

Amber's Experiment

1 Amber is going to flip a penny and roll a die at the same time. The die has the numbers 1, 2, 3, 4, 5, and 6 on it. What is the probability that the penny will land on heads and the die will land on 4? Write your prediction here and explain your thinking.



2 You are going to make 2 kinds of sample spaces for this experiment. Remember, a sample space is a list of all the possible outcomes.

a Think before you start. What are the possible outcomes for the penny flip?

b What are the possible outcomes for the die roll?

c Complete the chart below to show all the possible outcomes of Amber's experiment.

Number Rolled

Heads



Tails



	2			5	
	H2				
				T5	

d On the back of this sheet, make a tree diagram to show all the possible outcomes of Amber's experiment.

3 How many possible outcomes are there in this experiment? _____

4 What is the probability that the penny will land on heads and the die will land on 4? Express your answer as a fraction.