

NATIONAL CURRICULUM CONTENT

TEACHING & LEARNING OUTCOMES

OTHER POINTS TO NOTE

Crime, Inc.

To include:

- **Science:** Sound
- **Science:** Electricity
- **Geography:** International Trade
- **History:** Crime and Punishment – From Anglo-Saxon to Present
- **Art and Design:** Graffiti Art & Artists
- **Design and Technology:** Security Alarms (Electrical Systems & Programming)
- **RE:** Belief in Action

Working Scientifically

- ✓ 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
- ✓ 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.

Sound

- ✓ Identify how sounds are made, associating some of them with something vibrating
- ✓ Recognise that vibrations from sounds travel through a medium to the ear
- ✓ Find patterns between the pitch of a sound and features of the object that produced it
- ✓ Find patterns between the volume of a sound and the strength of the vibrations that produced it
- ✓ Recognise that sounds get fainter as the distance from the sound source increases

- Know that sounds are made when objects/materials vibrate.
- Describe observations about seeing and feeling a variety of materials vibrating and consider what it means.
- Understand that sounds can travel through different materials, i.e. solids, liquids and gases.
- Compare the volume of different sounds; recognising how volume is measured as well as what makes a sound louder or quieter.
- Explore the relationship between volume and distance.
- Recognise that some materials reduce the amount of sound that reaches the ear; understanding that some materials are more effective than others.
- Understand that the term ‘pitch’ describes how low or high a sound is.
- Know the factors that affect the pitch of a drum (Size, tightness).
- Know the factors that affect the pitch of a stringed instrument (length, thickness, tightness).
- Understand that sound can be made by air vibrating.
- Know how to control the pitch of a variety of wind instruments (long, vibrating air columns produce low notes, whilst short, vibrating air columns produce high notes).
- Recognise why pitch in wind instruments can be altered.

See Collins Connect ‘Snap Science’ Teaching Framework and Online Platform - <http://connect.collins.co.uk>

UNIT: Good Vibrations

Science

Working Scientifically

- ✓ Asking relevant questions and using different types of scientific enquiries to answer them
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Electricity

- ✓ Identify common appliances that run on electricity
- ✓ Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- ✓ 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
- ✓ Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- ✓ Recognise some common conductors and insulators, and associate metals with being good conductors

- Recognise the different sources and uses of electricity.
- Identify the common conductors of electricity (e.g. metals) and insulators (e.g. non-metals).
- Know the different common components of an electrical circuit.
- Understand how electricity flows through a complete circuit.
- Recognise how to construct circuits which incorporate bulbs, switches and buzzers.
- Use logical reasoning and problem solving skills to identify faults within a circuit.
- Understand that a switch is a controlled break within a circuit which stop electricity flowing to all parts.

See Collins Connect ‘Snap Science’ Teaching Framework and Online Platform - <http://connect.collins.co.uk>

UNIT: Switched On

Geography

Human and physical geography

- ✓ Describe and understand key aspects of:
 - ⇒ Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
 - ⇒ Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- ✓ Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- ✓ Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- ✓ Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies

- Recognise that many products are produced and distributed around the world to and from a variety of countries (international trade).
- Identify the products imported and exported by the United Kingdom.
- Know the main economic activities of a number of major world countries; exploring where a variety of different products originate, including food, clothes, energy, minerals and technology.
- Understand how physical geography may affect human geography in relation to the production and distribution of resources.
- Recognise the difference between developed and developing countries.
- Understand what is meant by globalisation; investigating the positive aspects (e.g. the exchange of resources, services, culture, information, art and music) and the negative consequences (e.g. smuggling, cheap low waged labour and an uneven distribution of wealth)
- Examine a variety of global alliances and organisation that help developing countries, including those that promote fair trade.
- Understand what is meant by a trade embargo.

