



# Term 3 - My, How You've Changed (Darwin) & Living Things And Their Habitats

Year 6

Southville Primary School

Local Anchor Point	Visit/ Visitor	Key Person	Key Outcome
Bristol Dinosaur Project	Bristol Dinosaur Project	Charles Darwin	Design and build evolution based board games
<b>Diversity, Equity and Inclusion</b> The unit incorporates a variety of animals and environments taken from across the globe. This will include diets of different communities depending on the animals and plant species available.		<b>Linked Learning:</b> Y3 fossils	
<b>Driver 1: Science</b> <i>How can adaptation lead to evolution of plants and animals? How do we classify living things?</i>		<b>Driver 2: Art</b> <i>How do artists create detailed observational sketches, using shape, line, shading and texture?</i>	
<b>Driver 1 Objectives</b> <b>Evolution and inheritance</b> <ul style="list-style-type: none"> <li>recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</li> <li>recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</li> <li>identify how animals and plants are adapted to their environment in different ways and that adaptation may lead to evolution</li> </ul> <b>Living things and their habitats</b> <ul style="list-style-type: none"> <li>describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</li> <li>give reasons for classifying plants and animals based on specific characteristics</li> </ul>		<b>Driver 2 Objectives</b> <ul style="list-style-type: none"> <li>Create sketch books to record their observations and use them to review and revisit ideas.</li> <li>Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay].</li> </ul> <b>Theoretical Knowledge:</b> <ul style="list-style-type: none"> <li><b>Key Artist / Movement:</b> Charles Darwin – His detailed observations of animals, particularly on the Galápagos Islands, influenced both scientific and artistic documentation of wildlife. His voyage on the HMS Beagle led to significant discoveries about adaptation and evolution, which artists and illustrators have depicted in scientific studies.</li> <li><b>Themes / Genre:</b> Observational drawing, realism, scientific illustration, nature studies, wildlife art</li> <li><b>Context and Significance:</b> Observational sketching has played a critical role in science, particularly in documenting species. Darwin relied on sketches to record his findings, and detailed drawing remains an essential skill in scientific illustration today. By studying and sketching animals, students develop both artistic and analytical skills.</li> </ul> <b>Practical Knowledge:</b> <ul style="list-style-type: none"> <li><b>Area of Making:</b> Drawing</li> <li><b>Media:</b> Graphite, pencil, pen, ink</li> <li><b>Methods and Techniques:</b> <ul style="list-style-type: none"> <li>Mark-making (stippling, cross-hatching, scribbling, blending),</li> <li>Shading (light to dark gradients, tonal values)</li> <li>Contour drawing (defining the outline of objects)</li> <li>Observational sketching (studying real-life or photographic references)</li> <li>Grid method (breaking down complex forms into basic shapes)</li> </ul> </li> </ul>	

### Driver 1 Disciplinary Knowledge and Skills

This is knowing how scientists carry out practical procedures using different equipment and to collect, use, interpret, understand and evaluate the evidence from scientific processes:

- **Planning:** Asking questions, fair testing, setting up simple tests
- **Doing:** Using different equipment safely, making systematic and careful observations
- **Recording:** Obtaining evidence, classifying and identifying, recording findings in a variety of ways (e.g. drawings, labelled diagrams, keys, bar charts, graphs and tables)
- **Concluding:** Suggesting answers, reporting, presenting (in oral and written forms)
- **Evaluating:** Seeking patterns, making predictions for the future

### Driver 1 Key Vocabulary

- **Tier 2:** adaptation, changes, characteristics, environment, generations, inherit, inheritance, survival, variation, organism, habitat, evidence, observation, comparison, natural, population, offspring, species, traits
- **Tier 3:** Darwin, theory of evolution, natural selection, fossilisation, classification, classification keys, vertebrate, invertebrate, reptiles, mammals, amphibians, species adaptation, extinction, genes, genetic variation, mutation, artificial selection, evolutionary advantage, arthropods, taxonomy, kingdoms of life, exoskeleton, endoskeleton, hominid evolution, paleontology, embryology, phylogenetic tree

### Driver 2 Disciplinary Knowledge and Skills

- **Shape** is a flat (2D) area surrounded by an outline or edge: How are shapes used or combined? How does the combination of shapes make things look 3D?
- **Lines** are used to show movement and mood. Is the use of line static or dynamic? How do they determine motion and direction in a piece?
- **Colour** is used to convey atmosphere and mood. How has colour been combined and varied to create mood and reaction in the viewer?
- **Value** is the intensity of colour and depends on the amount of white added.
- **Form** – artists use form when they create sculptures or the effect of flat objects being 3D. How has the artist made flat parts of an image appear 3D e.g. shading?
- **Texture** is the look and feel of a surface. How is the feel of a piece related to the materials it is made from?
- **Space** in artwork makes a flat image look like it has form. How has the empty area around shapes been used?

### Driver 2 Key Vocabulary

- **Tier 2:** accurate, proportion, shape, line, texture, shading, tone, observation, detail, outline, contrast, depth, highlight, refine, evaluate, improve, technique, careful, expressive, variation, smooth, rough, soft, bold, delicate, transition, effect
- **Tier 3:** observational drawing, sketching, mark-making, cross-hatching, stippling, blending, layering, tonal value, light source, shadow, highlights, contour, composition, perspective, form, structure, dimension, organic shapes, geometric shapes, rendering, realism, study, gradation

### Driver 1 Sequence

#### Evolution

1. **WALT:** consider the theory of evolution as a means to explain how organisms have changed over time.
2. **WALT:** decide whether evidence supports Darwin's theory of evolution.
3. **WALT:** review our knowledge of fossils and describe how they are formed.
4. **WALT:** explain the evolution of the Whale.
5. **WALT:** use scientific evidence to support the theory of natural selection.
6. **WALT:** use your knowledge of adaptation to explore the future evolution of humans.
7. **WALT:** investigate variation and characteristics in living organisms.

#### Living things and their habitats

8. **WALT:** explain why we classify living things.
9. **WALT:** classify animals with a backbone (vertebrates).
10. **WALT:** classify animals without a backbone (invertebrates).
11. **WALT:** recognise how plants are classified.
12. **WALT:** use keys to identify living things.
13. **WALT:** Design an evolution-themed board game.

### Driver 2 Sequence

1. **WALT:** identify and analyze shapes and lines in photographs of Galapagos animals
2. **WALT:** explore different types of line and experiment with mark-making
3. **WALT:** shade using different techniques to create tone and light in an observational drawing
4. **WALT:** use mark-making and shading to create an accurate sketch of an animal
5. **WALT:** create an accurate observational sketch, considering shape, tone, shading and mark-making.
6. **WALT:** create an accurate observational sketch, considering shape, tone, shading and mark-making.
7. **WALT:** reflect on our learning and evaluate our observational sketches