Y4 Term 5

English	Woof! Diary Entries Environmental issues: Discussion texts - For/against zoos	**Maths**	Perimeter, length, angles, position, direction, shape and symmetry

Science: Habitats

NC objectives from curriculum progression

Children will be taught to:

Scientific Knowledge

*recognise that living things can be grouped in a variety of ways
*explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
*recognise that environments can change and that this can sometimes pose dangers to living things.
*construct and interpret a variety of food chains, identifying producers, predators and prey

Scientific Enquiry Skills

*develop relevant, testable questions, e.g. based on observations of animals.
*plan investigations using different types of scientific enquiry, e.g. exploring various rocks by observing change over time, running comparative tests and conducting surveys.
*set up comparative and fair tests, e.g.. finding patterns in the sounds made by elastic bands of different thicknesses.
*use various equipment, as instructed, repeatedly and with care, e.g. rulers
*recognise the importance of using standard units and measures accurately.
*use various ways to record, group and display evidence, e.g. grouping and classifying various rocks.
*use words and diagrams to record findings, e.g. how habitats change during the year.
*use various ways to record evidence, e.g.. recording what happens to teeth when left in different liquids
*present findings either in writing or orally, e.g. answering questions about how humans digest food.
*write a conclusion based on evidence, e.g. materials electrical conductors are made of.
*use evidence to suggest further relevant investigations, e.g. making own instruments, using ideas about pitch and volume
*recognise patterns that relate to scientific ideas, e.g. finding out which materials make better earmuffs
*use evidence to produce a simple conclusion, e.g. the changes that occur when rocks are in water.

Notes and guidance (non-statutory)

Pupils should use the local environment throughout the year to raise and answer questions that help them to identify and study plants and animals in their habitat. They should identify how the habitat changes throughout the year. Pupils should explore possible ways of grouping a wide selection of living things that include animals and flowering plants and non-flowering plants. Pupils could begin to put vertebrate animals into groups such as fish, amphibians, reptiles, birds, and mammals; and invertebrates into snails and slugs, worms, spiders, and insects. Note: Plants can be grouped into categories such as flowering plants (including grasses) and non-flowering plants, such as ferns and mosses. Pupils should explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population and development, litter or deforestation.

Pupils might work scientifically by:

-using and making simple guides or keys to explore and identify local plants and animals
-making a guide to local living things
-raising and answering questions based on their observations of animals and what they have found out about other animals that they have researched..

Fieldwork

* Use fieldwork to observe, measure, record and present information about physical features: ***Which micro-habitats are in our school grounds?***
* Use a range of methods including sketch maps, plans and graphs, and digital technologies to collect and present information

History/Geography: Ancient Egypt – What did the Ancient Egyptians achieve?

NC objectives from the curriculum progressions

Children will (be taught to):

Historical Knowledge

*learn about everyday life and significant achievements in the Ancient Egypt civilisation

*identify this period of history on a chronological timeline, comparing it to other ancient civilisations

*be taught historical vocabulary: civilisation, ancient, AD, BC, century, millennium, monarchy, primary and secondary sources, legacy

Historical Concepts

*identify the role the River Nile played in the growth of this early civilisation

*evaluate the significance of Ancient Egyptian achievements: written language, social structure, building

*identify the cause and effect of Ancient Egyptians' death rituals (beliefs about the afterlife and the lasting legacy of the pyramids)

*address and devise historically valid questions relating to cause, effect, change and significance

Historical Enquiry

*construct informed responses to questions, involving thoughtful selection and organisation of evidence

*evaluate evidence about who built the pyramids and write a conclusion with evidence about their opinion on whether slaves built the pyramids or not

*identify and compare primary and secondary sources

Geographical Knowledge

*locate Africa and Egypt on a map

* identify the position and significance of the Equator; and the Southern and Northern Hemispheres; and the Arctic and Antarctic circles

Geographical Understanding

*identify how the distribution of natural resources, particularly the River Nile, contributed to the development of the civilisation (links between physical and human geography)

*learn about the role of the Nile in farming, trade and the development of settlements

*learn about the source and tributaries and which sea it flows in to

Geographical Enquiry

*use maps, atlases, globes and digital/computer mapping to locate Africa and Egypt and chart the course of the Nile through other African countries

*use maps, atlases, globes and digital/computer mapping to identify other physical and human features of Egypt: lakes, mountains, other rivers, modern cities

*use the eight points of the compass, four-figure grid references, symbols and keys to build their knowledge of the wider world

English activities/links	Maths activities/links	Outdoor learning/ Visits/Visitors
Explanations	Data collection about living things in habitats	Geography and science fieldwork: Which micro-habitats are in our school grounds?

