

Maths – Power Maths 5A



Place value up to 1,000,000

- Roman numerals
- Numbers to 1,000,000
- Read, write, compare, order and partition numbers up to 6-digits
- Find 10/100/1,000/10,000/100,000 more or less than a given number
- Powers of 10
- Round numbers up to 6-digits to the nearest 10/100/1,000/10,000/100,000.

Addition and subtraction

- Mental strategies
- Add and subtract whole numbers with more than 4-digits
- Use rounding to check answers
- Use inverse operations
- Solve multi-step addition and subtraction problems
- Solve missing number problems
- Solve comparison problems.

DT – Moving Mechanisms

- Understand the uses of pneumatic mechanisms
- Investigate simple pneumatic systems
- Build a simple framework to support a pneumatic system
- Make a pneumatic lifting machine
- Design a pneumatic machine
- Make a prototype of their pneumatic machine
- Evaluate the effectiveness of their prototype design.

History – The Shang Dynasty of ancient China

- Archaeological digs
- Key information about ancient China
- The famous dig at Yin Xu of Fu Hao's tomb
- Primary and secondary sources of evidence
- Oracle bones
- Religious beliefs of the Shang Dynasty
- Significance of bronze, jade & silk.

Science – Forces and Mechanisms

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.
- Investigations: Air resistance; water resistance; friction; plan and carry out their own investigation about forces.

Dynamic Dynasties

Year 5 Autumn 1

P.E. Invasion games – Netball / Swimming

Computing Programming efficiently



- Use procedures to create a repeated action in a program to make it more efficient
- Use procedures in Scratch programs and to control a floor robot
- Plan and design maze games in Scratch, with backgrounds and moving sprites that interact
- Use if/then commands, repetition loops and procedures to make our game programming more efficient.

Geography – Investigating Our World

- Ordnance Survey maps
- Contour lines
- Exploring map grid squares
- Relative locations and distances
- Transport networks
- Settlement hierarchy.

RE – Derbyshire Agreed Syllabus Unit 2.4: If God is everywhere, why go to a place of worship?

- How and why places of worship fulfil special functions in the lives of believers
- Make connections between how believers feel about places of worship in different traditions.

English



Teaching Reading:

- Use taught strategies to clarify vocabulary
- Distinguish between everyday word meanings and their subject-specific use
- Skim and scan texts to retrieve, record and present information, and to answer questions
- Distinguish between fact and opinion
- Ask questions to clarify their understanding
- Make predictions and modify ideas as they read
- Sequence and summarise the main ideas drawn from more than one paragraph
- Compare different versions of the same text
- Read poems by significant poets and identify what is distinctive about the style or presentation.

Writing:

Lost and found stories – Description

Explanations – How a machine works

- Structure a story using paragraphs and create cohesion between different parts
- Describe a setting, main character, feelings and atmosphere in detail
- Use technical vocabulary, causal connectives and sequence connectives to explain
- Use a range of sentence features, including fronted adverbials, parenthesis, relative clauses, expanded noun phrases
- Punctuate and separate sentences accurately, including commas, brackets, dashes
- Proofread and edit writing to improve it.

Texts to use:

- Fiction: *The Lost Thing* (Shaun Tan)
- Poetry: *Overheard in a Tower Block* (Joseph Coehlo)

French – Phonetics

- Core vocabulary and pronunciation.

PSHE – Relationships

- Belonging & inclusion
- Coping with difficult feelings and conflict
- Peer pressure.

Music – Livin' On A Prayer

- Listen to and appraise classic rock songs
- Play recorders or glockenspiels
- Perform as a group and individually.