

Super humans—Curriculum Driver

Year 3/4 Spring Term

Topic Question: How does the human body work?

Linked people of study: Marie Curie

George Washington Carver

Linked texts: The Astounding Broccoli Boy by Frank Cottrell Boyce
Demon Dentist by David Walliams
Giant by Kate Scott

Trips/Visitors: Farm & Country Day (Royal Cornwall Showground)

Local farm visit - Trevaskis

Invite school nurse into school

Topic Composite/Finale: Create a healthy eating display in the hall to inspire other children to look after their bodies.

Prior Learning Topic: Into the woods, Down in the Jungle

Future Learning Topic: There is No Planet B, Victorians



History

Intent: Children will learn about a significant turning point in history from scientific discoveries made by Marie Curie and George Washington Carver

Hooks from old learning (YR;Y1/2): Superheroes - important figures in own lives (YR), children have looked at key historical figures through many previous units. I.e. Neil Armstrong and Buzz Aldrin in Out of this World topic (Y1/2).

Skills and Knowledge Components Focus

Science history - Marie Curie (year 3 lesson 2 twinkl)

Identify changes related to scientific ideas by describing Marie Curie's research into x-rays.

George Washington Carver (year 3 lesson 3 twinkl)

Identify changes related to scientific ideas by describing the achievements of George Washington Carver.

Explain how George Washington Carver helped farmers to grow crops.

Notice and describe how changes have taken place in farming in the UK.

Year 3

Question why something happened and how it impacted people.

Year 4

Beginning to think about the impact of historical events/people.

Question why something happened and how it impacted people long term.

Sticky Knowledge:

George Washington Carver came up with more than 100 uses of a peanut so farmers could sell these plants at a higher price. The uses of peanuts included paints, face creams, plastics and medicines

Marie Curie was a famous scientist who developed the use of x-rays, which meant that a lot more patients could be correctly diagnosed and treated.

Key Vocabulary: Agriculture, crops, nutrients, soil, crop rotation. Marie Curie, radiation, element, chemistry, physics, x-ray, bones, support, protection, movement.

Subject Composite: Create fact files on significant people in history.

Impact: Children will be able to talk about key figures from history and how they impacted our world today.

Hooks for new learning (Y5/6): All topics have a linked person/s of study, for example Vicious Vikings looks at King Alfred the Great, King Edgar, King Edward the Confessor

Geography

Intent: Children will begin to take a careful look at the places around them, and begin to look for patterns in land use. They will become cartographers, making maps of the local area, and agricultural surveyors by considering where different types of farming activities occur within the UK.

Hooks from old learning (YR;Y1/2): On the move—compare places (YR), Into the woods, Castles and coasts—science Rainforest—habitats, Out of this world—Science humans and keeping healthy, Dinosaurs and discovery—lifecycles

Skills and Knowledge Components Focus

Year 3

Locate on a map Human and physical characteristics of the UK. Name and locate counties and cities of the UK. Study geographical similarities and differences between regions in the UK. Know where food comes from (trade routes). Use maps, atlases, globes and digital / computer mapping to locate countries and identify features of the UK. Use aerial photographs. Use fieldwork to support studies

Year 4

Use maps, atlases, globes and digital / computer mapping to locate countries and identify features of Europe. Use symbols and keys (including OS maps). Use fieldwork to support studies.

Sticky Knowledge:

Agriculture is another word for farming. The growing and harvesting of crops and/or breeding animals.

Know the difference between rural and urban areas.

Identify key urban and rural areas in the UK.

Key Vocabulary: agriculture, counties, recreation retail, rural Countryside or farmland, symbol, urban

Subject Composite: Link to local farm visit to create a piece of work to show land use in our local area.

Impact: Children will be able to read and draw simple maps and know how to use symbols for a key. They will compare land use and be able to say why an area is more suited to farming than another.

Hooks for new learning (Y5/6): Groovy Greeks—map/atlas work, Victorians—local fieldwork/studies of land use, growth of cities and English counties.

