Year 2 End of Unit Milestones:

Autumn Term – TEXTBOOK 2A

Chapter 1 Number and Place Value: Numbers to 100

By the end of this unit, children will be able to:

- count numbers up to 100 using concrete objects: counting up by ones and tens
- understand each digit in a number has its own value
- compare numbers using place-value knowledge gained from previous lessons
- use the number bond strategy to deepen understanding of place value
- count in ones and tens
- boundary cross using tens and ones
- recognise and describe patterns with more complex numbers, in particular 3 and 5.

Autumn Term – TEXTBOOK 2A

Calculations

Chapter 2: Addition and Subtraction

By the end of this unit, children will be able to:

- add a 1-digit number to a 2-digit number without regrouping the ones
- add tens by recognising its relationship to adding ones
- add 2-digit numbers where one is a multiple of 10
- add with tens and ones where the ones are both more than zero
- add 1-digit numbers to a 2-digit number resulting in renaming of ones
- add two 2-digit numbers where renaming is expected
- subtract ones from a 2-digit number
- subtract 2-digit multiples of 10 from 2-digit multiples of 10
- subtract tens from a 2-digit number with the ones being more than zero
- subtract a 2-digit number by another 2-digit number
- subtract a 2-digit number by a 1-digit number with renaming
- subtract a 2-digit number by another 2-digit number where renaming has to occur
- add three 1-digit numbers.

Chapter 3: Multiplication of 2, 5 and 10

By the end of this unit, children will be able to:

- know that multiplication is the same as repeated addition with equal groups
- recall the 2 times table
- use concrete materials and pictorial representations to multiply by 2
- recall the 5 times table and to highlight multiplication visually as equal groups
- identify numbers found in the 10 times table
- recall the 10 times table in more detail by looking at patterns and relationships
- understand links between the 2, 5 and 10 times tables.
- understand commutative law
- use knowledge of the 2, 5 and 10 times tables to further investigate commutative law.

Chapter 4: Multiplication and Division of 2, 5 and 10.

By the end of this unit, children will be able to:

- understand that grouping is a way of dividing
- divide by sharing an amount
- divide by 2. The two strategies used here are splitting into groups of x and splitting into equal groups of many
- divide by 5 and identify links with multiplying by 5
- divide by 10 and identify links with multiplying by 10
- use multiplication and division skills to identify family facts in a number sentence
- understand and solve word problems which require the use of the multiplication and division skills covered in this chapter
- decide whether odd or even numbers can be divisible by 2, 5 or 10

Autumn Term – TEXTBOOK 2A

Chapter 5: Measurement: Length

By the end of this unit, children will be able to:

- measure length in metres, centimetres
- compare length for objects using ‘greater than’ and ‘less than’ symbols
- compare different lengths using centimetres as the unit of measure
- compare and measure various line lengths: both straight and curvy
- solve problems involving measurement in the context of word problems.

Autumn Term – TEXTBOOK 2A

Chapter 6 Measurement: Mass

By the end of this unit, children will be able to:

- understand that mass is measured in kilograms and by using weighing scales
- measure mass in grams and to understand that it is a smaller unit of measure than a kilogram
- measure mass accurately in grams using weighing scales
- compare the mass of two different objects accurately
- compare the mass of three objects and use the appropriate vocabulary
- solve word problems in the context of mass.

Spring Term – TEXTBOOK 2A

Chapter 8 Statistics: Picture Graphs

.By the end of this unit, children will be able to:

- read a picture graph with confidence
- read and interpret a picture graph
- read and interpret a picture graph where the value of the picture can represent more than 1
- read, interpret and create a picture graph where the value of the picture can represent more than 1.

Spring Term – TEXTBOOK 2A

Chapter 7 Measurement: Temperature

By the end of this unit, children will be able to:

- accurately read temperature in Celsius
- estimate temperature and to read thermometers to confirm the estimate.

