## Unit 13 Probability:

| Objective | Sparx Task |  |
| :--- | :--- | :--- |
| Use a probability scale (distinguish between <br> impossible, certain, likely, unlikely and even chance) | U803 |  |
| Find probabilities from single theoretical events <br> including dice, coins, spinners etc. | U408 U510 |  |
| Work out probabilities from frequency tables, <br> frequency tress and two way tables. | U280 |  |
| Understand mutually exclusive events and that <br> probabilities should always sum to 1. | U683 |  |
| Be able to compare experimental and theoretical <br> probabilities and make inferences | U166 |  |
| Define experimental probability and understand <br> relative frequency and expected outcomes. | U673 |  |
| List outcomes systematically for single and combined <br> events (sample spaces) | U104 |  |
| Find probabilities from combined events and <br> understand the importance of AND and OR in <br> context. | U5arams for two dependant/independent | U558 U729 |

## REVISION Unit 11 Ratio and Proportion:

| Objective | Sparx Task |  |
| :--- | :--- | :--- |
| Write a ratio to describe a situation and cancel into <br> it's lowest form. | U687 |  |
| Understand and use the relationship between ratios <br> and fractions | U176 U753 |  |
| Split an amount into a given ratio. Explore this <br> relationship | U577 |  |
| Solve a mixture of ratios problems (be able to use <br> ratio tables) | U921 |  |
| Understand proportional amounts and links to ratio | U865 |  |
| Solve worded problems involving different types of <br> proportion | U721 |  |
| Scale up recipes, convert currencies | U610 |  |
| Use the unitary method/ratio tables as ways of <br> solving proportion/best buys problems | U640 |  |


| *Write ratios in 1:n and n:1 form |  |  |
| :--- | :--- | :--- |
| * Understand the link between ratios and equations |  |  |
| *Use given amount in ratio questions 3 different ways |  |  |
| *Link proportion to graphs |  |  |
| *Start to explore the direct proportion relationship of <br> $y=k x$ |  |  |

*Additional objectives

## Unit 14 Multiplicative reasoning:

| Objective | Sparx Task |  |
| :--- | :--- | :--- |
| Recall speed formulae and use to find variables (or <br> proportional reasoning) | U151 |  |
| Interpret and understand distance/time graphs | U256 |  |
| Recall and use formulae for density. Link to volumes <br> work. | U910 |  |
| Recall and use formulae for pressure | U527 |  |
| Convert between different compound units. | U515 |  |
| Substitute into the various kinematics formulae (do <br> not need to recall these) |  |  |
| Use percentage as an operator (profit, loss, repeat <br> percentage change, original amounts) |  |  |
| Use compound interest | U321 |  |
| Use a variety of measures within proportion problems <br> (e.g. currency, rates of pay) | U72 |  |
| Understand types of proportion (direct/inverse) and <br> start to interpret growth/decay problems | U357 |  |