Art/DT: DT – Habitats book/picture with moving parts (Mechanisms)

Children will:

Design

*explore a range of books with moving parts

*read these books with younger children and ask them about their likes/dislikes with regard to the moving parts

*investigate different types of mechanisms/moving parts: flaps, pop-ups, levers and linkages to create side-to-side and up-and-down movements

*describe the purpose of their product – a book with moving parts for younger children

*having evaluated existing examples of books with moving parts, identify criteria that can be used for their own designs

*through discussion, explore, develop and communicate design proposals by modelling ideas, using ICT where appropriate

*make design decisions that take account of the availability of resources

*make labelled drawings from different views showing specific features, indicating the features that will appeal to intended users and how particular parts work

Make

*develop a clear plan of how to use materials, equipment and processes; suggest alternative methods if the first attempts fail
*select appropriate tools and techniques for making their product, explaining their choices
*select materials, using scientific knowledge about the properties of materials to inform their choice
*be taught how mechanical systems such as levers and linkages create movement
*measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques
*join and combine materials and components accurately in temporary and permanent ways
*use simple graphical communication techniques
*use finishing techniques to ensure the aesthetic appeal of their books

Evaluate

At the start of the unit:
*evaluate books with moving parts, analysing:

- how well products have been designed
- how well products have been made
- why materials have been chose
- what methods of construction have been used
- how well products work
- how well products achieve their purposes
- how well products meet user needs and wants
- who designed and made the products
- where products were designed and made
- when products were designed and made
- whether products can be recycled or reused

*identify criteria that can be used for their own designs
During the unit:
*consider how well their design is meeting their intended purpose by referring to the design criteria and decide whether they need to make any changes
At the end of the unit:
*evaluate their product against the original design criteria, carrying out appropriate tests (read to younger children and gather feedback, particularly on the effectiveness of the moving parts)

ICT: We are virtual architects: create a virtual representation using Sketchup

Children will be taught:

Computer Science

*to use logical reasoning to detect errors in algorithms.
*how take a complex problem (how create a 3D representation of Italian landscapes/structures), identify component parts, use decomposition to break this problem down and then plan how they can solve the problem by working through the elements they have identified.

Information Technology

*to create a 3D computer model
*to create a virtual representation of an urban/rural landscape.

PHSE: Our Community: Being part of a Community

Children will be taught:**:**
L9. what being part of a community means, and about the varied institutions that support communities locally and nationally
L11. to appreciate the range of national, regional, religious and ethnic identities in the United Kingdom

French: Les Habitats

Children will be taught how to:
*tell somebody in French the key elements animals and plants need to survive in their habitat.
*tell somebody in French examples of the most common habitats for plants and animals and give a named example of these habitats.
*tell somebody in French which animals live in these different habitats.
*tell somebody in French which plants live in these different habitats

PE

Indoor PE
Real PE (Multi-Ability Focus: Social)

Outdoor PE
Striking and Fielding (Multi-Ability Focus: Personal)

Music

Music Express: Exploring melodies and scales
Learning to play the recorder: Visual Musical Minds
Mummy song (Egyptian)
https://www.youtube.com/watch?v=Cn7jTPj4zsg

RE: What can we learn from religions about deciding what is right from wrong?

This unit will enable children to:
*make connections between stories of temptation and why people can find it difficult to be good (A2).
*discuss their own and others' ideas about how people decide right and wrong (C3).
*give examples of rules for living from religions and suggest ways in which they might help believers with difficult decisions (B1).
*give examples of ways in which some inspirational people have been guided by their religion (B1).
*identify some similarities and differences between the codes for living used by Christians and the followers of at least one other religion or non-religious belief system (B3).
*find out at least two teachings from religions about how to live a good life (C3).
*express ideas about right and wrong, good and bad for themselves, including ideas about love, forgiveness, honesty, kindness and generosity (C3).