Science

Intent: children will learn about how animals survive and stay healthy and children will learn more about what makes a healthy, balanced diet. They learn about the nutrients that different foods provide and how these nutrients help our bodies. They also explore how different animals eat different types of foods and need different proportions of nutrients. They understand what food labels on packaging show and gather information from food labels to help them to answer questions. Children also explore the different types of skeletons that animals have and compare these. They learn some names of bones in the human body and carry out an investigation to explore if people with longer femurs jump further. They discuss how to plan a fair test and measure and record accurately. Children learn about how muscles help us to move and make a simple scientific model which they use to explain to a partner how skeletal muscles work. Children will focus on the digestive system in humans and animals and the functions of teeth. Children will learn more about herbivores, carnivores and omnivores in the context of teeth, digestion and the food chain. In addition, they will extend their understanding of food chains to more complex chains and food webs. Finally, children will apply their 'working scientifically' skills to design and carry out an investigation of their own, based on the human skeleton

Hooks from old learning (YR;Y1/2): Superheroes—our bodies, Let's Crawl—habitats, growth (YR), Into the woods—classifying animals, lifecycles, habitats, Down in the Jungle—how animals adapt to different environments. Dinosaurs and discovery—evolve and adapt, living things, life cycles, food chains (Y1/2).

Skills and Knowledge Components Focus

Year 3

Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

Identify that humans and some other animals have skeletons and muscles for support, protection and movement

Year 4

Describe the simple functions of the basic parts of the digestive system in humans

Identify the different types of teeth in humans and their simple functions

Construct and interpret a variety of food chains, identifying producers, predators and prey

Sticky Knowledge:

• Living things need food to grow and to be strong and healthy.

• Plants can make their own food, but animals cannot.

• To stay healthy, humans need to exercise, eat a healthy diet and be hygienic.

• Animals, including humans, need food, water and air to stay alive.

Skeletons do three important jobs: protect organs inside the body; allow movement; support the body and stop it from falling on the floor.

To help prevent tooth decay: limit sugary food and drink; brush teeth at least twice daily using a fluoride toothpaste; visit your dentist regularly.

The teeth of an animal are designed to eat different foods depending on the diet of the animal.

Key Vocabulary: herbivore, carnivore, omnivore, producer, predator, prey, digest, oesophagus, Stomach, small intestine, large intestine, Faeces, rectum, canine, incisor, molar, premolar, vertebrate, invertebrate, tendons, healthy, nutrients, energy, saturated fats, unsaturated fats, carbohydrates, protein, fibre, vitamins, minerals

Subject Composite: Create a healthy eating display in the hall to inspire other children to look after their bodies.

Impact: Children will name key body parts and how they function. They will know how to stay healthy and create a healthy lifestyle.

Hooks for new learning (Y5/6): There is no Planet B—living things and their habitats, lifecycles, reproduction in some plants and animal, animals including humans, health diet exercise, WW2 - living things and their habitats, Space - evolution and inheritance (fossils) genetics, adaption

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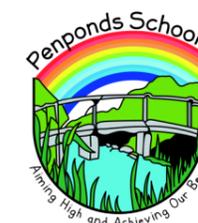
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Art and Design

Intent: Children will learn about artists such as Anthony Gormley, Giacometti and Elizabeth Frink. They will draw human form 'in action' and develop their ideas to create a sculpture of this using mod roc, wire and foil.

Hooks from old learning: (YR, Y1, Y2) Into the woods—Collage Mark Herald, Castles and Coasts—Sculpture Barbara Hepworth

Skills and Knowledge Components Focus

Year 3

Introduce sculpture materials including clay and tools to create decorations on clay including engravers and embossing tools. Different pencils for different purpose and effects.

Combine materials and give reasons for choices

Respond to the work of others and say how it makes them feel or think and give reasons as to why.

Begin to use a sketchbook for practice and to show development of their own ideas and to explore technique and composition.

