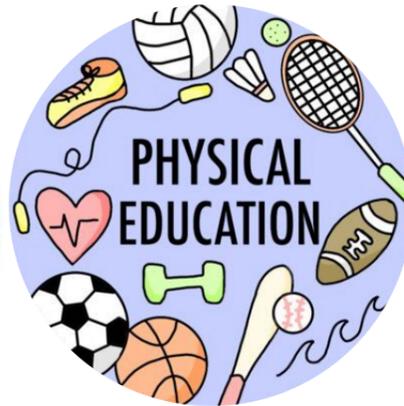
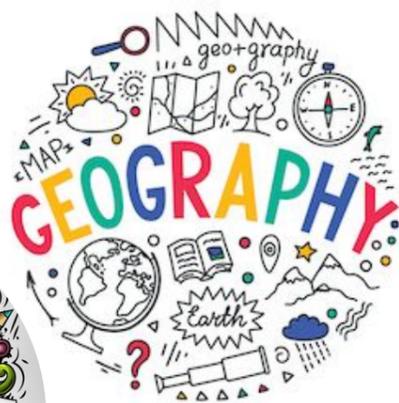
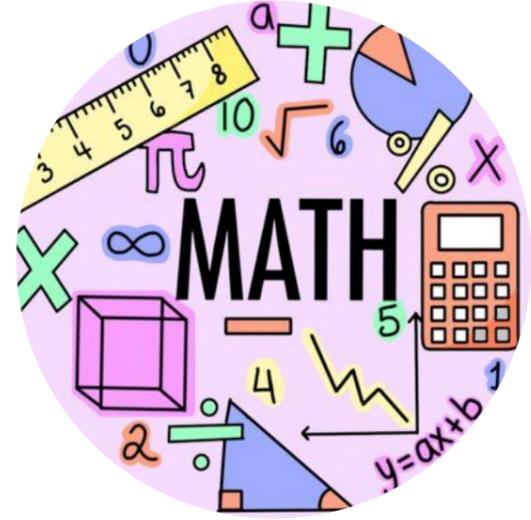
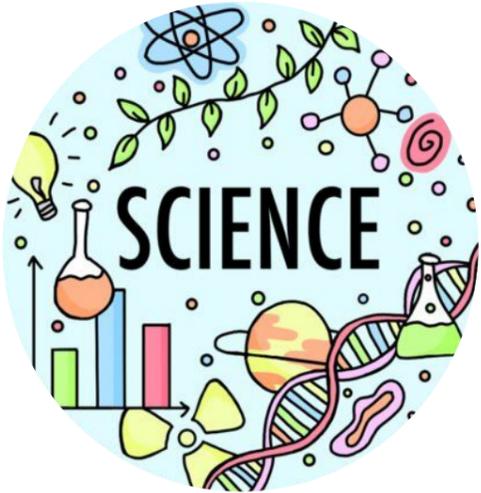


Heath Hayes Academy Curriculum Progression

Core Subjects

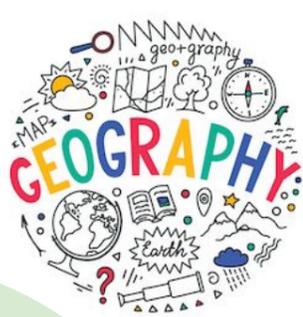


Foundation Subjects





Geography Journey at Heath Hayes Academy



EYFS

People Culture and Communities

Explain some similarities and differences between life in this country and life in other countries.

Describe their immediate environment using knowledge from observation,

The Natural World

Explore the natural world around them,

Know some similarities and differences between the natural world around them and contrasting environments,

Understand some important processes and changes (seasons and states of matter).

Year 1

Study the geography of the school and grounds.

Devise a simple map, and use basic symbols in a key.

Use near, far, left and right to describe map features.

Use North, South, East & West compass directions.

Use maps, atlases and globes to find the 7 continents, England and Wales.

Identify hot and cold areas in the world.

