

## **S2 Distance Scheme of Learning**

The lessons from Oak National Academy, have embedded quiz and exit tickets for students to check their understanding.

### **Data and Analysis**

[Find the mean, median, mode and range from a list of numbers](#)

[Stem and leaf diagrams](#)

[Pie charts \(interpreting\)](#)

[Probability as a fraction](#)

[Scatter Graphs](#)

### **Number problems/Number Facts & Order of operation**

[BODMAS](#)

[Factors \(Finding factor pairs\)](#)

[Multiples \(LCM\)](#)

[Primes](#)

[LCM & HCF](#)

### **Negative Numbers**

[Adding negative numbers](#)

[Subtracting negative numbers](#)

[Multiplying/Dividing](#)

## **Decimals**

[Add/Subtract decimals](#)

[Multiply/Divide by 10,100,1000](#)

[Multiply by multiples of 10,100,1000](#)

[Divide by multiples of 10,100,1000 \(Youtube video\)](#)

[Multiply a decimal by a decimal](#)

[Divide a decimal by a decimal](#)

[Rounding decimals\\_part 1](#)

[Round decimals\\_part 2](#)

[Rounding to a particular significant figure](#)

## **Fractions**

[Equivalent Fractions](#)

[Fractions of Quantity](#)

[Change between improper/mixed fractions\\_part 1](#)

[Change between improper/mixed fractions\\_part 2](#)

[Add/Subtract Fraction same denominator](#)

[Add/Subtract Fractions different denominator](#)

[Adding mixed fractions](#)

[Subtracting mixed fractions](#)

[Multiple a fraction by another fraction](#)

[Divide a fraction by a fraction](#)

## **Percentages**

[Percentages on a number line](#)

[Converting to decimals](#)

[Converting from fractions to percentages](#)

[Percentages of amount](#)

[Percentages of amount \(Part 2\)](#)

[Decimal Multipliers](#)

[Increase by a percentage](#)

[Decrease by a percentage](#)

## **Area, Perimeter & Volume**

[Converting units-length](#)

[Perimeter \(revision\)](#)

[Area of square/rectangle \(revision\)](#)

[Area of a triangle](#)

[Composite Areas](#)

[Volume of cube/cuboid](#)

[Unit conversion \(grams & kilograms\)](#)

## **Extension**

[Area of parallelograms](#)

[Parts of a circle](#)

[Circumference of a circle](#)

[Area of a circle](#)

## Whole Number

Adding two 3-digit numbers (regrouping in multiple columns)

Subtracting 3-digit numbers (regrouping tens to ones)

Subtracting 3-digit numbers (regrouping hundreds to tens)

Subtracting 3-digit numbers (regrouping in multiple columns)

Solving addition and subtraction word problems

Solving word problems with unknown values

Understanding multiplication can be completed in any order

Using bar models to represent known times tables

Understanding that multiplication and division are inverse operations

Using the inverse operation to find missing numbers

Recalling multiplication and division facts

Using factors and products to solve division problems

Solving correspondence problems

Using doubles to multiply

Using ten times greater for known times tables

Using bar models to represent word problems

Consolidating multiplication and division knowledge (Part 2)

## **Algebra**

[Algebraic expressions](#)

[Collecting like terms](#)

[Distributivity and expanding](#)

[Factorising expressions](#)

[Forming and exploring equations](#)

[Exploring equality](#)

[Inequalities](#)

[Further inequalities](#)

[Perimeter expressions](#)

[Perimeter inequalities](#)

[Counting strategies](#)

[Growing tree patterns](#)

## **Time**

[DST calculations](#)

[Covert hours and minutes into decimal time \(Youtube video\)](#)

## **Linear patters**

[Find the term to term rule](#)

[More complicated patterns](#)

## **Ratio & proportion**

[Simplifying ratios](#)

[Divide a quantity in a given ratio](#)

[Direct proportion](#)

## **Extension**

### Indirect proportion

### **Angles/Scale Drawing**

#### Recognise right angles

#### Recognise acute and obtuse angles

#### Angles in a triangle

#### Calculating angles within a shape

#### Alternate angles

#### Finding unknown angles vertically opposite & more

#### Scale Factor & enlarging objects

#### Constructing Triangles

## **Extension**

### Find missing angles in quadrilaterals

### Bearings & compass points

### Bearings on a coordinate grid

### Bearings using angle facts

## **Wages & Salaries**

### Hourly rate/overtime (Youtube video)

### Exchange rate

### Savings



## Extension Topics

### Scientific Notation

Changing small & large numbers into scientific notation

### Pythagoras

Square & cube numbers

Square & cube roots

Find the hypotenuse/short side

### Straightline

Find the gradient

Intro into  $y=mx + c$