

Design and Technology

Cam Dragons

Design

Carry out research and identify needs and preferences of individuals/ groups when designing a moving toy. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, and computer-aided design. Produce a list of tools, equipment and materials and form step by step plans.

Make

Select from and use a wider range of tools and equipment to perform practical tasks -cutting, shaping, joining and finishing accurately. Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

Technical knowledge: Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products cams and levers. Understand and use electrical systems in their products - series circuits incorporating switches, bulbs, buzzers and motors.

Evaluate

Investigate and analyse a range of existing products ie moving toys. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals in design and technology have helped shape the world.

Food Technology

Rice Dishes

Compare Asian and European diets, applying the principles of a healthy diet in their studies. Prepare and cook rice dishes, using a range of ingredients to alter the flavor ie ginger, garlic, Understand seasonality and know where and how rice is grown.

RE

To understand how Sikhs show their commitment to God
Understand the impact of certain beliefs in a Hindu's life
To understand how Christians show their commitment to God

Geography

Who are Britain's National Parks for?

The enquiry begins with pupils identifying the location and distribution of the 15 National Parks in the United Kingdom and understanding the rationale that underpins them. A study of an Exmoor hill farm enables pupils to appreciate how people live and attempt to earn a living in National Parks, often under very challenging conditions. Also how, as custodians of the countryside, farmers help National Parks to both protect and conserve the environment so that people can enjoy such environments. Pupils will then compare UK national parks with those in the USA.

Locational knowledge

Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities.

Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.

Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Human and physical geography

Describe and understand key aspects of:

Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.

Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

Prepare and practice a simple conversation, re-using familiar vocabulary and structures in new contexts.

Understand and express simple opinions.

Listen attentively and understand more complex phrases and sentences.

Re-read frequently a variety of short texts.

Make simple sentences and short texts.

Write words, phrases and short sentences, using a reference.

Look at further aspects of their everyday lives from the perspective of someone from France.

Make a simple story book.

Develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases.

Appreciate simple stories, songs, poems and rhymes in French.

PSHE

Health and well being

Safety, roads, cycle, rail, water, fire, media, images, reality/fantasy, true/false, balanced lifestyles, choices, health, wellbeing, balanced diet, choices, food, influences

Relationships

Collaborative working, shared goals, disputes, conflict, feedback, support, negotiation, compromise, actions, behaviour, consequences, physical contact, touch, acceptable, unacceptable

Living in the wider world

Discussion, debate, topical issues, problems, events, human rights, children's rights, media, social media, information, forwarding

Science
Earth and Space and Forces

Forces

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.

Earth and Space

Describe the movement of the Earth and other planets relative to the sun in the solar system. Describe the movement of the moon relative to the Earth.
Describe the sun, Earth and moon as approximately spherical bodies.
Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Working Scientifically

Plan different types of scientific enquiries to answer questions.
Begin to recognise why controlling variables is necessary.
Select the most appropriate type of scientific enquiry to answer questions.
Identify the variables within a test and explain why which ones need to be controlled and why.
Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs.
Report and present findings from enquiries, including conclusions, patterns in data and explanations of results in oral and written forms such as displays and other presentations.
Identifying scientific evidence that has been used to support or refute ideas or arguments.

ICT

We are architects

Understand the work of architects, designers and engineers working in 3D
Develop familiarity with a computer aided design tool
Develop spatial awareness by exploring and experimenting with a 3D virtual environment
Develop greater aesthetic awareness
E-safety – safe practise when searching and selecting digital content, avoid sharing private information, consider copyright

We are Bloggers

Pupils will become familiar with blogs as a medium and a genre of writing
Create a sequence of blog posts on a theme
Comment on the posts of others
E-safety- consider copyright and digital footprint, think carefully about what can be shared online, become more discerning about evaluating online content

Art and Design Chinese Art

Study art and artefacts from China, focusing on shape, texture, pattern and form and developing a design from this. Make detailed studies using a range of drawing techniques layering and blending media such as pastels, charcoal, colour pencils use different grades of pencils and varying pressure of pencil, cross-hatching. Work with increasing control and show awareness of texture, line, pattern shape and colour
Develop ideas from studies to when working with clay, choosing from a range of different techniques for working ie slab pots, relief tiles. Look at composition, space and balance of models and explore these independently and finish model by decorating the surface.
Represent ideas in collage / fabric work- using studies from natural world and studies of artists work to create fabric collage using mixed media, and considering texture, line and pattern.
Explore different techniques when working with fabric and thread: applique, padding, quilting, cross-stitch.

Music

Class Orchestra – Ukulele
Performing together for a performance
Pop

PE

Games – NC linked to REAL PE Scheme

Use running, jumping, throwing and catching in isolation and in combination
Play competitive games, modified where and apply basic principles suitable for attacking and defending
Develop flexibility, strength, technique, control and Take part in outdoor and adventurous activity challenges both individually and within a team
Compare their performances with previous ones and demonstrate improvement to achieve their personal best.

Dance – Solar System

History

Shang Dynasty

Chronological Understanding

Continue to develop a chronologically secure knowledge and understanding of world history, establishing clear narratives within and across periods by learning when and where the Shang dynasty existed.

Knowledge and understanding of events, people and places

Construct informed responses that involve thoughtful selection and organisation of relevant historical information by learning about the social hierarchy of the Shang dynasty and exploring what life was like for different people.

Historical interpretation and enquiry

Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference and significance by learning about the discovery, significance and purpose of oracle bones in Shang culture. Children can devise historically valid questions about change, cause, similarity and difference and significance by learning about the unearthing of Lady Fu Hao's tomb and what the study of the objects inside can teach us.