Identify seasonal weather patterns in the UK.

Understand differences in human and physical geography.

Identify characteristics and capital cities of the UK (England and Wales).

Know the world's 7 continents.

Year 2

Know the world's 5 oceans.

Identify characteristics and capital cities of the UK (Scotland & Northern Ireland).

Understand similarities and differences in human and physical geography.

Identify daily weather patterns in the UK.

Identify hot and cold areas in relation to the Equator, North Pole & the South Pole.

Use maps, atlases and globes to find the 7 continents, the 5 Oceans and countries in the UK.

Use North, South, East & West compass directions.

Use aerial and plan perspectives.

Use near, far, left and right to locate features and routes on a map.

Devise a simple map, and construct symbols in a key.

Study the geography of the surrounding environment.

Year 3

Use fieldwork, sketch maps and create plans to observe the local area.

Use maps, atlases and globes to locate countries.

Identify: the Equator, Northern Hemisphere, Southern Hemisphere, Arctic and Antarctic Circle

Understand human and physical geography of a region in the UK.

Describe aspects of human and physical geography.

Identify regions, human and physical geography in the UK.

Identify cities in the UK

Know countries in Europe.

Year 4

Know the world's countries extending further than Europe.

Identify counties in the UK

Understand key aspects of human and physical geography.

Identify: latitude, longitude, E, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle.

Understand and compare human and physical geography of a region in the UK, and a European country.

Use digital/computer mapping to describe features studied.

Use 4-figure grid references..

Observe, measure, record and present findings of fieldwork.

Year 5

Observe, measure, record and present findings of fieldwork.

Use 6-figure grid references, and 8 points of a compass.

Use digital/computer mapping to describe features studied.

Describe: volcanoes and earthquakes.

Describe: types of settlement and land use, economic activity including trade links.

Understand differences of human and physical geography of a region in the UK.

Understand Prime. Greenwich Meridian and time zones.

Know key topographical features (including hills, mountains, coasts and rivers) in United Kingdom.

Concentrate on environmental regions and key physical and human characteristics.

Locate countries and major cities in Europe, Asia, Africa and Australia.

Year 6

Locate countries and major cities on all continents.

Concentrate on environmental regions and key physical and human characteristics.

Identify land-use patterns, and how these have changed over time.

Understand differences of human and physical geography of a region in North/South America.

Describe and understand the distribution of natural resources, including energy, food, minerals and water.

Describe and understand: biomes and vegetation belts.

Use 6-figure grid references, 8 points of a compass and Ordnance Survey maps.

Observe, measure, record and present findings of fieldwork.

Use: sketch maps, graphs and digital technologies.

FINISH



Music Journey at Heath Hayes Academy



EYFS

Expressive Arts & Design

Invent, adapt and recount narratives and stories with peers and their teacher.

Sing a range of well-known rhymes and songs.

Perform songs, rhymes, poems and stories with others, and try to move in time with music.

Explore the inter-related dimensions of music (tempo and pitch).

Year 1

Experiment with, create and select sounds using the inter-related dimensions of music (tempo, duration and dynamics).

Listen with concentration to a range of high-quality recorded music.

Play tuned instruments musically.

Use their voices expressively by singing songs and speaking chants.

Year 2

Use their voices creatively by singing rhymes.

Play untuned instruments musically.

Listen with concentration to a range of high-quality live and recorded music.

Combine sounds using the inter-related dimensions of music (pitch, timbre, texture, structure).

Year 3

Listen with attention to detail.

Develop an idea of the history of music.

Appreciated a wide range of high-quality music from different traditions.

Know staff notation.

Improvise music for a range of purposes (tempo, duration and dynamics).

Play ensemble contexts, using voice and instruments.

Year 4

Play and perform ensemble contexts, using voice and instruments.

Compose music for a range of purposes (pitch, timbre, texture, structure).

Know and use musical notations.

Understand a wide range of high-quality music from different traditions.

Develop an understanding of the history of music.

Listen and recall sounds with increasing aural memory.

