

Science

O Track Objectives

Working Scientifically

- Plan enquiries, including recognising and controlling variables where necessary.
- Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models.
- Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.
- Present findings in written form, displays and other presentations.
- Use test results to make predictions to set up further comparative and fair tests.
- Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.

Animals, including humans

- Describe the changes as humans develop to old age.

Living Things and their Habitats

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Describe the life process of the reproduction in some plants and animals.

Earth and Space

- Describe the movement of the Earth, and other planets, relative to the sun in the solar system.
- Describe the movement of the Moon relative to the Earth.
- Describe the Sun, Earth and Moon as approximately spherical bodies.
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

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 some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Properties and Changes of Materials

- 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.
- Know that some materials will dissolve in liquid to form a solution, and describe how to recover from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
- 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.

Geography

Geographical skills and fieldwork

- Use maps, atlases, globes and digital/ computer mapping to locate countries and describe features studied.
- Use fieldwork to observe, measure, record and present the human and physical features in a local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Locational Knowledge

- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

O Track Objectives

- To investigate places: Use different types of fieldwork to observe, measure and record the human and physical features in the local area. Record results in a range of ways.
- To investigate places: Name and locate the countries of North and South America and identify their main physical and human characteristics, and major cities.
- To communicate geographically: Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earth quakes and the water cycle; human geography, including: settlements, land use, economic activity including trade links and the distribution of natural resources including energy, food, minerals, and water supplies.
- To communicate geographically: Create maps of locations of identifying patterns (such as: land use, climate zones, populations densities, height of land)>

Year 5

History

Britain's Settlement by Anglo-Saxons and Scots

Examples (non-statutory)

- Roman withdrawal from Britain in c.AD 410 and the fall of the western Roman Empire.
- Scots invasions from Ireland to north Britain (now Scotland).
- Anglo-Saxons invasions, settlements and kingdoms: place names and village life.
- Anglo-Saxon art and culture.
- Christian conversion- Canterbury, Iona and Lindisfarne.

The Viking and Anglo-Saxon struggle for the United Kingdom to the time of Edward the Confessor

Examples (non-statutory)

- Viking raids and invasion.
- Resistance by Alfred the Great and Athelstan, the first king of England.
- Further Viking invasions and Danegeld.
- Anglo-Saxon laws and justice.
- Edward the confessor and his death in 1066.

O Track Objectives

- To understand chronology: I can describe the timing of the main events studied.
- Knowledge: I can describe and make links between events and changes and give reasons for the results of these events and changes.
- Causation and change: I can explain most of the reasons for something and show links between them.
- Causation and change: I can ask historically valid and thoughtful questions.
- Communication: Use original ways to present information and ideas.

R.E.

Autumn: 1. How and why do Christians and Muslims see life like a journey? 2. The Magi

Spring: 1. Christian Aid Islamic relief: Can they change the world? 2. Holy Week

Summer: 1. Rules 2. Why are there now 50 mosques in Yorkshire?

O Track Objectives

- To understand beliefs and teachings: Explain how some teachings and beliefs are shared between religions.
- To understand practices and lifestyles: Explain the practices and lifestyles involved in belonging to a faith community.
- To understand practices and lifestyles: Show an understanding of the role of the spiritual leader.
- To understand how beliefs are conveyed: Explain some of the different ways that individuals show their beliefs.
- To reason: I can explain reasons for a point of view.

Art

O Track Objectives

To Develop Ideas:

- Develop and imaginatively extend ideas from starting points throughout the curriculum.
- Collect information, sketches and resources.
- Presents ideas imaginatively in a sketch book.
- Use the qualities of materials to enhance ideas.
- Spot the potential in unexpected results as work progresses.

To Master Techniques:

- Drawing- Use a choice of techniques to depict movement, perspective, shadows and reflection.
- Drawing- Use lines to represent movement.
- Collage- Mix textures (rough and smooth, plain and patterned).
- Collage- Use ceramic mosaic materials and techniques.
- Painting- Sketch (lightly) before painting to combine line and colour.
- Painting- Create a colour palette based upon colours observed in the natural or built world.
- Print- Build up layers of colours.
- Sculpture- Use tools to carve and add shapes, texture and pattern.
- Sculpture- Use frameworks (such as wire or moulds) to provide stability and form.
- Textile- Choose from a range of stitching techniques.

