- Complete the table
- Find the probability that Jessica scores a number less than 15