Lots of DATA 6 PLUS

Beard length(cm)	Frequency	
20<t≤30	20	
30<t≤40	58	
40<t≤50	14	
50<t≤60	3	

Some beards are measured. The lengths are in the table.

(a) What is an estimate for the mean length?

(b) Another beard is measured at 41cm. Does this change the mean?

Length of Tortoise (cm)	Frequency	
10≤t<15	2	
15≤t<20	58	
20≤t<25	34	
25≤t<30	3	

Some tortoises are measured. The lengths are in the table.

(a) What is an estimate for the mean length?

(b) Why is this only an estimate?

(c) Another tortoise is measured at 15cm.

　　　Which group would this fit into?

| Height of calf(cm)	Frequency	
120≤t<130	12	
130≤t<140	33	
140≤t<150	34	
150≤t<160	13	

Some calves are measured. The heights are in the table.

(a) What is the modal class?

(b) What is the median class?

(c) Another calf is measured.

　　This new result will change the mode.

　　What could the height be?

Length of Tortoise (cm)	Frequency	
10≤t<15	2	
15≤t<20	58	
20≤t<25	34	
25≤t<30	3	

Some tortoises are measured. The lengths are in the table.

(a) What is the modal class?

(b) What is the median class?

(c) Another tortoise is measured at 15cm.

　　　Which group would this fit into?

[3][?][?][?]
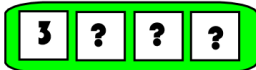
Connor has a combination padlock that has 4 dials.

Each dial has the numbers 0 to 9 on it.

He has forgotten the combination to unlock it.

However, he knows that it starts with a 3.

How many different combinations are possible?

[?][?][7][7]
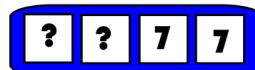
Ella has a combination padlock that has 4 dials.

Each dial has the numbers 0 to 9 on it.

She has forgotten the combination to unlock it.

However, she knows that it ends with 77.

How many different combinations are possible?

A security keypad is shown.

Every code must have 3 numbers followed by a letter.

Sandra has forgotten her code but remembers that the letter is E

How many different codes are possible?

3 4 5 6
B C D E
Code ???E
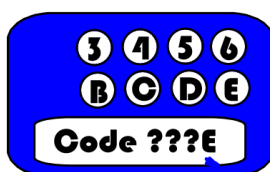
Sandwich shop "Underpass" has very little choice in their menu.

You must choose bread and filling.

| White Bread	Meatball
Brown Bread	Chicken Tikka
Cheesy Bread	Turkey and Ham
	BLT

Jonny is unable to choose. How many different combinations are possible?

Sandwich shop "Underpass" has very little choice in their menu.

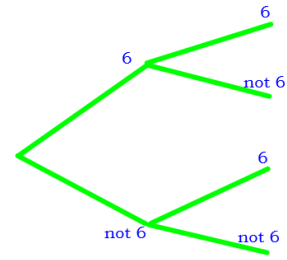You must choose bread, filling and sauce.

White Bread	Meatball	Mayo
Brown Bread	Chicken Tikka	Hot Chilli
Cheesy Bread	Turkey and Ham	South West
	BLT	

Rachel is unable to choose. How many different combinations are possible?
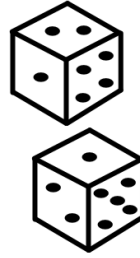
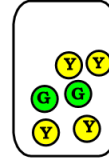2 normal fair dice are thrown one after the other.

Fill in the probability tree.

6

6

not 6

6

not 6

not 6

What is the probability of getting two 6's?

This spinners is spun twice. The scores are added together.

Fill in this probability tree.

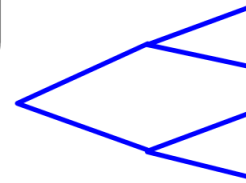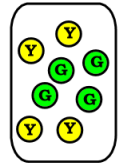1 2 3
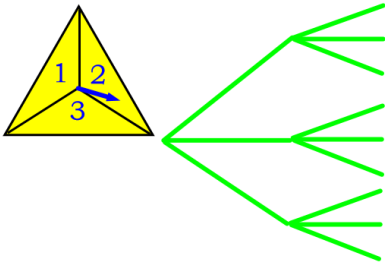
What is the probability of scoring total of 2?

Bag A

Bag B

A counter is taken from Bag A

Then a counter is taken from Bag B

Fill in this probability tree.

Find the probability of getting 2 yellow.

Steve is playing a game of tennis then a game of darts.

The probability he wins the tennis is $^3/_{10}$

The probability he wins the darts is $^7/_{10}$

Complete the probability tree diagram.

win

win
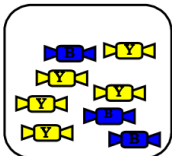
lose

tennis   darts

win

lose

lose
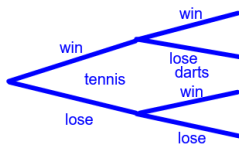
What is the probability that he wins both games?

Steve is playing a game of tennis then a game of darts.

The probability he wins the tennis is 0.8

The probability he wins the darts is 0.2

Complete the probability tree diagram.

win

win

lose

tennis   darts

win

lose

lose
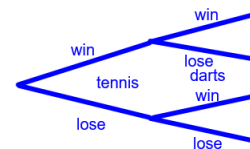
What is the probability that he wins both games?


Some sweets are in a jar.

A sweet is chosen at random.

It is eaten.

Then another is picked and eaten.
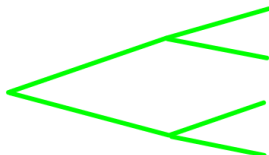
Find the probability of getting 2 yellow sweets.

The probability it snows on Monday is 0.8

If it snows then the probability it snows on the next day is 0.9

If it does not snow then the probability it snows on the next day is 0.7

Fill in the probability tree diagram for Monday and Tuesday

Tuesday

snow

Monday   snow

no snow
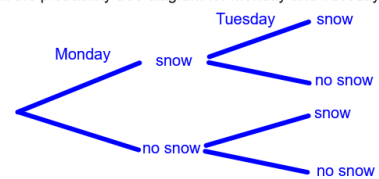
snow

no snow

no snow

Then calculate the probability there is no snow on Monday or Tuesday.