To Take Inspiration from the Greats (classic and modern)

- Give details (including own sketches) about the style of some notable artists, artisans and designers.
- Create original pieces that show a range of influences and styles.

Languages

O track objectives

- To read fluently: Read and understand the main points and some of the detail in short written texts.
- To read fluently: Use the context of a sentence to work out the meaning of unfamiliar words.
- To read fluently: show confidence when reading aloud, and in using reference materials (inc. dictionaries).
- To write imaginatively: Write short texts on a familiar topic, changing sentences previously learnt.
- To write imaginatively: Use dictionaries or glossaries to find suitable imaginative language.
- To speak and listen confidently: Understand the main points and opinions in a spoken passage.
- To speak and listen confidently: Give a short prepared talk that includes opinions.
- To speak and listen confidently: Refer to recent experiences or everyday activities and interests.
- To speak and listen confidently: Be understood with little or no difficulty.
- To understand the culture of the countries in which the language is spoken: Give more detailed accounts of the customs, history and culture of the countries and communities where the language is spoken.
- To understand the culture of the countries in which the language is spoken: Describe, with interesting detail, some similarities and differences between countries and communities where the language is spoken and this country.

Music

O Track Objectives

To Perform:

- Sing or play from memory with confidence.
- Perform solos or as part of an ensemble.
- Sing or play expressively and in tune.
- Hold a part within a round.
- Sing a harmony confidently and accurately.
- Sustain a drone or a melodic ostinato to accompany singing.
- Perform with controlled breathing (voice) and skilful playing (instrument).

To Compose:

- Create songs with verses and a chorus.
- Create rhythmic patterns with an awareness of timbre and duration.
- Combine a variety of musical devices, including melody, rhythm and chords.
- Thoughtfully select elements for a piece in order to gain a defined effect.
- Use drones and melodic ostinato (based on pentatonic scale).
- Convey the relationship between lyrics and the melody.
- Use digital technologies to compose, edit and refine pieces of music.

To Transcribe:

- Use the standard musical notation of crotchet, minim and semibreve to indicate how many beats to play.
- Read and create notes the musical stave.

To Describe Music:

- Choose from a wide range of musical vocabulary to accurately describe and appraise music including: pitch, dynamics, tempo, timbre, texture, lyrics and melody, sense of occasion, expressive, solo, rounds, harmonies, accompaniments, drones, cyclic patterns, combinations of musical elements, cultural context.

Computing

O Track Objectives

Computer Science

- Design programs that accomplish specific goals.
- Design and create programs.
- Debug programs that accomplish specific goals.
- Use repetition in programs.
- Use logical reasoning to detect and correct errors in programs.
- Appreciate how search results are selected.

Information Technology

- Select a variety of software to accomplish given goals.
- Select, use and combine internet services.

Digital Literacy

- Understand the opportunities computer networks offer for communication.
- Identify a range of ways to report concerns about content.
- Recognize acceptable / unacceptable behaviour.

Design and Technology

O Track Objectives

To design, make, evaluate and improve:

- Ensure products have a high quality finish, using art skills where appropriate.
- Make products through stages of prototypes, making continual refinements.

To take inspiration from design throughout history:

- Combine elements of design from a range of inspirational designers throughout history, giving reasons for choice.
- Evaluate the design of products so as to suggest improvements to the user experience.

To master practical skills:

- **Food-** Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).
- **Food-** Demonstrate a range of baking and cooking techniques.
- **Materials-** Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).
- **Textiles-** Create objects (such as a cushion) that employ a seam allowance.
- **Electrics and electronics-** Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).
- **Computing-** Write code to control and monitor models or products.
- **Mechanics-** Convert rotary motion to linear using cams.

PE

O Track Objectives

To develop practical skills in order to participate, compete and lead a healthy lifestyle.

Games

- Choose and combine techniques in game situations (running, throwing, catching, passing, jumping and kicking, etc.).
- Work alone, or with team mates in order to gain points or possession.
- Strike a bowled or volleyed ball with accuracy.
- Use forehand and backhand when playing racket games.
- Uphold the spirit of fair play and respect in all competitive situations.

