Barn Croft Primary School Autumn 2 2023-2024

## Year 5 Curriculum Newsletter

## Children are expected to read at home daily. <br> Practice on Times Tables Rockstars three

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 Monday $11^{\text {th }}$ December 2023 (optional project)
times weekly.

Maths - Money

- Units of money and how these interact. Calculating change and using the four operations with money


## Negative numbers

- Positive and negative numbers can be used to represent change.
- Our number system includes numbers that are less than zero; these are negative numbers. Numbers greater than zero are positive numbers.
- The negative/minus symbol $(-)$ is placed before a numeral to indicate that the value is a negative number.
- Negative numbers can be shown on horizontal scales; numbers to the left of zero are negative (less than zero) and numbers to the right of zero are positive (greater than zero). The larger the value of the numeral after the negative/minus symbol, the further the number is from zero.
- Knowledge of the positions of positive and negative numbers in the number system can be used to calculate intervals across zero.
- Negative numbers are used in coordinate and graphing contexts. Short division and multiplication
- The distributive law can be applied to multiply any two-digit number by a single-digit number, by partitioning the two-digit number into tens and ones, multiplying the parts by the single-digit number, then adding the partial products.
- Any two-digit number can be multiplied by a single-digit number using an algorithm called 'short multiplication'; the digits of the factors must be aligned correctly; the algorithm is applied working from the least significant digit (on the right) to the most significant digit (on the left); if the product in any column is ten or greater, we must
'regroup'.
- The distributive law can be applied to multiply any three-digit number by a single-digit The distributive law can be applied to multiply any three-digit number by a single-digit
number, by partitioning the three-digit number into hundreds, tens and ones, multiplying the parts by the single-digit number, then adding the partial products.
- Any three-digit number can be multiplied by a single-digit number using the short multiplication algorithm.
- Any two-digit number can be divided by a single-digit number, by partitioning the two digit number into tens and ones, dividing the parts by the single-digit number, then adding the partial quotients; if dividing the tens gives a remainder of one or more tens, we must exchange the remaining tens for ones before dividing the resulting ones value by the single-digit number.
- Any two-digit number can be divided by a single-digit number using an algorithm called 'short division'; the algorithm is applied working from the most significant digit (on the left) to the least significant digit (on the right); if there is a remainder in the tens
column, we must 'exchange'.
- Any three-digit number can be divided by a single-digit number, by partitioning the two-digit number into hundreds, tens and ones, dividing the parts by the single-digit number, then adding the partial quotients; if dividing the hundreds gives a remainder one or more hundreds, we must exchange the remaining hur
dividing the resulting tens value by the single-digit number
Any three-digit number can be divided by a single-digit number using the short-division algorithm.


## This Term's Whole Class Text: Alex Rider Stormbreaker

Stormbreaker follows the thrilling journey of Alex Rider, a teenage boy unwittingly thrust into the world of intelligence after his uncle's mysterious death. As Alex investigates his uncle's life, he discovers a web of secrets, leading him to MI6. Soon, he finds himself on a perilous mission to stop a madman's plot involving a powerful computer called Stormbreaker. Packed with suspense, gadgets, and unexpected twists, the book keeps readers on the edge of their seats as Alex navigates the dangerous world of

> international espionage.

## English

Write an adventure story. Adverbials of time, place or manner
Develop characters through description, action and speech
Plan and write a police report
Use formal and technical language within my descriptions.
-Subordinating conjunctions

## Reading

Retrieve information
from the text
Make predictions
Make comparison and connections
Summarise paragraphs Make inferences from the text
To say whether a testament is true or false

## Science Materials: Properties and Changes

Determine the hardness of different materials and link this to their uses.
Determine the transparency of different materials and link this to their uses.
Determine the thermal and electrical conductivity of different materials and link this to their uses.
Demonstrate, identify and describe reversible and irreversible changes.
When working scientifically pupils
who are secure will be able to:
Evaluate the hardness test to determine the degree of trust in the results.
Plan and draw a table of results. Write a detailed, organised and easy to follow method.
Write a prediction using prior knowledge of the states of matter Analyse observations about rusting and use them to support a conclusion.
Measure accurately in centimeters.

## Religious Education Hinduism

To understand Hindu beliefs in God. To understand and explain how Hindus use symbolism. To describe the 4 ashrams during the samsara cycle of life.

## PSHE/RHE

Smoking
Children will: explain some of the risks associated with smoking (physical, social, and legal) and name the addictive ingredient found in cigarettes, e-cigs, etc. Describe how smoking can affect your immediate and future health and wellbeing. Give reasons why someone might start and continue to smoke.

Identify and use skills and strategies to resist any pressure to smoke

## Computing

## Online safety:

To gain a greater understanding of the impact that sharing digital content can have.
To review sources of support when using technology and children's responsibility to one another in their online behaviour.

To know how to maintain secure passwords.
To understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons for this.
To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.
To learn about how to reference sources in their work
To search the Internet with a consideration for the reliability of the results of
sources to check validity and understand the impact of incorrect information.
To ensure reliability through using different methods of communication.
Spreadsheets
To use formulae within a spreadsheet to convert measurements of length and distance.
To use the count tool to answer hypotheses about common letters in use. To use a spreadsheet to model a real-life problem.
To use formulae to calculate area and perimeter of shapes. To create formulae that use text variables. To use a spreadsheet to help plan a school cake sale.

## Humanities: Geography

Slums
What is a slum?
What are the similarities between Rocinha and Dharavi?
What challenges are faced by people living in the slums?
What improvements can be made for people living in the slums?
What next for Dharavi?

## Creative Design: Design and Technology

## Cooking and nutrition: What could be healthier?

Understand how beef gets from the farm to our plates.
Present a subject as a poster with clear information in an easy to read format.
Contribute ideas as to what a 'healthy meal' means.
Notice the nutritional differences between different products and recipes.
Recognise nutritional differences between two
similar recipes and give some justification as to why this is.
Work as a team to amend a bolognese recipe with healthy adaptations.
Follow a recipe to produce a healthy bolognese sauce.
Design packaging that promotes the ingredients of the bolognese.

## French

## French numbers, calendars and birthdays

Say the numbers to 31 in French.
Read and calculate Maths sums correctly in French.
Say all the days of the week, working out the words for the days that are yesterday and today. Match most of the French months to their English equivalents.
Ask when someone's birthday is and give the number and month of their own birthday. Say the seasons of the year.

## PE

## Fitness

Pupils will take part in a range of activities that explore and develop different areas of their health and fitness. Pupils will be given opportunities to work at their maximum and improve their fitness levels, recognising how the activities make them feel. They will need to persevere when they get tired or when they find a challenge hard and are encouraged to support others to do the same. Pupils are asked to recognise areas for improvement and suggest activities that they could do to do this. Pupils will be encouraged to work safely and with control.

