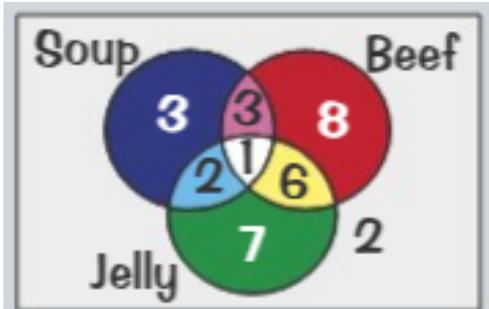


Probability

Examples and key information

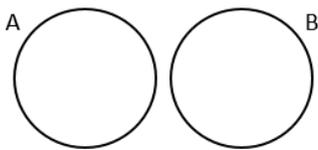


$$\frac{\text{Total number having had jelly}}{\text{Total number of students}} = \frac{16}{32} = \frac{1}{2}$$

Key words

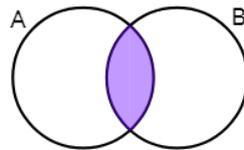
- Certain
- Impossible
- Likely
- equal chance
- fair
- biased
- random
- theoretical
- trials
- independent
- conditional,
- experimental

Mutually Exclusive Events



$$P(A \text{ or } B) = P(A) + P(B)$$

Non-Mutually Exclusive Events



$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

Independent Events

The outcome of one event **does not** affect the outcome of the other.

If A and B are independent events then the probability of both occurring is

$$P(A \text{ and } B) = P(A) \times P(B)$$

Dependent Events

The outcome of one event affects the outcome of the other.

If A and B are dependent events then the probability of both occurring is

$$P(A \text{ and } B) = P(A) \times P(B|A)$$

Probability of B given A

Success Criteria: Scatter Diagrams & Correlation

I can...

To be able to calculate probabilities from a two-way table.

Explain what is meant by the word independent.

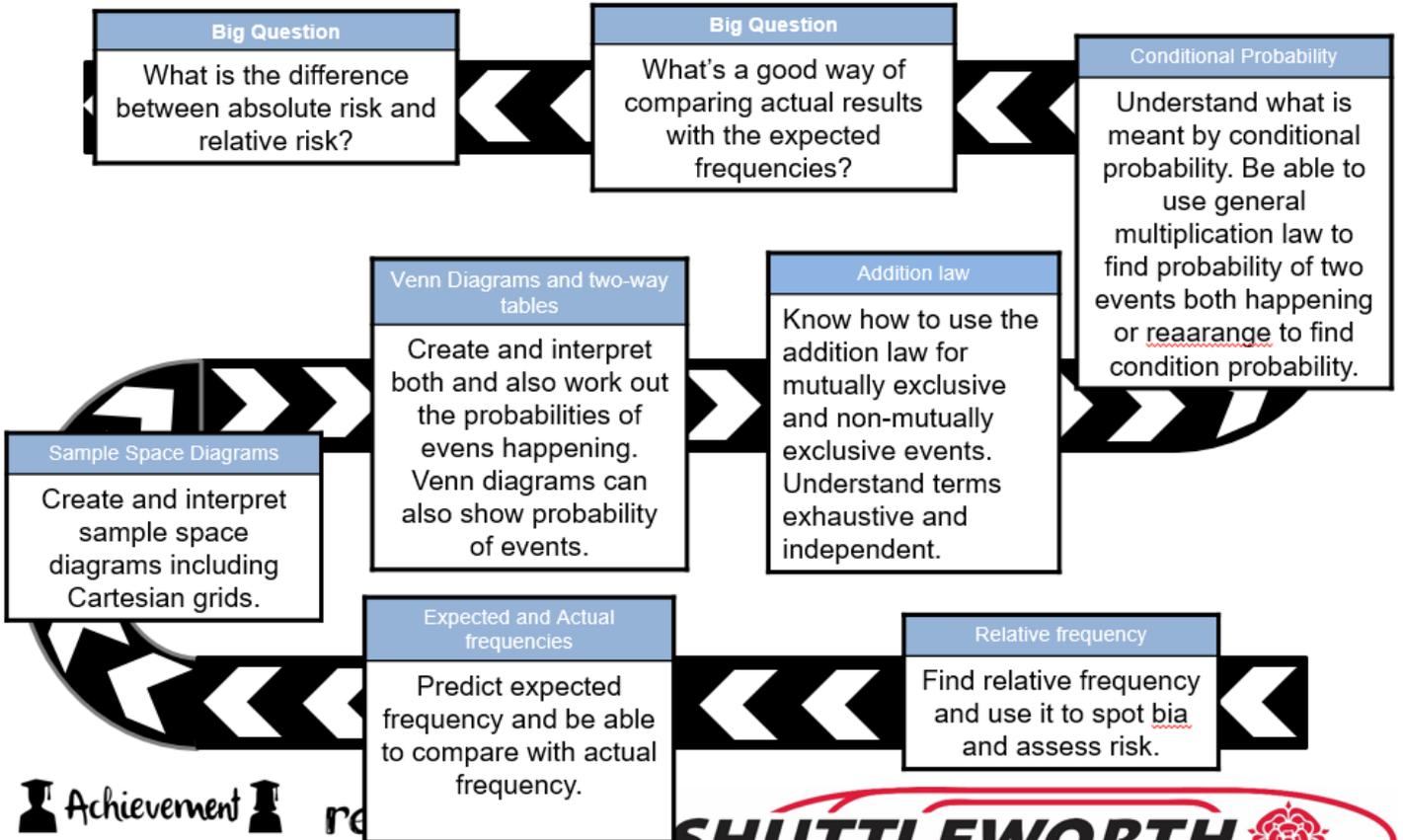
Calculate probabilities from a Venn diagram.

If given $P(A \text{ and } B)$, $P(A|B)$ and $P(B|A)$, deciding if A and B are independent events.

Complete a tree diagram and find probabilities from it.

Think big.
Chase dreams.
Succeed together.

Mathematics Learning Journey: Probability



Achievement

re



Community



PERSEVERANCE

Pride



COLLEGE

<p>DEFINITION</p> <p>ETYMOLOGY/MORPHOLOGY</p>	<p>CHARACTERISTICS</p>
<p>EXAMPLES</p>	<p>NON-EXAMPLES</p>