S1 Distance Learning Planner (last update 15/12/20)

The lessons included from Oak National Academy are Self Contained Exercise, with built in quizzes etc.

Whole Number

Addition and Subtraction

- Deriving Number Facts
- Addition and Subtraction Facts
- Choosing the correct addition strategy
- Choosing the correct subtraction strategy
- Add using the column method
- Add using the column method with regrouping
- Subtracting using the column method
- Subtracting using the column method with regrouping
- Mixed addition and subtraction
- Representing word problems part 1
- Representing Comparison word problems part 2
- Representing word problems part 3

Multiplication and Division

- Pictorial Representation of Multiplication and Division
- Representing Problems with bar models
- Representing Problems with bar models part 2
- Multiplying a two digit number by a single digit

- Multiplying 3 digits by a single digit
- Multiplying 3 digits by a single digit part 2

Coordinates

- Describing coordinate positions on a grid
- Translating simple shapes
- Reflecting simple shapes
- Solving practical coordinate problems (Part 1)
- Solving practical coordinate problems (Part 2)

Decimals

- Add and Subtract Decimals
- Multiplication of two decimals
- Division of a decimal number by an integer
- Decimal divided by decimal

Algebra (Simplifying and Evaluating)

- Writing Expressions
- Collecting Like Terms
- Expanding Single Brackets
- Factorising

Fractions (simplifying etc.)

- Equivalent Fractions
- Simplifying Fractions
- Comparing Fractions
- Improper Fractions Part 1
- Improper Fractions Part 2
- Fractions of Quantity

Extension

- Add/Subtract Fraction same denominator
- Add/Subtract Fractions different denominator

Ratio

- Simplifying ratios
- Divide a quantity in a given ratio
- Find a part given a part
- Find the total or difference given a part
- Equivalent ratios
- Direct proportion
- Ratio Shares_part1
- Ratio Shares_part2

Negative Number

- Adding directed numbers
- Subtract directed numbers
- Multiply and divide directed numbers
- Order of operations

Angles

- Understanding angles
- Recognise right angles
- Recognise acute and obtuse angles

- Angles within a shape
- Compare and order acute, obtuse and reflex angles
- Reading angles on a protractor (Part 1)
- Reading angles on a protractor (Part 2)
- Reading angles on a protractor Part 3
- Draw angles with a protractor 1
- Draw angles with a protractor (Part 2)
- Calculating angles on a line or around a point
- Calculating angles within a shape 1
- Calculating angles within a shape (Part 2)
- Calculating angles within a shape 3
- Revision and Angle fluency facts

Algebra: Solving Equations

- Solving one-step equations
- Solving two-step equations

Extension

- Solving equations with brackets
- Solving equations with unknown on both sides

Time

- Understanding that clocks have more than one scale
- Reading analogue time to the nearest minute
- Telling the time to am and pm

- Telling 'minutes past' on a digital clock
- Reading and ordering time (presented in different ways)
- Exploring units of measured time
- Measuring time in seconds
- Calculating and comparing intervals of time
- Applying knowledge of time to solve problems
- Further applying knowledge of time to solve problems

Symmetry

- To identify lines of symmetry in 2-D shapes
- To identify lines of symmetry in a pattern
- To investigate a problem using symmetry (Part 1)
- To investigate a problem using symmetry (Part 2)
- Translation
- Rotation
- Reflection
- Mixed Transformations
- Combining Translations and Reflections

2D Area

- Properties of 2D shapes-parallel lines
- Perimeter
- Perimeter of composite shapes
- Area Description

- Area of square/rectangle
- Area of triangles
- Composite Areas

3D/Volume

- Properties of 3D shapes
- Recognise & draw nets of cubes
- Recognise & draw nets of prisms
- Simple volume
- Volume of cube/cuboid
- Reading Liquid Volumes

Data and Analysis (Chart types)

- Pictographs & Bar graphs
- Composite bar graphs
- Drawing bar graphs
- Simple pie charts
  Probability-language
- Probability as a fraction

Extension

- More complicated pie charts
- Introduction to averages (mean)

History of Maths

Research famous mathematicians e.g Andrew Celsius, Pythagoras…the list goes on. Create a presentation of your results.

You may which to research;

Q: Who invented the thermometer?

Q: Who invented pie charts, bar graphs? What are they used for?

Q: Who is Pythagoras? What was his invention?

Linear Number Patterns

- Linear number patterns

Scale Drawings and Bearings

- Bearings & compass points
- Scale Factor & enlarging objects
- Constructing Triangles

Fractions/Decimals/Percentages

- Understanding percentages
- Percentages as a fraction & decimal
- Converting from fractions to percentages
- Finding a percentage of a quantity

Number Theory: Primes, HCF, LCM, BODMAS, Rounding

- Rounding to 10,100,1000 & nearest whole number
- Rounding to 10,100,1000, nearest whole number & D.P
- Rounding to 2 D.P
- BODMAS
- LCM & HCF
- Prime Numbers

Measurement

- Converting between metric units of length
- Converting measurement_length, mass & capacity