Spring Term – TEXTBOOK 2B

Chapter 10 Measurement: Money

By the end of this unit, children will be able to:

- identify standard UK coins and notes and write their names
- count in sequences of 5 and 10; to recognise the value of notes by appearance
- count coins in sequences of their value; to recognise the value of coins by appearance
- represent amounts of money using coins and notes; to count coins and notes using their denominations
- create equal amounts of money using different coins
- exchange denominations of money for different coins
- compare different amounts of money using coins
- add money together to determine the total amount

- calculate change from £100 or less; to use the bar model approach to represent amounts of money.

Spring Term – TEXTBOOK 2B

Chapter 11 Geometry – Properties of Shapes: 2-D Shapes

By the end of this unit, children will be able to:

- identify the number of sides on basic 2-D shapes
- identify and count the vertices in regular polygons
- identify lines of symmetry in basic 2-D shapes
- construct shapes using pattern blocks that have lines of symmetry
- sort shapes based on number of sides, vertices and other factors

- recognise patterns of familiar shapes and colours of up to three objects
- describe patterns using ordinal numbers and shape names.
- move shapes on a square grid from one position to another using common language.

Spring Term – TEXTBOOK 2B

Chapter 12 Geometry – Properties of Shapes: 3-D Shapes

By the end of this unit, children will be able to:

- recognise 3-D shapes by identifying their properties
- describe 3-D shapes and classify them using faces, vertices and edges
- describe 3-D shapes based on the number of faces and the 2-D shapes of these faces; to construct nets of shapes into 3-D shapes
- group 3-D shapes by similar properties
- form 3-D structures using multiple 3-D objects
- make and recognise patterns using 3-D shapes.

Spring Term – TEXTBOOK 2B

Chapter 13 Fractions: Fractions

By the end of this unit, children will be able to:

- make equal parts from a whole using simple and complex methods
- show and recognise halves and quarters
- show and identify more than one quarter using materials and pictures
- show and identify thirds in shapes; to use the vocabulary 'numerator' and 'denominator' when referring to fractions

- identify and name fractions by looking at the number of pieces and how many are shaded in
- recognise equivalent fractions in quarters, thirds and halves
- compare and order similar fractions by looking at the size of the pieces shaded
- compare and order fractions with different denominators

- count the number of wholes and parts to form mixed numbers

- count in halves and place halves onto a number line using pictures
- count in quarters and place quarters onto a number line using pictures
- count in thirds and place thirds onto a number line using pictures.
- find fractions (half, quarter and third) of whole numbers and of quantities (length).

Summer Term – TEXTBOOK 2B

Chapter 9: More Word Problems

By the end of this unit, children will be able to:

- decide when it is appropriate to add and/or subtract when solving word problems; to improve the use of bar modelling and decision making based on visual representations.
- use the bar model method to solve word problems looking at the difference between two amounts
- solve multi-step word problems using bar modelling; to use more than one bar model in a problem to work out the answer
- use bar modelling to solve multi-step word problems involving unknown quantities.

Spring Term – TEXTBOOK 2B

Chapter 14 Measurement: Time

By the end of this unit, children will be able to:

- tell and write time to 5-minute intervals
- tell time to 5-minute intervals and to the hour
- sequence events of the day by looking at analogue clocks and pictures
- draw hands on an analogue clock to show the correct time
- find the duration of time using an analogue clock in 30- and 60-minute intervals
- find the duration of time to 5-minute intervals
- find the ending of a duration of time from different 5-minute starting points
- find the ending time in intervals of 5 minutes from delayed starts
- find the starting time from 30-minute and 1-hour interval durations
- find the start of multiple durations of time using a common end time

- compare durations of time from the least amount to the most amount of time and vice versa.

Summer Term – TEXTBOOK 2B

Chapter 15 Measurement: Volume

By the end of this unit, children will be able to:

- compare volume in different-sized containers using the terms 'greater than,' 'less than,' 'greatest' and 'least'
- compare the volume of different containers using non-standard units
- measure volume using litres and determine whether an amount is 'more than,' 'less than' or 'equal to' a litre
- measure volume using millilitres and litres; to determine how many ml there are in 1 L
- solve word problems involving bar models with litres as the standard unit.