Year 5

Use and understand staff notation.

Understand the history of music by making comments.

Appreciate and understand a wide range of high-quality music from different traditions.

Listen with attention to detail and recall sounds.

Compose music using the inter-related dimensions of music (tempo, duration and dynamics).

Using voice and instruments with increasing accuracy and fluency.

Play and perform in solo contexts.

Year 6

Play and perform in ensemble contexts.

Using voice and instruments with increasing control and expression.

Improvise music using the inter-related dimensions of music (all).

Listen, recall and repeat sounds with increasing aural memory.

Understand a wide range of live and recorded high-quality music.

Understand the history of music by making judgements.

Use and understand staff and musical notations.

FINISH



Computing Journey at Heath Hayes Academy



EYFS

Use technology safely and respectfully, keeping personal information private.

Recognise common uses of information technology within school and home.

Use technology purposefully to create and organise.

Use logical reasoning.

Create simple programs.

Understand what algorithms are.

Year 1

Year 2

Understand how algorithms are implemented and that programs execute by following precise and unambiguous instructions.

Debug simple programs.

Use reasoning to predict the behaviour of simple programs.

Use technology purposefully to store, manipulate and retrieve digital content.

Recognise common uses of information technology beyond school and home.

Identify where to go for help and support when they have concerns about content or contact using technology.

Year 3

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour.

Understand search technologies and appreciate how results are selected and ranked.

Begin to understand how the internet works.

Select and use software to design and create a range of programs, systems and content.

Begin to use reasoning to explain how some simple algorithms work.

Use sequence and selection, in programs.

Design and write programs that accomplish specific goals, control physical systems and begin to solve problems by breaking down into small parts.

Year 4

Debug programs that accomplish specific goals, control physical systems and begin to solve problems by breaking down into small parts.

Use repetition in programs; work with inputs and outputs.

Begin to use reasoning to detect and correct simple errors in algorithms and programs.

Combine software to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Begin to understand computer networks and how networks can provide multiple services.

Evaluate digital content in search technologies.

Identify a range of ways to report concerns about content and contact.

Year 5

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour.

Select, use and combine software to design and create a range of programs, systems and content that accomplish given goals including presenting data and information.

Use search technologies effectively and understand and appreciate how results are selected and ranked.

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web.

Use logical reasoning to explain how some simple algorithms work.

Use sequence, selection, and repetition in programs.

Design and write programs that accomplish specific goals, including controlling or simulating physical systems.

Year 6

Debug programs that accomplish specific goals, including controlling or simulating physical systems.

Solve problems by decomposing them into smaller parts.

Work with variables and various forms of input and output.

Use logical reasoning to detect and correct errors in algorithms and programs.

Understand computer networks and the opportunities they offer for communication and collaboration.

Select, use and combine a variety of software to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing and evaluating.

Identify a range of ways to report concerns about content and contact.

FINISH

Religious Education Journey at Heath Hayes Academy



EYFS

People Culture and Communities

Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps.

Know some similarities and differences between different religious and cultural communities in this country, drawing on their experiences and what has been read in class.

Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and maps.

Year 1

Reflect on examples of care and concern shown by believers and religious communities and explore reasons for these actions.

Values & commitments

Ask and respond imaginatively to questions about things that are interesting or puzzling; listen to and question about stories of individuals and their relationship with God.

Meaning purpose and truth

Find out about ceremonies in which special moments in the life cycle are marked.

Identity diversity and belonging

Engage with religious beliefs and ideas expressed through story, symbol, and other visual forms.

Expressing meaning

Find out how and when people worship; explore the preparations for festivals.

Practices and ways of life

Engages with stories and extracts; explore the lives and teachings of religious key figures.

Belief teachings and sources.

Year 2

Belief teachings and sources.

Talk about the meaning of stories and extracts; find out ways sacred texts are regarded, read and handled.

