

# Mathematics Assessment (CfE) - Level 2

(MNU 2 - 22a)

I can conduct simple experiments involving chance and communicate my predictions and findings using the vocabulary of probability.

Where possible, answers should be given as fractions in their simplest form.

1. For each of these statements, say whether the probability of it happening is :-

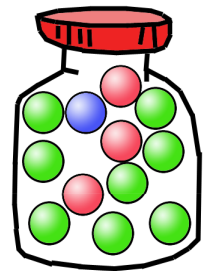
impossible - less than likely - evens - more than likely - a dead cert

- a A new born baby girl will weigh **more** than 3 stone (19.1 kilograms).
- b When I choose a month at random, it will have the letter "a" in it.
- c When I pick a number from "2, 3, 5, 7, 11, 13", it will be an **odd** number.

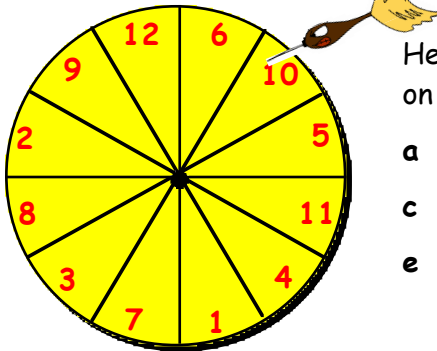
2. A jar contains 1 blue, 8 green and 3 red gobstopper sweeties in it.

If a sweet is removed at random, calculate the following probabilities :-

- a P(blue)
- b P(red)
- c P(green)
- d P(brown).



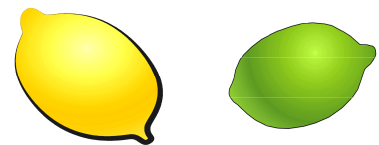
3. Here is a simplified dartboard. When a dart is thrown and it lands on the board, what are the following probabilities :-



- a P(10)
- b P(odd)
- c P(not 2)
- d P(greater than 3)
- e P(multiple of 3)
- f P(a factor of 12) ?

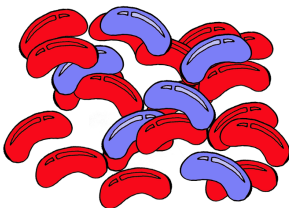
4. There are 50 fruits in a box - a mixture of lemons and limes.

The probability of picking a lemon is  $\frac{9}{10}$ .



- a What is the probability of picking a lime ?
- b How many lemons and how many limes are there in the box ?

5. A bag contains 6 blue jelly beans and 18 red ones.



- a If a jelly bean is chosen at random, what is the probability that it will be **red** ?
- b If that red bean is not put back into the bag, what is the probability that the next jelly bean chosen will be **blue** ?

6. Shaun the weather man said "The probability it will be sunny tomorrow is 0.8".

What is the probability it will **not** be sunny tomorrow ?

