## Year 10 Objective List - Higher <br> HT2-2022-23

## Fractions, Percentages, Ratio \& Proportion

| Objective | Sparx Task |  |
| :--- | :--- | :--- |
| 1.Perform all operations with fractions, including <br> mixed numbers | U704 U646 <br> U746 U736 <br> U793 U475 |  |
|  | U224 U544 <br> U538 |  |
| 2.Convert a recurring decimal to a fraction | U689 |  |
| 3.Find reciprocal and convert between FDP | U888 |  |
| 4.Find a percentage increase/decrease and <br> understand how to use a 'multiplier' | U671 |  |
| 5.Find a percentage or an original amount by using a <br> multiplier | U286 |  |
| 6.Use simple and compound interest | U533 U332 |  |
| 7.Use percentages in real life situations, including <br> percentages over 100 |  |  |
| 8.Simplify and give equivalent ratios. Write as 1:n or <br> n:1. Ratios as fractions |  |  |
| 9.Use and ratio to split a quantity or work out other <br> amounts |  |  |
| 10.Convert between ratios and linear functions | U676 |  |
| 11.Use proportion within tables/ best buys/ currency <br> conversion | U610 |  |
| 12. Use direct and inverse proportion to solve <br> problems | U407 U721 |  |
| 13. Understand and use fractions as multiplicative <br> inverses | U138 |  |
| 14. Find reciprocals of integers, decimals and <br> fractions |  |  |
| 15. Understand that fractions can be more accurate <br> in calculations and choose to convert appropriately. |  |  |
| 16. Use ratios to compare scaled objects to real life |  |  |
| 17. Use proportion to scale up/down recipes |  |  |
|  |  |  |

## Probability

| Objective | Sparx Task |  |
| :--- | :--- | :--- |
| 1.Find single event probabilities including <br> compliments and probabilities of events not <br> happening. | U408 U510 |  |
| 2.List all outcomes of single and combined events <br> systematically. | U104 |  |
| 3.Understand experimental and theoretical <br> probability. | U580 |  |
| 4.Find relative frequency and expected out comes <br> from experimental data. | U166 |  |
| 5.Understand independent and mutually exclusive <br> events. | U683 |  |
| 6.Use tree diagrams to find probabilities of <br> independent events | U558 |  |
| 7.Use tree diagrams for conditional events | U729 |  |
| 8.Use two way tables to find probabilities, including <br> conditional. | U246 |  |
| 9.Use a Venn diagram to represent real life situations. | U476 |  |
| 10.Use a Venn diagram to find conditional <br> probabilities. | U748 |  |
| 11.Use intersection and union notation. | U296 |  |
| 12.Compare experimental/ theoretical probabilities <br> and make inferences. |  |  |