Practices and ways of life

Ask questions about worship and its importance to believers; identify the importance of belonging to a religion and the difference it has on their lives

Expressing meaning

Explore the special nature of artefacts in worship, identify symbolic actions, gestures and rituals and talk about how they are used.

Identity diversity and belonging

Reflect and respond to stories about belonging and relating to religious communities; identify and question customs associated with religious communities

Meaning purpose and truth

Explore a range of stories and extracts from sacred writings and talk about the meaning they have for believers

Values & commitments

Reflect and respond to stories highlighting the morals and values of believers; explore stories from religious traditions and find out about attitudes to the natural worlds

Year 3

Investigate ceremonies associated with joining or belonging to a faith community and talk about the meaning of commitment.

Values & commitments

Raise questions about issues which cause people to wonder and investigate some answers to be found in religious writings and teachings.

Meaning purpose and truth

Find out about the activities of a local religious community and make links with key religious teachings.

Identity diversity and belonging

Identify some of the ways in which religions name and describe attributes of God and make links with belief and practice.

Expressing meaning

Identify the main features and patterns of an act of worship and talk about the importance of worship for believers.

Practices and ways of life

Explore the life of key religious figures and makes links with teachings and practices of special significance to followers.

Belief teachings and sources.

Year 4

Belief teachings and sources.

Explore the origins or sacred writings and consider their importance for believers today.

Practices and ways of life

Compare and contrast the practice of religion in the home in different religious communities.

Expressing meaning

Explore the symbolic use of a wide range of objects, sounds, visual images, actions and gestures and make suggestions as to the intended meaning they might have for believers.

Identity diversity and belonging

Research some key events in the development of a religious tradition and explain the impact on believers today.

Meaning purpose and truth

Investigate stories about God's relationship with people and suggest how, for some people, this helps them to make sense of life.

Values & commitments

Engage with a variety of people about their beliefs and values and ask questions about the way commitment affects their lives.

Year 5

Explore rules for living found in sacred writings and teachings and ask questions about their impact on the lives of believers.

Values & commitments

Investigate and reflect on a range of religious responses to suffering, hardship and death.

Meaning purpose and truth

Investigate the importance for believers of ceremonies in which special moments in the life cycle are marked.

Identity diversity and belonging

Identify some of the ways in which religions name and describe attributes of God and make links with belief and practice.

Expressing meaning

Investigate some features of key religious festivals and celebrations and identify similarities and differences.

Practices and ways of life

Explore the meaning of a wide range of stories about the beginnings of the world and reflect upon their importance for believers.

Belief teachings and sources.

Year 6

Belief teachings and sources.

Explore a variety of forms of literature found in sacred books and investigate a range of religious teachings.

Practices and ways of life

Investigate the life of a person who has been inspired by their faith and make links between belief and action.

Expressing meaning

Compare and contrast the use of symbols, actions and gestures used in worship by different communities.

Identity diversity and belonging

Explore the diversity of a range of religious traditions and identify and reflect on similarities and differences.

Meaning purpose and truth

Make links between beliefs and action and reflect on how this might have local, national and international impact.

Values & commitments

Explore religious stories and teachings about the environment and identify and reflect on their impact on behaviour.

FINISH

Design & Technology Journey at Heath Hayes Academy



EYFS

Expressive Arts & Design

Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Share their creations, explaining the process they have used.

Make use of props and materials when role playing characters in narratives and stories.

Year 1

Understand where food comes from.

Build structures, exploring how they can be made stronger, stiffer and more stable.

Explore and evaluate a range of existing products.

Select from and use materials and components according to their characteristics (construction materials).

Select and use a tools and equipment (cutting & shaping).

Generate and model through talking, drawing, templates.

Design purposeful, functional, appealing products for themselves.

Year 2

Design purposeful, functional, appealing products for others.

Generate, develop, model and communicate ideas using mock-ups.

Use ICT to design.

Select and use tools and equipment (cutting, shaping, joining & finishing).

Select and use materials and components according to their characteristics (construction & textiles).

Evaluate their ideas and products against design criteria.

