Topic: Basic Percentages

| Topic/Skill | Definition/Tips | Example |
| :---: | :---: | :---: |
| 1. Percentage | Number of parts per 100. | $31 \% \text { means } \frac{31}{100}$ |
| $\begin{aligned} & \text { 2. Finding } \\ & 10 \% \end{aligned}$ | To find $\mathbf{1 0 \%}$, divide by $\mathbf{1 0}$ | $10 \%$ of $£ 36=36 \div 10=£ 3.60$ |
| 3. Finding 1\% | To find 1\%, divide by 100 | $1 \%$ of $£ 8=8 \div 100=£ 0.08$ |
| 4. Percentage Change | $\frac{\text { Difference }}{\text { Original }} \times 100 \%$ | A games console is bought for $£ 200$ and sold for $£ 250$. $\% \text { change }=\frac{50}{200} \times 100=25 \%$ |
| 5. Fractions to Decimals | Divide the numerator by the denominator using the bus stop method. | $\frac{3}{8}=3 \div 8=0.375$ |
| 6. Decimals to 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 Percentages | Multiply by 100 | $0.4=0.4 \times 100 \%=40 \%$ |
| 9. Fractions to Percentages | Percentage is just a fraction out of 100 . Make the denominator 100 using equivalent fractions. <br> When the denominator doesn't go in to 100, use a calculator and multiply the fraction by 100 . | $\begin{aligned} & \frac{3}{25}=\frac{12}{100}=12 \% \\ & \frac{9}{17} \times 100=52.9 \% \end{aligned}$ |
| 10. Percentages to Fractions | Percentage is just a fraction out of 100 . Write the percentage over 100 and simplify. | $14 \%=\frac{14}{100}=\frac{7}{50}$ |

