## **♦** Maths teacher hub

Higher Homework 37: Probability

1.	The tab	le bel	ow s	hows	the	prob	abilities	of	choosing	ga	counter	from	a ł	oag.
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The value of yellow to green is in a ratio of 2:1

There are 8 yellow counters.

How many red counters are there

Red	Black	Green	Yellow
0.4	0.3		

(3 marks)

2. Lucas has calculated his probability of scoring against certain teams.

The probability he will score against Hitchmond FC is 0.55

The probability he will score against Moore Town is 0.7

(a) Draw a tree diagram to show this.

(2 marks)

(b) Work out the probability he will not score against either team.

(2 marks

## \*MATHS TEACHER HUB Higher Homework 37: Probability

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3. Laura asked 80 people what their favourite sport was.	
31 people liked all three sports	
48 people liked football and rugby	
45 people liked football and netball	
5 people liked netball and rugby, but not football	
4 people only liked football	
5 people only liked netball	
All together 56 people liked rugby.	
How many didn't like any of the sports?	
	(4 marks)
2. There are 5 blue counters and 4 yellow counters in a bag.	
One counter is taken out, not replaced.	
A second counter is then taken.	
(a) Draw a tree diagram to display this information.	
(w) = 1000 0 200 0 200 p 200 v 200 200 200 200 200 200 200 200 2	
	(2 marks)
	(2 marks)
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(b) Work out the probability that at least one is a yellow.	
	(3 marks)