Dance

- Compose creative and imaginative dance sequences.
- Perform expressively and fluently and hold a precise and strong body posture.
- Perform and create complex sequences.

Gymnastics

- Create complex and well executed sequences that include a full range of movements including: travelling, balances,
- Include in a sequence set movements, choosing the most appropriate linking elements.
- Hold controlled shapes that are strong, fluent and expressive.
- Vary speed, direction, level and body rotation during floor performances.

Swimming

- To have an understanding of basic water safety.
- Swim unaided up to 25 metres.
- Use one basic stroke, breathing correctly.
- Control leg movements to create a forward motion.
- To enter and exit the water in an appropriate manner.
- Swim between 25 and 50 metres unaided.
- Use more than one stroke and coordinate breathing as appropriate for the stroke being used.
- Coordinate leg and arm movements to travel forwards.
- Swim at the surface and below the water.
- Swim over 100 metres unaided.
- Use breast stroke, front crawl and back stroke, ensuring that breathing is correct so as not to interrupt the pattern of swimming.
- Swim fluently with controlled strokes.
- To swim and short distance under the water.

Athletics

- Choose the best pace for running over a variety of distances.
- Throw accurately and refine performance by analyzing technique and body shape.

Outdoor and adventurous activities

- Arrive properly equipped for outdoor and adventurous activity.
- Understand the need to show accomplishment in managing risks.
- Show an ability to both lead and form part of a team.
- Support others and seek support if required when the situation dictates.
- Show resilience when plans do not work and initiative to try new ways of working.
- Use maps, compasses and digital devices to orientate themselves.
- Remain aware of changing conditions and change plans if necessary.

PSHCEE

O Track Objectives

My Healthy Lifestyle

- I know what and can make choices to a healthy lifestyle- the benefits of exercise and healthy eating and the factors (positive and negative) that affect mental health, including positive self-image.
- I know where individuals, families and groups can get help and support.
- I can express my views confidently and listen to and show respect for the views of others.
- I can resolve differences, looking at alternatives, making decisions and explaining choices.
- I can deal positively with my feelings and recognise a range of emotions in others and can explain the intensity of my feelings to others.

Me and My Future

- I know about the range of jobs carried out by people and the range of earnings for different jobs and jobs that are specific to my local area both past and present.
- I understand how and why people save and can plan for future spending.
- I know and understand how I can develop skills to make a contribution in the future
- I understand 'value for money' and can make informed choices to get 'value for money' and assess the 'best buy' in a range of circumstances.
- I can differentiate between essentials and desires - needs and wants.
- I can discuss wider issues such as 'does money make you happy?'
- I know that I have the same rights and opportunities in learning and work the same as other people.

Moving On

- I can understand why other people are behaving as they are when they are finding change difficult.
- I know some of the ways of dealing with the feelings that sometimes arise from changes.

Me and My Relationships

- I understand simple, safe routines to prevent the spread of bacteria and viruses.
- I know where individuals, families and groups can get help and support.

Keeping Myself Safe

- I can identify a range of risks connected to alcohol, tobacco, medicines and illegal drugs and know which ones are illegal.
- I recognise that not all information on the internet is accurate including advertising and can develop strategies for identifying the origin of a website.
- I know how to present myself safely online e.g. social media sites.
- I understand that the person that I think I am communicating with on-line may not be who they say they are.
- I can use online tools safely to exchange information and collaborate with others within and beyond school.
- I understand the potential risks of providing personal information in an increasing range on online technologies both within and outside school.
- I communicate confidently and safely with others within and beyond my school.
- I know that the pressure to behave in an unacceptable, unhealthy or risky way can come from a variety of sources including people I know and the media

Me and My Future

- I know how to access local and national support groups and I know where to find impartial advice to inform my decision making.
- I know that circumstances in other countries and cultures may be different from our own and appreciate the range of national, regional, religious and ethnic identities in the United Kingdom.
- I know about Fair Trade and what it means.
- I understand that choices we make as individuals, a community and a nation impact internationally and can describe some of the different beliefs and values in society and demonstrate respect and tolerance towards people who are different from myself I am beginning to understand that 'poverty' might have different meanings to different people in different circumstances.
- I can resolve differences, looking at alternatives, making decisions and explaining choices.