



**Barn Croft Primary School**  
**Spring 1 2023-2024**  
**Year 5 Curriculum Newsletter**

Children are expected to read at home daily.  
Practice on Times Tables Rockstars three times weekly.

**Open Homework**  
Children can complete a piece of writing, research, art, project, comic etc. about any area of their learning this half term and bring it to school to share with their peers.  
Due Friday 2<sup>nd</sup> February 2024 (optional project)

**Maths**  
**Area and scaling**

Perimeter is the distance around the edge of a two-dimensional (2D) shape. Perimeter is measured in units of length and can be calculated by adding together the lengths of the sides of a 2D shape.  
Multiplication can be used to calculate the perimeter of a regular polygon; when the perimeter is known, side-lengths can be calculated using division.  
Area is the measurement of the surface of a flat item.  
Area is measured in square units, such as square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>).  
The area of a rectangle can be calculated using multiplication; the area of a composite rectilinear shape can be found by splitting the shape into smaller rectangles.  
A longer length can be described in terms of a shorter length using the language of 'times'; the longer length can be calculated, if the shorter length is known, using multiplication.  
A shorter length can be described in terms of a longer length using the language of fractions; the shorter length can be calculated, if the longer length is known, using division.  
Other measures can be compared using the language of 'times' and fractions, and calculated using multiplication or division.

**Calculating with decimal fractions**

Explain the effect of multiplying and dividing a number by 10, 100 and 1,000  
Explain how to multiply and divide a number by 10, 100 and 1,000  
Pupils use their knowledge of multiplication and division by 10/100/1,000 to convert between units of measure  
Explain how to use known multiplication facts and unitising to multiply decimal fractions by whole numbers (tenths and hundredths)  
Explain the relationship between multiplying by 0.1 dividing by 10 & 100  
Explain how to use multiplying by 10 or 100 to multiply one-digit numbers by decimal fractions  
Explain how to use multiplying by 10 or 100 to divide decimal fractions by one-digit numbers

**Factors: multiples and primes**

Pupils explain volume, describe units used to measure volume, and calculate volume of a cuboid  
Pupils explain what a cube is  
Calculate volume to solve problems and calculate volume of compound shapes  
Explain commutative and distributive laws when multiplying three or more numbers  
Explain the reasons for changing two-factor multiplication calculations to three-factor multiplication  
Explain factor and arrays  
Explain square numbers using factors  
Identify a prime number or a composite number  
Common factors and prime factors of a number  
Use knowledge of properties of number to solve problems in a range of contexts  
Explain how to use the factor pairs of '100' to solve calculations efficiently

**This Term's Whole Class Text: Cosmic: It's one giant leap for all boy-kind**

"Cosmic" by Frank Cottrell Boyce is a captivating adventure novel that revolves around the life of Liam Digby, a 12-year-old boy who appears much older than his age. Liam's extraordinary height and mature appearance lead to a case of mistaken identity, catapulting him into an unexpected journey.

Liam, often mistaken for an adult, seizes the opportunity to participate in a unique contest for the first child in space. The story unfolds as Liam finds himself aboard a spaceship with a group of other children, each with their quirks and talents. Together, they navigate the challenges of space travel and form unlikely bonds while discovering the wonders and dangers of the cosmos.

As the young crew faces unexpected obstacles and humorous mishaps, "Cosmic" explores themes of friendship, courage, and the boundless possibilities that await in the vastness of outer space. The narrative is filled with humor, heart, and a sense of wonder, making it a delightful and thought-provoking read for readers of all ages.

**Science**  
**Forces and space: Earth and space**

Describe the geocentric and heliocentric models.

Name and describe the shape of celestial bodies.

Describe the orbits of celestial bodies in the Solar System and name the force that keeps them in their orbits.

Describe the orbit of the Moon around the Earth and its phases.

Explain how day and night occur.

Explain how the seasons occur.

Explain how a sundial works.

List some of the uses of satellites and explain why space junk poses a problem to them.

**English**

Figurative language  
Relative pronouns  
Subordinating conjunctions  
Relative clauses  
Sci-fi writing style

**Reading**

Forming impressions of people and places  
Retrieval  
Word meaning  
Character impact

**Religious Education**  
**Sikhism**

Know the names and symbolism of the 5 Ks.  
Know how Guru Gobind Singh introduced the khalsa.  
Know the significance of the Amrit ceremony to a Sikh.  
Know the values that underpin Sikh life.

**PSHE/RHE**

**Looking Out for Others and Adults' & Children's Views**

Recognise why we should take action when someone is being unkind.  
Describe caring and considerate behaviour, including the importance of looking out for others.  
Demonstrate why it is important to behave in an appropriate and responsible way.  
Identify how making some choices can impact others' lives in a negative way.

**Computing**  
**Spreadsheets**

In this unit, we will focus on:  
Understanding spreadsheets  
Formula Wizard and Formatting Cells  
Creating graphs  
Conversions of measurements  
Using spreadsheets to model a situation  
Formulae including Advanced Mode

**Humanities: History**  
**Medieval Monarchs**

Why was there a succession crisis in 1066?  
Who was responsible for the death of Thomas Becket?  
Which king was worse, John or Richard?  
What makes a great medieval monarch?  
How did power change during the medieval period?

**Creative Design: Art and Design**  
**Making Monotypes**

In this pathway children explore the process of making monotypes. The pathway starts with an introduction to monotypes, and then children explore the work of an artist who uses monotypes to build sculptures and installations.  
Pupils develop their mark making skills through a simple warm up exercise, before focusing upon a project which gives them the opportunity to use the monotype process (combined with painting and collage) to make a "zine", inspired by a piece of poetry. The pathway provides two ways of making monotypes according to the space and time you have available.

**French**

French adjectives of colour, size and shape – Children will learn about the differences in word order between English and French.  
A circle of life in French - This lesson will help children learn how to use a bilingual dictionary.  
French food - This lesson has two aspects - to help children practise a typical conversation in French by ordering food in a café, and to teach them to give their opinions using j'aime and je n'aime pas

**PE**  
**Athletics**

In this unit, pupils are set challenges for distance and time that involve using different styles and combinations of running, jumping and throwing. As in all athletic activities, pupils think about how to achieve their greatest possible speed, height, distance or accuracy and learn how to persevere to achieve their personal best. They learn how to improve by identifying areas of strength as well as areas to develop. Pupils are also given opportunities to lead when officiating as well as observe and provide feedback to others.  
Pupils learn the following athletic activities: long distance running, sprinting, relay, triple jump, shot put and javelin.