Manipulating clay using fingers and tools.

Decoration techniques such as embossing, engraving and imprinting.

Draw outlines with reference to size and shape

Begin to research great artists and designers through time.

Begin to include elements of other artists work in their own.

Be able to appraise the work of other artists and designers and architects, and to say how their work links to their own

Year 4

Begin to experiment with different tools for line drawing.

Use more hardwearing materials (card, cardboard, wood) for creating 3D structures.

Talk about their intention and how they wanted their audience to feel or think.

Continue to use art as a tool in other curricular areas e.g.: RE or Literacy. As a response to work or as a starting point to learning.

Use pencils and penwork to create tone and shade and intricate marks when drawing.

Use joining techniques such as slotting, tying, pinning and sewing when creating 3D structures.

Have an in-depth knowledge of one famous artist in time and be able to link their own work to them.

Be exposed to great pieces of art and craftsmanship through visits, visitors and experiences.

Begin to critique their own and others' work alongside set criteria

Sticky Knowledge: Giacometti's sculptures of the human form became larger, thinner and more elongated as the years passed by. He once said that he wasn't sculpting the human body but rather the shadow it cast. In 2000 one of Giacometti's bronze sculptures, the lifesize L'Homme qui marche I, sold for about £65 million.

Key Vocabulary: bronze, elongated, sculptor, figures, abstract

Subject Composite: Children will create a sculpture of human form.

Impact: Children will know about scuptors and their work. They will be able to create a sculpture using appropriate tools and resources available.

Hooks for new learning (Y5/6): Space—sculpture focus, Groovy Greeks—Greek pottery

Design Technology

Intent: Children to devise and carry out a survey to find out what kind of preferences your consumer has. Next they research different types of smoothie and the ingredients that go into them. Choosing the correct equipment for cutting, slicing, squashing and blending, children create their smoothies. Once created, children can evaluate their final products from their own point of view and that of their consumers. After analysing feedback children can adapt their drinks to the identified needs.

Hooks from old learning: (YR, Y1, Y2) Castles and coasts —Make and evaluate a mini banquet,

Skills and Knowledge Components Focus

Year 3

Design an appealing and functional product with a clear purpose and use for themselves and others. Sketch and label diagrams of their design ideas. Discuss their ideas and explain the purpose, choice of materials, any necessary changes and how it will be made. Explain what they are making, why they are making it and what they will need to use.

Select and name appropriate tools and equipment needed from a suggested range

Explore and analyse existing products. Consider why products are good (or not) and how effective they are at meeting their purpose. Suggest ways of improving their own and others' work.

Understand what a healthy, varied and balanced diet is. Choose, prepare and cook dishes using some cooking techniques. Understand where fruit, vegetables, meat and meat products come from.

Year 4

Design an appealing and functional product for a particular audience. Create design criteria for a product. Use sketches, labelled diagrams and notes to explain their design. Explain their ideas, the purpose, choice of materials, any necessary changes and how it will be made. Explain what they are making, why they are making it and what they will need to use, using the design criteria.

Select and name appropriate tools and equipment needed

Explore and analyse existing products against a set of criteria. Consider how products were made, why they are good (or not) and how effective they are at meeting their purpose. Suggest ways of improving their own and others' work based on how effective the product is.

Understand why we need to eat a healthy, varied and balanced diet. Understand why we need particular food groups. Choose, prepare and cook dishes using different cooking techniques. Know which foods can be grown or reared locally.

Sticky Knowledge: All foods contain nutrients which your body needs to stay active throughout the day. Some foods have more nutrients than others. Everyone should have their '5 a day' - this means five portions of fruit and vegetables, to get the proteins right amount of nutrients.

Key Vocabulary: names of fruit, ingredients, equipment, slice, cut, squash, juice, dice, slice

Subject Composite: Children will design, make and evaluate their own healthy smoothies.

Impact: Children will know what foods are healthy and which are not, They will have the skills to plan and create their own healthy smoothie and evaluate their work.

