**Memory**

Expectation:

Probability x no. of trials

**Research**

What is meant by the term mutually exclusive? Give an example.

**Literacy**

Theoretical probability

Experimental probability

Expected

Trial

Sample space diagram

**Stretch**

Peter conducts an experiment with a dice. The results are shown below:

|  |  |
| --- | --- |
| 5 rolled | Not a 5 rolled |
| 9 | 21 |

1. What is the experimental probability of rolling a 5?
2. Compare this to the theoretical probability. Do you think this dice is biased?
3. If Peter was to roll this dice 90 times, how many times would you expect not a 5 to be rolled?

**Skills Practice**

1. What is the probability of picking a vowel (a,e,I,o,u) from the letters MRS MAHONEY?
2. Which is more likely- rolling a prime number on an ordinary 6 sided dice, or rolling a square number?
3. There are 10 counters in a bag. 5 are red, 3 are blue and the rest green. What is the probability that I choose:
4. A green counter B) A blue Counter

C) A yellow counter D) A red or blue counter

4) A spinner has the numbers 1, 2, 3 and 4 on. A second spinner has the numbers 4, 5, 6 and 7 on. The two spinners are spun and their numbers added together.

1. Draw a sample space diagram for this
2. What is the probability that the total score is greater than 10
3. What is the probability that the total score is 1