Explore and use mechanisms in products.

Use the basic principles of a healthy and varied diet to prepare dishes.

Year 3

Prepare and cook a variety of savoury dishes.

Understand and apply the principles of a healthy and varied diet.

Evaluate ideas and products against their own design criteria.

Investigate an existing product.

Select and use materials according to their functional properties and aesthetic qualities (construction materials).

Select and use tools to perform practical tasks accurately (cuttings, shaping, joining and finishing).

Develop and model ideas (annotated sketches & prototypes).

Generate ideas through discussion.

Develop design criteria for functional products which are fit for purpose.

Use research to inform design of products.

Year 4

Develop design criteria to inform the design of innovative products.

Communicate ideas through discussion.

Develop and model ideas (cross sectional or exploded diagrams).

Select and use tools to perform practical tasks accurately (cutting, shaping, joining and finishing).

Select and use materials according to their functional properties and aesthetic qualities (construction & textiles).

Analyse an existing product.

Understand how key events in design and technology have helped shape the world.

Apply their understanding of how to strengthen, stiffen and reinforce complex structures.

Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Year 5

Use a range of cooking techniques.

Apply the principles of a healthy and varied diet.

Understand and use mechanical systems.

Evaluate against own design criteria.

Investigate and analyse a few of existing products.

Select and use materials according to their functional properties and aesthetic qualities (construction and textiles).

Select and use tools to perform practical tasks (cutting, shaping, joining and finishing).

Generate, develop, model and communicate through: discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes.

Develop innovative, functional, appealing products that are fit for purpose.

Use research to inform design of products.

FINISH

Year 6

Develop innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

Generate, develop, model and communicate through: discussion, pattern pieces, computer-aided design.

Select and use tools to perform practical tasks accurately (cutting, shaping, joining and finishing).

Select and use materials according to their functional properties and aesthetic qualities (construction & textiles).

Investigate and analyse a range of existing products.

Evaluate the views of others to improve their work.

Understand how key individuals in D&T have helped shape the world.

Apply understanding of computing to program, monitor and control their products.

Use a range of cooking techniques.

Know where and how a variety of ingredients are grown, reared, caught and processed.



History Journey at Heath Hayes Academy



EYFS

Past & Present

Talk about the lives of the people around them and their roles in society.

Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class.

Understand the past through settings, characters and events encountered in books read in class and storytelling.

Year 1

Use historical language: past, long time ago, decade, old, century.

Recount events in history verbally.

Place events in order.

Identify some parts of historical events.

Use pictures and artifacts to find information about the past.

Asking questions about the past.

Year 2

Use stories and sources to find information about the past.

Describe parts of historical events.

Place events in order including dates.

Recount and record events in history.

Use historical language: past, long time ago, decade, old, century.

Year 3

Understand history from the perspective of children.

Describe the social and religious diversity of the past.

Compare sources (differences) and what information they give about the past.

Recognise the concept of change of time.

Suggest causes for events in history.

Year 4

Suggest consequences for events in history.

Understand the concept of change over time.

Describe historical accounts.

Compare sources (similarities and differences) and what information they give about the past.

Describe the ethnic, cultural and social diversity of the past.

Understand history from the perspective of men, women and children.

Year 5

Use vocabulary: dates, time period, era, chronology, continuity, change, century, decade, legacy.

Understand history from the perspective of women, men and children and the ideas towards them.

Describe the main changes in a period of history (social, religious and cultural).

Describe the social, ethnic, cultural or religious diversity of past society.

Recognise the concept of continuity.

Suggest causes for events in history using sources for evidence.

Show awareness of propaganda.

Year 6

Understand the necessity for multiple sources of evidence.

Explain awareness of propaganda.

Suggest consequences for events in history using sources for evidence.

Understand the concept of change over time.

Describe the social, ethnic, cultural or religious diversity of past society including how this has changed over a period of time.

Describe the main changes in a period of history (political, technological and social).

Use vocabulary: dates, time period, era, chronology, continuity, change, century, decade, legacy.

