**Geography**

National Curriculum Ref. *Pupils should be taught to:*

*Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world’s most significant human and physical features.*

*They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.* *describe and understand key aspects of:*

*- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle*

In this Unit, we will:

-learn about biomes and link the conditions of the biome to variation in animals that have adapted and evolved to suit their biome.

**Extraordinary Evolution**

Year 5 and 6 Topic Web – Summer 1 - 2023

**Art, Design** **and Technology**

National Curriculum Ref. – *-- develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.*

*-to create sketch books to record their observations and use them to review and revisit ideas*

*-to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]*

In conjunction with our work in Geography, we will construct a 3d model of a biome which could include a desert, rainforest, tundra, grassland, savannah or temperate forest. We will look at information from the Eden Project as inspiration and we will use a range of tools and modelling techniques to create our model biomes.

A picture containing grass, sky, outdoor, dome

Description automatically generated

A cover of a book

Description automatically generated with medium confidence

Map

Description automatically generated with medium confidence

The aim of this picture book adaptation is to explain in an accessible and inspiring way the theory of evolution by Charles Darwin. It is aimed at children and adults.

Text

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**Our Class Book:**

**On the Origin of Species – a picture book retelling of Charles Darwin’s book.**



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| **Maths**  **Year 5:**  **Shape (Continued from before Easter)**  Step 1 Identify angles Step 2 Compare and order angles Step 3 Measure angles in degrees Step 4 Measuring with a protractor Step 5 Drawing lines and angles accurately Step 6 Calculating angles on a straight line Step 7 Calculating angles around a point Step 8 Triangles Step 9 Quadrilaterals Step 10 Calculating lengths and angles in shapes Step 11 Regular and irregular polygons Step 12 Reasoning about 3-D shapes  **Position and Direction**  Step 1 Read and plot coordinates Step 2 Problem solving with coordinates Step 3 Translation Step 4 Translation with coordinates Step 5 Lines of symmetry Step 6 Reflection in horizontal and vertical lines  **Decimals**  Step 1 Use known facts to add and subtract decimals within 1 Step 2 Complements to 1 Step 3 Add and subtract decimals across 1 Step 4 Add decimals with the same number of decimal places Step 5 Subtract decimals with the same number of decimal places Step 6 Add decimals with different numbers of decimal places Step 7 Subtract decimals with different numbers of decimal places Step 8 Efficient strategies for adding and subtracting decimals Step 9 Decimal sequences Step 10 Multiply by 10, 100 and 1,000 Step 11 Divide by 10, 100 and 1,000 Step 12 Multiply and divide decimals – missing values  **Year 6**  **Shape (Continued from before Easter)**  Step 1 Measure with a protractor Draw lines and angles accurately Step 2 Angles on a straight line Step 3 Angles around a point Step 4 Calculate angles Step 5 Vertically opposite angles Step 6 Angles in a triangle Angles in a triangle Step 7 Angles in special quadrilaterals Step 8 Angles in regular polygons Step 9 Draw shapes accurately Step 10 Draw nets of 3-D shapes  **Position and Direction**  Step 1 The first quadrant Step 2 Read and plot points in four quadrants Step 3 Solve problems with coordinates Step 4 Translations Step 5 Reflections  **KS2 SATs**  **Consolidation through investigation and exploration** |

**English**

**Non-Fiction** – Non-chronological report – Text: On The Origin of Species by Charles Darwin – retold and illustrated by Sabina Radeva

Lessons concentrate on the teaching of writing with a sharp focus on the craft and construction of sentences. Each Sentence Stacking lesson is organised into three learning chunks which incorporate effective punctuation and grammar alongside use of ambitious vocabulary and figurative language. This Sentence Stack will build over the duration of the unit to the culmination of the whole piece of text.

**Spelling** – The children will all do daily spelling work which is introduced on Monday and tested on Friday. Each day, we will work together as a class on learning about spelling rules, word meanings and helpful ways to remember spellings.

**Guided Reading** – In small groups, the children take part in a weekly reading session where they share a book and study it in depth alongside the teacher or teaching assistant.

**Handwriting** – Our handwriting work will also incorporate an element of grammar and punctuation from our English work to re-enforce prior learning.

