Smarties: Colour Investigation

Name:_____

Fill in this table to show how many smarties of each colour there are in one tube.

Colour	Number
Brown	
Green	
Orange	
Pink	
Red	
Yellow	
Purpe	
Blue	

Total:	

Which is the most common colour?

Which is the least common colour?

Class results:

Which is the most common colour?

Which is the least common colour?

Sweet Probability

By experimenting, we can get enough information to predict the outcome of a game.
Fill in the tables below as we experiment with coloured sweets:

Remember:
The chance of something happening can $\dfrac{3}{4}$ means that a particular outcome happens
be written as a fraction: 3 times out

There are 3 boxes, each containing a number of coloured sweets:
         The colours of sweets are: **Red**, **Orange**, **Purple** and **Yellow**

You won't see how many of each colour there are until the end, but you will see one sweet at a time.

Eventually you may be able to *guess* quite accurately what the next colour will be.

Box A

Fill in this table whenever anyone takes a sweet from box A | This box contains **4** sweets. |

Colour of sweet:
(red, orange, purple, yellow)

After you've filled in that table, count up the number of each colour and put the totals here:

1
2
3
4
5
6
7
8

Probability:

Red: [   ]   ___ or ___
                         8   4

Orange: [   ]   ___ or ___
                            8   4

Purple: [   ]   ___ or ___
                           8   4

Yellow: [   ]   ___ or ___
                            8   4

Which colour is the **most likely**? [   ]

Which colour is the **least likely**? [   ]

Box B

Fill in this table whenever anyone takes a sweet from box B

This box contains 8 sweets.

Colour of sweet:
(red, orange, purple, yellow)

1	9
2	10
3	11
4	12
5	13
6	14
7	15
8	16

After you've filled in that table, count up the number of each colour and put the totals here:

Probability:

Red: —— or ——
     16   **8**

Orange: —— or ——
     16   **8**

Purple: —— or ——
     16   **8**

Yellow: —— or ——
     16   **8**

Which colour is the **most likely**?

Which colour is the **least likely**?

Box C

Fill in this table whenever anyone takes a sweet from box B

This box contains 12 sweets.

Colour of sweet:
(red, orange, purple, yellow)

1	13
2	14
3	15
4	16
5	17
6	18
7	19
8	20
9	21
10	22
11	23
12	24

After you've filled in that table, count up the number of each colour and put the totals here:

Probability:

Red: —— or ——
     24   **12**

Orange: —— or ——
     24   **12**

Purple: —— or ——
     24   **12**

Yellow: —— or ——
     24   **12**

Which colour is the **most likely**?

Which colour is the **least likely**?