

MATHEMATICS

Year 7 Curriculum

road map

AUTUMN TERM

SEQUENCES, PLACE VALUE

STUDENTS WILL RECOGNISE, DESCRIBE AND CONTINUE SEQUENCES, LINKING THIS TO TABULAR AND GRAPHICAL REPRESENTATIONS. STUDENTS WILL COMPARE, ORDER AND ROUND NUMBERS, BUILDING ON THEIR UNDERSTANDING OF INTEGERS & DECIMALS.

CHALLENGE: INVESTIGATING POWERS

HT1

AUTUMN TERM

DIRECTED NUMBER, ALGEBRAIC NOTATION

STUDENTS WILL BUILD THEIR UNDERSTANDING OF NEGATIVE NUMBERS, PERFORMING CALCULATIONS THAT CROSS ZERO. STUDENTS WILL DEVELOP THEIR KNOWLEDGE OF ALGEBRA, WORKING WITH FUNCTION MACHINES AND USING SUBSTITUTION

CHALLENGE: EVALUATE ALGEBRAIC EXPRESSIONS WITH DIRECTED NUMBER

HT2

SPRING TERM

EQUALITY & EQUIVALENCE, FDP EQUIVALENCE

STUDENTS WILL BUILD ON THEIR UNDERSTANDING OF EQUALITY, TRANSFERRING THIS INTO ALGEBRAIC FACTS, SO THEY ARE ABLE TO COLLECT LIKE TERMS AND SOLVE EQUATIONS. STUDENTS WILL WORK FLUENTLY BETWEEN FRACTIONS, DECIMALS AND PERCENTAGES.

CHALLENGE: EXPLORE FDP ABOVE ONE WHOLE

HT3

SPRING TERM

ADDITION, SUBTRACTION, MULTIPLICATION & DIVISION

STUDENTS WILL SOLVE PROBLEMS USING THE FOUR KEY MATHEMATICAL OPERATIONS, USING MENTAL AND MORE FORMAL METHODS TO WORK WITH DECIMALS. THESE SKILLS WILL BE APPLIED TO A VARIETY OF TOPIC AREAS.

CHALLENGE: EXPLORE MULTIPLICATION/DIVISION WITH ALGEBRA

HT4

SUMMER TERM

FRACTIONS & PERCENTAGES OF AMOUNTS, ADDING & SUBTRACTING FRACTIONS, GEOMETRIC NOTATION

STUDENTS WILL FIND FRACTIONS AND PERCENTAGES OF AMOUNTS. STUDENTS WILL REPRESENT FRACTIONS IN A VARIETY OF FORMS ALLOWING THEM TO ADD & SUBTRACT FRACTIONS, IMPROPER FRACTIONS AND MIXED NUMBERS. STUDENTS WILL DRAW & MEASURE ANGLES, USE LABELLING CONVENTIONS AND RECOGNISE POLYGONS

CHALLENGE: ADD & SUBTRACT ALGEBRAIC FRACTIONS

HT5

SUMMER TERM

DEVELOPING GEOMETRIC REASONING

STUDENTS WILL BUILD ON THEIR GEOMETRIC KNOWLEDGE, UNDERSTANDING AND APPLYING ANGLE RULES. STUDENTS WILL SOLVE COMPLEX PROBLEMS INTERLINKING THEIR KNOWLEDGE OF SHAPES.

CHALLENGE: USE KNOWN FACTS TO OBTAIN SIMPLE GEOMETRIC PROOF

HT6