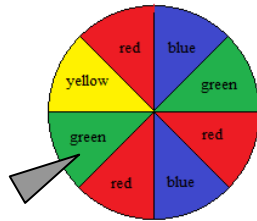**Year 5/6**　　**Chance and data**　　**Worksheet 1**

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1. A spinner has eight equal sectors coloured in blue, green, yellow and red as shown below. List the possible outcomes of a single spin of the spinner.

2. Refer to Q1.
In a single spin of the spinner,
(a) which two colours are equally likely to occur?
(b) which colour is most likely to occur?
(c) which colour is least likely to occur?

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3. The six faces of a small cube are numbered from 1 to 6. Numbers 1, 2 and 3 are written in red, 4 and 5 are in blue, and 6 is in green.
(a) List the possible *colour* outcomes in tossing the cube once.
(b) List the possible *number* outcomes in tossing the cube once.

4. Refer to Q3.
(a) Order the possible colour outcomes from least likely to most likely.
(b) Which one of the following events is more likely to occur in tossing the cube once?
Events: Blue odd number, red odd number.

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5. Two cubes are numbered and coloured the same way as the cube in Q3. List the possible outcomes when the two cubes are tossed together and the numbers obtained added.

6. Four possible outcomes in Q5 are 3, 5, 7 and 10. Order them from least likely to most likely.

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7. List the possible outcomes when the two cubes in Q5 are tossed together and the colours obtained recorded.

8. Refer to Q7. Which one of the following events is more likely?
Events: Same colour obtained for both cubes, different colours obtained for the two cubes.

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9. The table below shows the average number of rainy days in May over the last ten years for 8 cities, A, B, C ......, H.

A	B	C	D	E	F	G	H
18	5	3	20	7	9	11	1

Order the cities on chance of rain from least likely to most likely on a particular day in May.

10. A bag contains 6 green, 3 red and 1 blue counters.
You randomly take a counter out of the bag. List the colour obtained from the least likely to the most likely.
Write true or false:
(a) The chance of taking a green counter is 6 times the chance of taking a blue counter.
(b) The chance of taking a green counter is 2 times the chance of taking a red counter.
(c) The chance of taking a green counter is 5 times greater than the chance of taking a blue counter.

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11. Refer to the bag of counters in Q10.
You randomly take 2 counters out of the bag at the same time. List the possible combinations of colours from the least likely to the most likely.

Numerical, algebraic and worded answers.

1. Red, green, yellow, blue
2. (a) Blue, green
   (b) Red (c) Yellow
3. (a) Red, blue, green
   (b) 1, 2, 3, 4, 5, 6
4. (a) Green, blue, red
   (b) Red odd number
5. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
6. 3, 10, 5, 7
7. rr, rb, rg, bb, bg, gg
8. Different colours obtained for the two cubes
9. H, C, B, E, F, G, A, D
10. (a) True (b) True (c) True
11. br, rr, bg, gg, gr