1.1- Research what the definition of probability is.

1.2- Explain how is probability measured?

Which of the following is NOT a probability?

A. A 20% chance there will be rain tomorrow.

B. A one in five chance that Jason will win the marathon.

C. A prediction that Spain will win the World Cup

D. The fact the getting head when you toss a coin is equally as likely as getting tails

1.3- A box contains 3 salt and vinegar, 4 cheese and onion, and 2 ready salted packets of crisps. How would you work out what the probability of getting a packet of salt and vinegar crisps was, if you were choosing at random?

A. Number of different flavours divided by the number of salt and vinegar crisps.

B. Number of crisp packets divided by the number of different flavours.

C. Number of salt and vinegar crisps divided by the number of all the packets of crisps in the box.

D. Number of salt and vinegar crisps divided by the number of other flavours.

- 1.4- Could you identify the likelihood of the following events happening, by writing next to them either Impossible, Unlikely, Likely or Certain.
 - a) The probability of a lottery ticket winning is:
 - b) A day in February is chosen at random. What is the probability that this date is 35th February?
 - c) A single die, with numbers 1 to 6, is thrown. What is the probability a 1 is thrown?

Probability Experiment

- 1) Flip a coin 10 times.
- 2) Record the result as a tally mark whether the coin landed on 'heads' or 'tails'
- 3) Repeat until you have ten results.

| | Tally | Total |
|-------|-------|-------|
| Heads | | |
| Tails | | |

According to your results, what is the probability of getting a heads?

Repeat again for 20 coin flips

| | Tally | Total |
|-------|-------|-------|
| Heads | | |
| Tails | | |

According to your results, what is the probability of getting a heads?

Repeat again for 30 coin flips

| | Tally | Total |
|-------|-------|-------|
| Heads | | |
| Tails | | |

According to your results, what is the probability of getting a heads?

Repeat again for 40 coin flips

| | Tally | Total |
|-------|-------|-------|
| Heads | | |
| Tails | | |

According to your results, what is the probability of getting a heads?

Record your results in a graph below

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