Understand history from the perspective of women, men and children and the attitudes and beliefs towards them.

FINISH



Art & Design Journey at Heath Hayes Academy



EYFS

Expressive Arts & Design

Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Share their creations, explaining the process they have used.

Make use of props and materials when role playing characters in narratives and stories.

Year 1

Compare similarities and differences between pieces of art or design.

To describing differences and similarities between different practices and disciplines.

To use colour, pattern and texture to: Show pattern and texture using lines and dots. Use rolled up paper, straws, paper, card and clay as materials for sculpture. Collage torn and cut shapes
Understand colour wheel

To use drawing painting and sculpture to share and recreate ideas.

How to design a product.

Year 2

How to design a product from a brief.

To use drawing painting and sculpture to share ideas based on experiences and imagination.

To use line, shape, form and space to: Explore thickness and sizes of lines. Exploring tone by drawing light and dark areas. Mix primary colours to make secondary colours. Add white to colours to make tints and black to colours to make tones.

To make links within their own artwork and that of artists, craft makers and designers.

Use ideas of artists, craft makers and designers studied for own work.

Showing a link between own work and artist or designer's work.

Year 3

To understand techniques used.

To research artists, architects, designers in history.

Use sculpture to make recognisable forms. Sculpt to express movement.

Select materials for collage for striking effect and present effectively.

Using a range of brushes for effect. Mix paint effectively. Print using 2 or more colours.

Draw using pencils of varying hardness. Sketch lightly avoiding hard lines for outline.

To record observations.

Year 4

To record observation, review and revisit ideas.

Watercolours for washed backgrounds. Using colours to create mood.

Draw using pencils of varying hardness to show line, texture and tone. Sketch lightly avoiding hard lines for outline (no use of rubber).

Use textiles including basic cross stitch and backstitch, colour fabrics and weave.

Use sculpture to make recognisable forms. Sculpt to express movement.

To understand techniques used by artists, architects, and designers.

To demonstrate awareness of choice of style.

Year 5

Understanding techniques used by artists, architects and designers.

To research artists, architects and designers who have impacted the world.

Sculpt to using tools for texture and pattern. Sculpt life-like objects with appropriate proportions or if abstract intent proportional differences.

Select materials for collage for striking effect including ceramic mosaics.

Select materials for collage for striking effect including ceramic mosaics.

Include techniques in drawing or painting to show reflection, sunlight and shadows.

Use paint suited to their qualities e.g. watercolours and acrylics. Create own colour palette from stimulus. Combine colours, tones and tints to enhance mood of the piece. Print using several colours and layers.

Have a record of prior skills learnt with reflections.

Year 6

Have a solid record of prior skills learnt with purposeful reflections and adaptations.

Develop personal style of painting. Include techniques in drawing or painting to show movement and perspective.

Use textiles including a range of stitching techniques for purpose and effect.

Create original pieces which show personal influence and style.

Sculpt to using tools for texture and pattern. Sculpt life-like objects with appropriate proportions or if abstract intent proportional differences.

To understand how artists, architects and designers impacted the world.

Apply techniques used by artists, architects and designers.

Understand media for purpose.

FINISH

Working Scientifically Journey at Heath Hayes Academy



EYFS

Explore the natural world around them, making observations and drawing pictures of animals and plants.

KS1

Asking simple questions and recognising that they can be answered in different ways.

Observing closely, using simple equipment.

Performing simple tests.

KS1

Identifying and classifying.

Using their observations and ideas to suggest answers to questions.

Gathering and recording data to help in answering questions.

LKS2

Asking relevant questions and using different types of scientific enquiries to answer them.

Setting up simple practical enquiries, comparative and fair tests.

Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.

LKS2

Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.

Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

Identifying differences, similarities or changes related to simple scientific ideas and processes.

Using straightforward scientific evidence to answer questions or to support their findings.

UKS2

Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Taking measurements, using a range of scientific equipment, with increasing accuracy and precision.

Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs.

UKS2

Using test results to make predictions to set up further comparative and fair tests.

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations.

Identifying scientific evidence that has been used to support or refute ideas or arguments.

FINISH

Year 1 Science



Year 1

identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense

describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)

identify and name a variety of common animals that are carnivores, herbivores and omnivores

identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals

Animals, including humans

Plants

identify and name a variety of common wild and garden plants, including deciduous and evergreen trees

identify and describe the basic structure of a variety of common flowering plants, including trees

compare and group together a variety of everyday materials on the basis of their simple physical properties

describe the simple physical properties of a variety of everyday materials

identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock

distinguish between an object and the material from which it is made

Everyday materials

Year 2

Seasonal Changes

observe changes across the 4 seasons

observe and describe weather associated with the seasons and how day length varies

Year 2 Science



Year 2

describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

find out about and describe the basic needs of animals, including humans, for survival (water, food and air)

notice that animals, including humans, have offspring which grow into adults

Animals, including humans

Plants

observe and describe how seeds and bulbs grow into mature plants

find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

identify and name a variety of plants and animals in their habitats, including microhabitats

identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

explore and compare the differences between things that are living, dead, and things that have never been alive

Living things and their habitats

Year 3

Uses of everyday materials

identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses

compare how things move on different surfaces

find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Year 3 Science



Year 3

explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

investigate the way in which water is transported within plants

explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant

identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers

Plants

Animals including humans

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

find patterns in the way that the size of shadows change

recognise that shadows are formed when the light from a light source is blocked by a solid object

recognise that light from the sun can be dangerous and that there are ways to protect their eyes

notice that light is reflected from surfaces

recognise that they need light in order to see things and that dark is the absence of light

Light

Rocks

compare and group together different kinds of rocks on the basis of their appearance and simple physical properties

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

Year 4

predict whether 2 magnets will attract or repel each other, depending on which poles are facing

describe magnets as having 2 poles

compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials

observe how magnets attract or repel each other and attract some materials and not others

notice that some forces need contact between 2 objects, but magnetic forces can act at a distance

compare how things move on different surfaces

Forces & Magnets

Year 4 Science

Year 4

recognise that environments can change and that this can sometimes pose dangers to living things

explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

recognise that living things can be grouped in a variety of ways

All Living Things

Animals including humans

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

recognise that sounds get fainter as the distance from the sound source increases

find patterns between the volume of a sound and the strength of the vibrations that produced it

find patterns between the pitch of a sound and features of the object that produced it

recognise that vibrations from sounds travel through a medium to the ear

identify how sounds are made, associating some of them with something vibrating

Sound

States of Matter

compare and group materials together, according to whether they are solids, liquids or gases

observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$)

identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

recognise some common conductors and insulators, and associate metals with being good conductors

recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery

construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

identify common appliances that run on electricity

Electricity

Year 5

Year 6 Science

Year 5

describe the life process of reproduction in some plants and animals

describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird

Living things and their habitats

Animals including humans

describe the changes as humans develop to old age

use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky

describe the Sun, Earth and Moon as approximately spherical bodies

describe the movement of the Moon relative to the Earth

describe the movement of the Earth, and other planets, relative to the Sun in the solar system

Earth and Space

Forces

explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

identify the effects of air resistance, water resistance and friction, that act between moving surfaces

recognise that soils are made from rocks and organic matter

Year 6

explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda

demonstrate that dissolving, mixing and changes of state are reversible changes

give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution

compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets

Properties and Change of Materials

Year 6 Science

Year 6

give reasons for classifying plants and animals based on specific characteristics

describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals

Living Things and their habitats

Animals including humans

identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

describe the ways in which nutrients and water are transported within animals, including humans

use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

recognise that light appears to travel in straight lines

Light

Electricity

associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches

use recognised symbols when representing a simple circuit in a diagram

identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago

Evolution

Finish