Year 5 Newsletter

Spring 2

Our topic/theme this half term is:

Our Universe!

In this topic, we will be exploring space, the Universe and our Solar System. We will be using our learning about the 'space race' and the developments that have happened over the years. We will use our knowledge of space to understand forces.

Our key text this half term will be 'Cosmic' by Frank Cottrell-Boyce.

Our English learning this half term:

Reading:

In Guided Reading this half term, we will be focusing on the following objectives:

- Continue to read and discuss an increasingly wide range of fiction, poetry, non-fiction and reference books.
- Identify and discuss themes and conventions in writing.
- Make comparisons within a book.
- Retrieve, record and present information from non-fiction.
- Distinguish between statements of fact and opinion.
- Participate in discussions about books that are read to him/her and those that can be read
 for himself/herself, building on his/her own and others' ideas and challenging views
 courteously and with clear reasoning.

Writing: In Year 5, we will be developing the following writing skills:

- Plan our writing of narratives by considering how authors have developed characters and settings in what the class have read, listened to and seen performed.
- Draft and write by using further organisational and presentational devices to structure text and to guide the reader e.g. headings, bullet points, underlining.
- Draft and write by selecting appropriate grammar and vocabulary.
- Evaluate and edit by ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing.
- Proof-read for spelling errors linked to spelling statements for this year group.

We will be writing stories with a moral. We will be developing the following skills:

- Use pathetic fallacy, the power of three and the technique 'show not tell' to create mood and atmosphere.
- Use punctuation and speech correctly to add dialogue into our writing.
- Use a range of popular moral tales to support our ideas.

We will be writing non-chronological reports. We will use the following skills:

- Use an appropriate layout and a range of organisational devices.
- Link sentences with generalisers and varied openers.
- Use descriptive or technical language.

In grammar, we will be revisiting different sentence types (including simple and compound sentences), exploring different tenses, learning about how to accurately use and punctuate speech and fronted adverbials.

Our Maths learning this half term:

Fractions

We will be finishing off our fractions unit with multiplying fractions and finding fractions of amounts.

Decimals

Read and write decimal numbers as fractions such as 0.71 = 71/100.

Identify and use thousandths and can explain how they relate to tenths and hundredths and their decimal equivalents.

Write equivalent fractions of a given fraction including tenths and hundredths.

Round numbers with two decimal places to the nearest whole number and to 1 decimal place.

Read, write, order and compare numbers with up to three decimal places.

Solve problems involving numbers with up to three decimal places.

Percentages

Identify the percent symbol (%) and how it relates to parts per hundred, hundredths and decimals.

Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

Throughout the term, we will also be revisiting less confident areas of our prior learning and developing our mental arithmetic skills.

Our Science and Computing learning this half term:

Science

Our unit of science this half term will be on forces, exploring the following content areas:

I can identify the effects of air resistance, water resistance and friction, which act between moving surfaces

I can recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

We will be developing the following skill areas:

- Decide what observations to make, what to measure and how long for.
- Choose most appropriate equipment and use precisely. Take repeat measurements where appropriate.
- Notice causal relationships in data and identify evidence that refutes or supports their ideas
- Use relevant scientific language and illustrations to discuss, communicate and justify ideas
- Use the scientific skill of pattern-seeking to investigate different questions relating to force.

Computing

Our unit of computing this half term is focused on programming and exploring how computers simulate processes and can control gadgets.

- I can explain why computers are sometimes used to control things.
- I can use a program to control a gadget.
- I can use a program to simulate a physical system.
- I can debug a program to fix a problem.
- I can explain the strengths and weaknesses of a physical system and of using simulation.
- I can write a program that controls a gadget.
- I know what simulation means.
- I know what a physical system is.
- I know what computer control means.
- I can explain why computers are sometimes used to simulate things.

Our Humanities learning this half term:

History:

This half-term, we are going to find out about the incredible story of space exploration and the race to the moon. It is a story of determination, tragedy and courage!

In this unit, we will explore the following areas:

- Learn about the origins of the space race and the first artificial satellite in space.
- Explore the differing ideas and beliefs of people in the past.
- Understand the key events of the space race and order these chronologically.
- Discuss the reasons why space exploration is important and how it has had an impact on our lives today.

RE:

In RE, we will be continuing to explore the question: 'What is it like to be a Christian?' We will be looking at what this is like in the UK as well as other parts of the world.

Spanish:

In Spanish this half term, we will be learning about clothing and Spanish festivities.

Our Creative Arts learning this half term:

Art:

This half-term we will be working in **mixed media to create land or city scapes** with energy and a sense of place. This half-term is about experimenting and exploring. The emphasis is on creative risk taking and discovery. Children are encouraged to explore the format and composition of their work, and explore lots of media combinations through exploratory work.

Key concepts:

- That artists use a variety of media often combining it in inventive ways, to capture the energy and spirit of land or city scapes.
- That artists often work outside (plein air) so that all their senses can be used to inform the work.
- That as artists we are able to experiment with materials, combining them to see what happens. We can feel free and safe to take creative risks, without fear of getting things "wrong".
- We can share our artistic discoveries with, and be inspired by each other.
- We can use sketchbooks to focus this exploration and we do not always need to create an "end result" – sometimes the exploratory journey is more than enough.

Music:

Practising performing skills in an ensemble and independently using chords and melodies.

Using notation/ tab, learn well known songs on the chosen instrument. Learn to play several parts to a piece of music. Introduce singing where appropriate.

Our PE and PSHE learning this half term:

PE:

Our PE units this half term are Gymnastics and Handball

Gymnastics

Perform short movement phrases, linking jumping actions together. Develop jumps on and off the apparatus and link with travel movements, with a partner to produce a routine. Land all jumps safely using apparatus and mats. Use keywords to evaluate own/others work.

Handball

Further develop ball handling skills by learning the game of handball. Learn/adapt ways of passing successfully in the game situation, understand and use attacking and defending skills adapted from netball and the importance of spacial awareness. Play small-sided and full games.

PSHE:

Our unit this half term is 'Relationships and Sex Education'

- Know and understand the appropriate scientific names for the external and internal sexual parts of the body, and be able to explain basic functions.
- Understand the main changes that happen at puberty, know some ways to manage them, and how it affects people differently.
- Have a basic understanding about body image, and have learnt some ways to support a positive body image for themselves and others.
- Understand the importance of washing regularly and of maintaining other hygiene routines during puberty.
- Understand ways they can prevent the spread of some bacterial and viral diseases.

Key Vocabulary

Key Vocabulary for this half term:

<u>Maths:</u> percent, percentage, equivalent, reduced to, cancel, integer, quantity, fraction, proper fraction, improper fraction, mixed number, decimal, rounding, tenths, hundredth, thousandth, proportion, thirds, fifths, sixths, sevenths...,for every, in every,

<u>English</u>: apostrophe, modal verb, dialogue, sentence type, command, exclamation, statement, tense, atmosphere, mood, moral, fact, opinion.

<u>Science:</u> gravity, resistance, friction, water resistance, air resistance, streamlining, Newtons, pulley, lever, gear, mass, weight, pattern seeking

<u>History:</u> launch, mission, satellite, orbit, rocket, conflict, Cold War, World War II, USSR

Names related to the 'Space Race': Churchill, Truman, Stalin, Sputnik, Vanguard TV3, Laika, Valentina Tereshkova, Yuri Gagarin, Alan Shepard, Neil Armstrong, Helen Sharman