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| **Subject and National Curriculum Reference** | **Key Knowledge** |
| **Science - Animals including humans – evolution and inheritance**  **National Curriculum Ref.**  Pupils should be taught to:  -recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago  -recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents  -identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution | Building on what they learned about fossils in the topic on rocks in year 3, pupils should find out more about how living things on earth have changed over time.  They should be introduced to the idea that characteristics are passed from parents to their offspring, for instance by considering different breeds of dogs, and what happens when, for example, labradors are crossed with poodles.  They should also appreciate that variation in offspring over time can make animals more or less able to survive in particular environments, for example, by exploring how giraffes’ necks got longer, or the development of insulating fur on the arctic fox. Pupils might find out about the work of palaeontologists such as Mary Anning and about how Charles Darwin and Alfred Wallace developed their ideas on evolution.  Note: at this stage, pupils are not expected to understand how genes and chromosomes work. |
| **Religious Education – Creation and Science: Conflicting or complimentary?**  **Understanding Christianity** | Pupils will know that:   * There is much debate and some controversy around the relationship between the accounts of creation in Genesis and contemporary scientific accounts. * These debates and controversies relate to the purpose and interpretation of the texts. For example, does reading Genesis as a poetic account conflict with scientific accounts? * There are many scientists throughout history and now who are Christians. * The discoveries of science make Christians wonder even more about the power and majesty of the Creator. |
| **Computer Science – Creating Media – 3d modelling– National Curriculum reference:**   * Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information * Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact | **We will:**  Learners will develop their knowledge and understanding of using a computer to produce 3D models. Learners will initially familiarise themselves with working in a 3D space, moving, resizing, and duplicating objects. They will then create hollow objects using placeholders and combine multiple objects to create a model of a desk tidy. Finally, learners will examine the benefits of grouping and ungrouping 3D objects, then go on to plan, develop, and evaluate their own 3D model of a building. |
| **French – Le sport– National curriculum reference:**   * engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help reading aloud or using familiar words and phrases * read carefully and show understanding of words, phrases and simple writing * broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary * write phrases from memory, and adapt these to create new sentences, to express ideas clearly * describe people, places, things and actions orally and in writing * understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English | **We will:**   * Talk about which sports you like * Say what you think about different sports * Give reasons for preferences * Talk about a sporting event |
| **P.E. Cricket**  Pupils should be taught to:  - use running, jumping, *throwing and catching in isolation and in combination* ♣ play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending | **Handball:** Handball is a team sport in which two teams of seven players each pass a ball using their hands with the aim of throwing it into the goal of the opposing team.  See cricket for National Curriculum links. |
| **PSHE – Relationships and Sex Education – taught to individual year groups to co-incide with when one year group is doing Forest School**  In September 2020, the DfE introduced statutory requirements for Relationships Education and Health Education which are to be covered by the end of Primary School. This unit contains teaching which directly addresses the requirements for Relationships Education:  Being Safe (BS)• how to report concerns or abuse, and the vocabulary and confidence needed to do so.  Health Prevention (HP)• about personal hygiene and germs including bacteria, viruses, how they are spread and the importance of handwashing. Changing Adolescent Body (CAB)• key facts about puberty and the changing adolescent body, particularly from age 9 through to age 11, including physical and emotional changes. • about menstrual wellbeing including the key facts about the menstrual cycle.  Family and People Who Care for Me (FP)• that others’ families, either in school or in the wider world, sometimes look different from their family, but that they should respect those differences and know that other children’s families are also characterised by love and care for them.  Mental Wellbeing (MW)• how to recognise and talk about their emotions, including having a varied vocabulary of words to use when talking about their own and others’ feelings • how to judge whether what they are feeling and how they are behaving is appropriate and proportionate. | **Year 5**  -know and understand the appropriate scientific names for the external and internal sexual parts of the body, and be able to explain basic functions.  -understand the main changes that happen at puberty, know some ways to manage them, and how it affects people differently.  - have a basic understanding about body image, and have learnt some ways to support a positive body image for themselves and others.  -understand the importance of washing regularly and of maintaining other hygiene routines during puberty.  -understand ways they can prevent the spread of some bacterial and viral diseases  **Year 6**  -be able to describe the main stages of sexual reproduction, using some scientific vocabulary  -be able to describe some emotions associated with the onset of puberty and have strategies to deal with these positively  - understand that puberty affects people in different ways, both physically and emotionally  -understand that the way they behave affects others and that they have some responsibility to others to make sure they are not hurt  -describe some characteristics of loving, trusting relationships |