High Performance Learning **Subject Mathematics** Learning Outcomes Focus 1 2 3 4 5 Introduction lessons and baseline assessments. Baseline Assessments Prime Numbers and Prime Factorisation Product of prime factores using Factor tree, Finding LCM, HCF using Venn diagram/factor tree LCM, HCF reverse problems, worded problems HCF and LCM Number Multiplying and dividing by powers of 10

Estimation and rounding

Fractions: Addition and Subtraction

Add and subtract like/unlike fractions, mixed/ improper fractions including worded problems.

Fractions: Multiplication and Division

Ectivity, fict reverse problems, worded problems

To identify the correct place value, to multiply, divide using powers of 10, multiply and divide by 0.1 and 0.01 and to use inverse and related calculations.

Rounding to 1/2/3 dp, 1/2/3 sf, effects of rounding on estimation

Add and subtract like/unlike fractions, mixed/ improper fractions including worded problems.

Multiply and divide like/unlike fractions, mixed/ improper fractions including worded problems. Ratio and Proportion 8 9 10 11 Writing ratio's as n: 1/1: n - comparing ratio's by using this method, Writing ratio as fractions and equations, Ratio Combining ratio's a:b and b:c, find the ratio a:b:c, worded problems Ratio Ratio and Proportion Length in Similar Shapes Recognise similar shapes; compare lengths (lengths of lines and lengths of sides of 2D shapes); calculate the scale factor of similar shapes, find missing sides of similar shapes. Pie Charts Draw pie charts given a frequency table and vice versa; read and interpret Pie chart using key information. 12 2D Pythagoras'
13 Perimeter, area and volume Area of Circles To state Pythagoras' Theorem and apply this by labelling right-angled triangles. To find a missing hypotenuse length. To find a missing shorter side length. 2D Pythagoras' Theorem Calculate the area of a full circle when given the radius/diameter; calculate the area of semi or quarter circles, calculate the radius or diameter given the area; area of a shaded region by finding multiple areas. 14 Circumference of Circles Calculate the circumference of a circle; worded problems on circumference of a circle; work backwards to find the radius/diameter when given the circumference of a circle; calculate the circumference of semi or quarter circles.