Hooks for new learning (Y5/6): Groovy Greeks—plan, make and evaluate a Greek kebab.

Computing

Intent: Teach computing - Stop-frame animation (Year 3)

Children will use a range of techniques to create a stop-frame animation using tablets. Next, they will apply those skills to create a story-based animation. This unit will conclude with learners adding other types of media to their animation, such as music and text.

Teach computing - Repetition in shapes - Programming A (Y4)

Learners will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming language.

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Hooks from old learning: (YR, Y1, Y2) Programming A and Programming B Unit (Y1/2)

Skills and Knowledge Components Focus

Year 3

To plan simple sequences with algorithms. Use logical reasoning to predict errors.

Create and implement programmes to accomplish given goals. Use technology to present data and digital content.

Continue to use technology safely and respectfully.

Year 4

Know how to use digital tools responsibly to communicate

Design a simple programme with a specific focus using algorithms to write the sequence. Use sequence selection and repetition in programmes. Detect and correct errors in algorithms and programmes

Create and implement a range of programmes to accomplish given goals. Use technology to collect and present data and digital content.

Use technology safely, respectfully and responsibly. Know what it means to be a responsible digital citizen.

Sticky Knowledge: Animations can be made on screen and off screen, Logo can be used to create simple algorithms.

Key Vocabulary: input, output, process, digital device, wires, wifi, network, switch, server, wireless

Subject Composite: Children will create an animation and a simple programme.

Impact: Children will know how to create simple programmes and animations.

Hooks for new learning (Y5/6): Programming A and Programming B Unit (Y5/6)

Music

Intent: Children will use the BBC ten pieces—Connect it to listen and appraise. They will use body percussion to create and perform their own piece of music.

Hooks from old learning: (YR, Y1, Y2) To build on previously learnt skills from the charanga scheme.

Skills and Knowledge Components Focus
Year 3

Sing songs from memory with accurate pitch and in tune. Show control in voice and pronounce the words in a song clearly (diction). Play notes on instruments clearly and including steps/ leaps in pitch. Improvise (including call and response).

Compose and perform simple melodies (limited notes).

Use sound to create abstract effects (including using ICT).

Create/ improvise repeated patterns (ostinato) with a range of instruments.

Effectively choose, order, combine and control sounds (texture/ structure).

Know the difference between pulse and rhythm. Internalise the pulse in music.

Start to use musical dimensions vocabulary to describe music—duration, timbre, pitch, dynamics, tempo, texture, structure. Use these words when analysing music/performances

Use musical dimensions together to compose music

Introduce simple notation (crotchet, quaver).

Use silence for effect and know symbol for a rest.

Year 4

Sing in tune, breathe well, and pronounce words, change pitch and dynamics.

Sustain a rhythmic ostinato/ drone/ melodic ostinato (riff) (to accompany singing) on an instrument (tempo/ duration/ texture). Perform with control and awareness of what others are singing/ playing.

Make creative use of the way sounds can be changed, organised and controlled (including ICT).

Create accompaniments for tunes using drones or melodic ostinatos

Create rhythmic patterns with awareness of timbre and duration

Know how pulse stays the same but rhythm changes in a piece of music.

Listen to several layers of sound (texture) and talk about the effect on mood and feelings. Use more musical dimensions vocabulary to describe music—duration, timbre, pitch, dynamics, tempo, texture, structure, rhythm, metre, riff, ostinato, melody, harmony.

Identify patterns in music.

Sticky Knowledge: songs from memory

Key Vocabulary: beat, pace, rhythm, pulse, melody, texture, timbre, pitch, dynamics, tempo, structure, metre, riff, ostinato, harmony.

Subject Composite: Create and perform own body percussion piece.

Impact: Children will be able to hold a rhythm using their own bodies and to notate their ideas.

Hooks for new learning (Y5/6): Continue to develop rhythm work and notation, adding melody in different ways.