## **Topic: Basic Percentages**

| Topic/Skill                        | Definition/Tips   | Example   |
|------------------------------------|---|---|
| 1. Percentage                      | Number of parts per 100.  | $31\%$ means $\frac{31}{100}$   |
| 2. Finding<br>10%                  | To find <b>10%</b> , <b>divide by 10</b>  | 10% of $\pounds 36 = 36 \div 10 = \pounds 3.60$   |
| 3. Finding 1%                      | To find <b>1%, divide by 100</b>  | 1% of $\pounds 8 = 8 \div 100 = \pounds 0.08$   |
| 4. Percentage<br>Change            | Difference<br>Original× 100%  | A games console is bought for £200<br>and sold for £250.<br>% change = $\frac{50}{200} \times 100 = 25\%$ |
| 5. Fractions to Decimals           | <b>Divide the numerator by the</b><br><b>denominator</b> using the bus stop method.   | $\frac{3}{8} = 3 \div 8 = 0.375$  |
| 6. Decimals to<br>Fractions        | Write as a fraction over 10, 100 or 1000 and simplify.  | $0.36 = \frac{36}{100} = \frac{9}{25}$  |
| 7. Percentages to Decimals         | Divide by 100   | $8\% = 8 \div 100 = 0.08$   |
| 8. Decimals to<br>Percentages      | Multiply by 100   | $0.4 = 0.4 \times 100\% = 40\%$   |
| 9. Fractions to<br>Percentages     | Percentage is just a fraction out of 100.<br><b>Make the denominator 100 using</b><br><b>equivalent fractions</b> .<br>When the denominator doesn't go in to<br>100, use a calculator and <b>multiply the</b><br><b>fraction by 100</b> . | $\frac{3}{25} = \frac{12}{100} = 12\%$ $\frac{9}{17} \times 100 = 52.9\%$                                 |
| 10.<br>Percentages to<br>Fractions | Percentage is just a fraction out of 100.<br>Write the percentage over 100 and simplify.  | $14\% = \frac{14}{100} = \frac{7}{50}$  |