Year 9 Mathematics | Term 1 | Knowledge Organiser

| Probability |  |  | Circles |  |  | Percentages |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Probability | The chance that something will happen | 3 | Circumferenc e | the length around the outside of a circle | 1 | Percent | Parts per 100 - written |
| 2 | Relative frequency | How often something happens divide by the outcomes | 4 | Radius | The length from the centre of a circle to its circumference | 2 | Decimal | Numbers to the right of the decimal point are called |
| 3 | Independent | An event that is not affected by any other events | 5 | Diameter | The length from one side of a circle to the other, through the centre. <br> The ratio of a circle's | 3 | Fraction | decimals <br> Represents how many parts of a whole value you have |
| 4 | Chance | The likelihood of a particular outcome | 6 | Pi $(\pi)$ | circumference to its diameter. 3.14159... | 4 | Multiplier | The number you are multiplying by |
| 5 | Event | The outcome of a probability - a set of possible outcomes | 7 | Sector | A part of a circle enclosed by two radii and an arc | 5 | Integer | A whole number - can be positive, negative or zero |
| 6 | Biased | A built in error that makes all values wrong by a certain amount - weighted dice | 8 | Area of a circle | equalities $\pi r^{2}$ | 6 | Increase | To make the value bigger |
| 7 | Fair | There is zero bias and all outcomes have an equal likelihood | 1 | Inequality | Compares values showing if one is greater, less than or equal to | 7 | Decrease | To make the value smaller |
| 8 | Random | Something happens by chance and is unable to predict | 2 3 | $>$ $<$ | Greater than Less than | 8 | Invest | Use money with the goal of it increasing in value over time |
| 9 | Mutually exclusive | Events that do not occur at the same time | 4 | $\geq$ | Greater than or equal to | 9 | Profit | The income take away any expenses or costs |
| 10 | Set | A collection of things | 5 | $\leq$ | Less than or equal to | 10 | Equivalent | Of equal value |

