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| Objectives – Set 1 | | |
| By the end of these units of work, you will have learned how to…. | | |
| * Simplify and compare ratios | * Systematically list the outcomes for combined events | * Name 3D shapes and draw their nets |
| * Divide a quantity in a given ratio | * Use a tree diagram to list outcomes and calculate probabilities | * Draw plans and elevations and isometric diagrams |
| * Use the unitary method to solve direct proportion problems | * Identify mutually exclusive events and calculate their probabilities | * Calculate the surface area of a prism |
| * Solve ratio and proportion problems | * Estimate probabilities using experiments and compare the results to theoretical models | * Calculate the volume of a prism |
| * Compare proportions | * Use random numbers to simulate real world data |  |
| * Describe quantities in direct proportion using an equation or graph | * Use Venn diagrams to calculate probabilities |  |

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|  | These are the homework clip numbers that are appropriate for this half term. | Set 1 |
| Ratio and Proportion | Probability | 3D Shapes |
| 328 – Compare quantities using ratio  329 – Simplify ratios  332 – Share in a given ratio 1  339 - Direct proportion 1  340 - Direct proportion 2 | 350 – Express a probability in numbers  351 – Probability of single events (1)  353 - Probability of an event not happening  355 - Expectation  356 – Experimental probability and relative frequency  372 – Displaying sets in Venn diagrams  354 – Mutually exclusive events  361 – Independent events and tree diagrams 1  358 – Probability of more than one event 1  359 – Probability of more than one event 2  670 – Systematic listing | 584 – Surface area of cuboids  567 – Counting cubes  568 – Cuboids 1  570 - Prisms (1)  571 - Prisms (2) |

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| Objectives – Set 2 and 3 | | |
| By the end of these units of work, you will have learned how to…. | | |
| * Simplify and use ratios | * Use diagrams and tables to record mutually exclusive outcomes | * Recognise and name 3D solids and recognise their nets |
| * Solve problems involving direct proportion | * Find probabilities based on equally likely outcomes | * Use isometric paper and draw plans and elevations of 3D shapes |
| * Calculate a percentage of an amount | * Calculate the probability that an event does not occur from the probability that it does occur | * Calculate the surface area and volume of cuboids |
| * Calculate a percentage increase or decrease | * Estimate probabilities by collecting data from an experiment | * Calculate the volume of prisms |
| * Use fractions, decimals and percentages to compare simple proportions and solve problems | * Compare experimental probabilities with theoretical probabilities |  |
|  | * Use the language of sets and use sets to calculate probabilities |  |

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|  | These are the homework clip numbers that are appropriate for this half term. | Set 2 and 3 |
| Ratio and Proportion | Probability | 3D Shapes |
| 328 – Compare quantities using ratio  329 – Simplify ratios  332 – Share in a given ratio 1  339 - Direct proportion 1  340 - Direct proportion 2  88 - Percentage increase or decrease (non-calc)  90 - Percentage increase or decrease | 349 – Express a probability in words  350 – Express a probability in numbers  351 – Probability of single events (1)  353 - Probability of an event not happening  355 - Expectation  356 – Experimental probability and relative frequency  372 – Displaying sets in Venn diagrams | 584 – Surface area of cuboids  567 – Counting cubes  568 – Cuboids 1  570 - Prisms (1)  571 - Prisms (2) |

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| Objectives – Set 4 | | |
| By the end of these units of work, you will have learned how to…. | | |
| * Simplify ratios | * Understand and use the probability scale from 0 to 1 | * Recognise and name 3D shapes |
| * Divide amounts into ratios | * Use vocabulary to describe the likelihood of events | * Use isometric drawings to visualise 3D shapes |
| * Express one amount as a proportion of a whole | * Find probabilities based on equally likely outcomes | * Use nets of 3D shapes |
| * Recognise and use direct proportion | * Use experiments to estimate probabilities | * Find the surface area of cubes and cuboids |
| * Compare proportions of amounts using fractions and percentages | * Use Venn diagrams to find probabilities | * Find the volume of a 3D shape by counting cubes |
| * Solve problems involving money using mental methods, written methods or using a calculator |  |  |

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|  | These are the homework clip numbers that are appropriate for this half term. | Set 4 |
| Ratio and Proportion | Probability | 3D Shapes |
| 328 – Compare quantities using ratio  329 – Simplify ratios  332 – Share in a given ratio 1  77 – Fractions of an amount  84 – Find percentages of amounts (common non-calc)  85 - Find percentages of amounts (using 10 non calc) | 349 – Express a probability in words  350 – Express a probability in numbers  351 – Probability of single events (1)  356 – Experimental probability and relative frequency  372 – Displaying sets in Venn diagrams | 584 – Surface area of cuboids  567 – Counting cubes  568 – Cuboids 1 |