1.

Here are some simple experiments. Think about them carefully and then work out the probability of the event happening.

a) A bag contains six blue balls and four green balls. One ball is chosen without looking at its colour. What is the probability it is green?

b) A spinner has the numbers from **1** to **20** on it. If it is spun, what is the probability of getting an even number?

c) A spinner has the numbers from **1** to **20** on it. If it is spun, what is the probability of getting a prime number?

d) A milkcrate contains ten red top and four silver top bottles of milk. A bird lands on one of the milk bottles. What is the probability it lands on a silver top?

e) Twenty cards are laid out on a table. Four are green. Six are yellow. Ten are blue. A boy throws a dart at the table. If the dart hits one of the cards, what is the probability it is a yellow card?

f) Six boys and five girls are in a lift. One of the children feels ill. What is the probability it is one of the boys?

g) A factory has sixteen workshops. Accidents happened in three of them today. What is the probability of working in a workshop which had an accident?

h) In a batch of **1 000** nails, twelve were faulty. If one of the nails is chosen at random, what is the probability it is a faulty one?

Now draw a probability line from 0 to 1 and put the above events on the line in the correct places.

1. **Probabilities here are given as fractions, but equivalent decimals are just as valid.**

a) 4/10 or 2/5 **b)** 1/2 or 10/20 **c)** 8/20 or 2/5 **d)** 4/14 or 2/7 **e)** 6/20 or 3/10
f) 6/11 **g)** 3/16 **h)** 12/1000 or 3/250