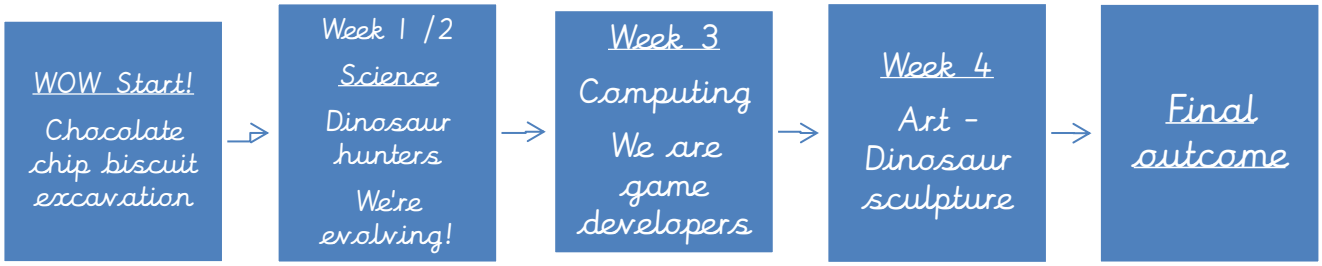
Year 5/6 Science – 'Funny Bones!' (3/4 weeks)



. Children start by studying variation in species, adaptation and links to evolution. They then look in detail at scientific evidence about dinosaurs and theories about how and why dinosaurs died out, linked to their learning on variation. They create a game using scratch with a dinosaur theme and then link this to art work, possibly using the Natural History Museum models as a stimulus.

Science skills

Thinking scientifically skills	Science knowledge skills
• Make in depth and detailed observations of evidence to support a theory. • Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. Previous Vocabulary: - Fossil - Metamorphic - Igneous - Sedimentary	• 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. All of the above linked to general species and then dinosaurs. Previous Knowledge: Rocks (Volcanoes) Compare and group together different kinds of rocks on the basis of their simple, physical properties. Relate the simple physical properties of some rocks to their formation (igneous, metamorphic or sedimentary) Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter.
Art skills	Computing skills
• Show life-like qualities and real-life proportions or, if more abstract, provoke different interpretations. • Use tools to carve and add shapes, texture and pattern. • Combine visual and tactile qualities.	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • Use sequence, selection and repetition in

• Use frameworks (such as wire or moulds) to provide stability and form. • Develop and imaginatively extend ideas from starting points throughout the curriculum. • Collect information, sketches and resources and present ideas imaginatively in a sketch book. • Use the qualities of materials to enhance ideas. • Spot the potential in unexpected results as work progresses. • Comment on artworks with a fluent grasp of visual language. Previous Knowledge: Claude Monet Frida Kahlo Henri Rousseau	programs; work with variables and various forms of input and output • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • 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 Basic skills to be taught alongside: • Understands file icons and extensions and which ones attribute to different ICT products – year 5 • Is aware of computer security issues – year 5 Previous Knowledge: • design, write and debug programs that accomplish specific goal; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Fossils are created when bones are compressed deep underground over millions of years and we learn about the lives of past creatures when palaeontologists discover and study fossils.

Evolution is the name given to how living things adapt over time to be able to survive in their environments.

Animals and plants will adapt to the environment in which they live, in order to survive. Weaker species will die off.

We will inherit some of the characteristics of our parents but not all.

Some of our characteristics are environmental (scars, earrings).

A computer program is made through a series of algorithms (set of calculations or instructions).

Sculpture is one of three things – carving, modelling or assembly

All sculpture is a 3-D structure made out of a material substance – it has mass (solid material) and exists in a space (3D)

Proportion is the size of an object in relation to another.

Fossils

Adaptation

Evolution

environmental features

evolve

genetic

inherited features

palaeontologist

Algorithm

debug

program

Species

Characteristics

Proportion

Sculpture