Autumn 1   Class 3

Maths:
End of last year assessments completed to ascertain individual needs to support catch up work needed.
Y4:
 Number - Number and place value
• find 1000 more or less than a given number
• recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
• order and compare numbers beyond 1000
• identify, represent and estimate numbers using different representations

 Number – Addition and subtraction
• practise mental methods with increasingly large numbers to aid fluency
• solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

Geometry – Properties of shape
• identify lines of symmetry in 2-D shapes presented in different orientations
• complete a simple symmetric figure with respect to a specific line of symmetry

Number – Multiplication and division
• recall multiplication and division facts for multiplication tables up to 12 × 12
• recognise and use factor pairs and commutativity in mental calculations
Number – Number and place value
• count in multiples of 6 and 9

Number – Fractions
• recognise and show, using diagrams, families of common equivalent fractions
• understand the relation between non-unit fractions and multiplication and division of quantities

Geometry – Position and direction
• describe positions on a 2-D grid as coordinates in the first quadrant
• describe movements between positions as translations of a given unit to the left/right and up/down
• plot specified points and draw sides to complete a given polygon

Y5:
Number – Number and place value
• read, write, order and compare numbers to at least 1 000000 and determine the value of each digit
• count forwards or backwards in steps of powers of 10 for any given number up to 1000000
• round any number up to 1000000 to the nearest 10, 100 and 1000

Number – Addition and subtraction
• add and subtract numbers mentally with increasingly large numbers
• solve addition and subtraction multi-step problems in contexts, deciding which

operations and methods to use and why

Geometry – Properties of shapes
• identify 3-D shapes, including cubes and other cuboids, from 2-D representations

Number – Multiplication and division
• multiply and divide numbers mentally drawing upon known facts
• multiply and divide whole numbers by 10, 100 and 1000

Number – Fractions
• compare and order fractions whose denominators are all multiples of the same number
• identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
• develop their understanding of fractions as numbers, measures and operators by finding fractions of numbers and quantities *
• practise counting forwards and backwards in simple fractions *
• recognise and describe linear number sequences, including those involving fractions and find the term-to- term rule * [Domain: Number – Number and place value]

Geometry – Position and direction
• identify, describe and represent the position of a shape following a translation, using the appropriate language, and know that the shape has not changed

Y6:

Number – Number and place value
• read, write, order and compare numbers up to
10 000 000 and determine the value of each digit
• round any whole number to a required degree of accuracy
• solve number and practical problems that involve all of the above

Number – Addition and subtraction
• perform mental calculations, including with large numbers
• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
• solve problems involving addition, subtraction, multiplication and division
• use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Geometry – Properties of shapes
• recognise, describe and build simple 3-D shapes, including making nets

Number – Multiplication and division
• practise multiplication for larger numbers, using the formal written methods of short and long multiplication *
• perform mental calculations, including with large numbers
• solve problems involving addition, subtraction, multiplication and division
• use estimation to check answers to calculations

Number – Fractions
• use common factors to simplify fractions; use common multiples to express fractions in the same denomination
• compare and order fractions, including fractions > 1
• add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

Geometry – Position and direction
• describe positions on the full coordinate grid (all four quadrants)
• draw and translate simple shapes on the coordinate plane, and reflect them in the axes

English: Catch Up Unit based on the book 'Of Thee I Sing' by Barack Obama. *'In this tender, beautiful letter to his daughters, Barack Obama has written a moving tribute to thirteen ground-breaking Americans and the ideas that have shaped the nation. From the artistry of Georgia O'Keefe to the courage of Jackie Robinson, from the strength of Helen Keller to the patriotism of George Washington, Barak Obama sees the traits of these heroes within his own children, and within all of America's children.'*

<u>National curriculum skills for this unit:</u>
Spoken language:
• Listen and respond
• Ask relevant questions
• Participate in discussions, presentations, performances, role play, improvisations and debates
• Consider and evaluate different viewpoints

Reading comprehension:
• Read for a range of purposes
• Ask questions to improve understanding of a text
• Draw inferences (characters' feelings, thoughts and motives); justify with evidence
• Identify main ideas drawn from more than one paragraph and summarise
• Identify how language, structure and presentation contribute to meaning
• Retreive and record information from non-fiction
• Participate in discussions about books

Writing composition:
• Plan writing by discussing the structure, vocabulary and grammar of similar writing
• Discuss and record ideas
• Compose and rehearse sentences orally
• In non-narrative material, use simple organisational devices
• Assess the effectiveness of own and others' writing
• Propose changes to grammar and vocabulary to improve consistency, including the use of pronouns in sentences
• Proofread for spelling and punctuation errors

Science:
In this topic children learn about forces and machines. They start with the force of gravity then study friction forces, including air and water resistance, before investigating how simple machines work.

Geography:

This unit focuses on rivers. It introduces the water cycle and, as the key concept is that water flows downhill, looks at mountains, the source of many rivers. It looks at how people interact with rivers as well as their geographical features. A case study features one of the UK's major rivers, the River Thames. Cameos of some of the world's great rivers and mountain environments are included to extend children's geographical general or locational knowledge.

Art / D&T:

This unit of work links to the Geography Unit *Rivers and the Water Cycle*. The unit will focus mainly on collage objectives. The children will experiment with a range of collage techniques (tearing, overlapping, layering) cutting to create images and represent textures. The final piece will be a Mountain scene water cycle collage.

R.E:
People of God – How can following God bring freedom and justice?

By the end of this unit, pupils are expected to be able to:

- Explain connections between the story of Moses and the concepts of freedom and salvation, using theological terms.
- Make clear connections between Bible texts studied and what Christians believe about being the People of God and how they should behave.
- Explain ways in which some Christians put their beliefs into practice by trying to bring freedom to others.
- Identify ideas about freedom and justice arising from their study of Bible texts and comment on how far these are helpful or inspiring, justifying their responses.

Computing:

On-line Safety

In this unit, children learn about preventing and dealing with cyberbullying; how to use search engines efficiently; how to avoid plagiarism online; and how to be a good digital citizen. The unit ends with children applying their new knowledge to design a character to be displayed around school to promote online safety.

PE & Games:

Invasion Games: (Key Concepts)
- Use different techniques for passing, controlling, dribbling and shooting the ball in games
- Apply basic principles of team play to keep possession of the ball
- Use marking, tackling and /or interception to improve their defence.
- Play effectively as part of a team
- Know what position they are playing in and how to contribute when attacking and defending.