Possible Educational Visits:

- Science Museum
- Power Station
- Sound Studio
- Tower of London
- London Dungeons
- Police Station
- Law Courts
- Local Place of Worship
- School Visit by Community Police Officer and/or Local Religious Leader

History

- ✓ A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066

- Recognise and explore crime and punishment during different periods of British history, including the Romans, Anglo-Saxons and Vikings, Medieval and Tudor, the early modern period, and Victorians.
- Explore how and why changes in society, including invasion, religious upheaval, civil war, economic and industrial change, influenced the types of crimes that were committed, as well as the ways in which they were punished.
- Know that some of the punishments were determined by the wergild, trial by ordeal or the bloody code, and could include imprisonment, mutilation, fines and transportation [USA (until 1776) and Australia (1787-1857)].
- Identify the common crimes committed within today’s society and how they are punished.
- Explore how and why the Roman justice system still has an influence on law and order today.
- Discuss the importance of laws; identifying what might happen without them.
- Explore the creation of the police force and the use of prisons as punishments.
- Understand how and why new laws are written.
- Examine changes in law too which led to changes in crimes, such as failing to send your child to school.
- Debate whether or not there is less crime now than in the past.

Art and Design

- ✓ To create sketch books to record their observations and use them to review and revisit ideas
- ✓ To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- ✓ About great artists, architects and designers in history

- Investigate a range of prominent graffiti artists; identifying their qualities and characteristics; identifying the similarities and differences within technique and structure.
- Discuss the legal and social ramifications of graffiti art.
- Explore ideas; sketching and recording appropriate observations into sketch books.
- Investigate and experiment with different art techniques (e.g. paint, pens and stencils).
- Evaluate work and identify possible areas for improvement.

Artists:

- Banksey
- Keith Haring
- Inkie

Design and Technology

Design

- ✓ Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- ✓ Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- ✓ Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately
- ✓ Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- ✓ Investigate and analyse a range of existing products
- ✓ Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- ✓ Understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- ✓ Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers & motors]
- ✓ Apply their understanding of computing to program, monitor and control their products

- Investigate and analyse a range of existing security products; identifying materials and methods used during assembly.
- Explore how electrical systems are used within security products, e.g. series circuits incorporating switches, bulbs and buzzers.
- Understand that the security system is generally triggered when there is either unauthorised movement (sensor) or a break within the circuit.
- Apply what they have learnt through investigation to the design process.
- Present ideas clearly; using a variety of appropriate methods.
- Assemble different materials together to produce a quality house or classroom security alarm that will detect when there is a break within the circuit.
- Evaluate work and identify possible areas for improvement.

Resources :

- Electrical Circuit Components [e.g. Wire, Bulbs, Buzzers, Switches, Batteries].
- FlowGo Control Interface, FlowI3 Software, Connection Leads, Light Switches, Proximity Switches, Small Pressure Pad Switches, 6V Light Bulb & Holder, 6V Square Buzzer.
- Construction Equipment [e.g. Scissors, Glue, Sellotape, Reclaimed Cardboard Boxes, Paint].

RE

- Understand the response of religions and their beliefs to global issues: Human rights? Justice and fairness? Social justice? The importance of the environment?
- Identify and explain the similarities and differences within and between religions in their responses.
- Recognise the link between values and commitments, as well as beliefs and actions.

Resources:

- Religious stories/books.
- Artefacts from a variety of religions.

Computing

- ✓ Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- ✓ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- ✓ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

- ✓ 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 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 – *Word Processing, Presentation, Graphics, Digital Media (capturing video & sound footage, photography, animation) and Data Handling*

Suggested Software:

- World Wide Web (www) – Search Engine
- CEOP – www.thinkuknow.co.uk
- LGFL: E-Safety Framework
- LGFL London Mail

Suggested Software:

- 2Simple Software (& Purple Mash): 2Go, 2Logo, 2DIY, 2DIY 3D, 2Simulate
- Roamer World (with 2Paint A Picture)
- Purple Mash 2Code: Gibbon Lessons, Debug Challenges Gibbon
- J2Code www.j2e.com/j2code
- Scratch www.scratch.mit.edu
- Flowol3

Suggested Equipment:

- Floor Robots - BeeBot, Pro-Bot, Roamer
- Floor Mats/Grids
- FlowGo Interface
- FlowGo Mimics
- Electrical Circuit Components [e.g. Wire, Light Switches, Proximity Switches, Small Pressure Pad Switches, 6V Light Bulbs & Holders, 6V Square Buzzers, Motors]
- K’NEX & Lego Construction Sets

Suggested Software:

- 2Simple Software (& Purple Mash): 2Paint A Picture, 2Design and Make, 2Type, 2Create a Story, 2Create, 2Publish, 2Connect, 2Photo, 2Animate, 2Count, 2Graph, 2Question, 2Investigate, 2Calculate, 2Music – Explore, Beat & Sequence
- Purple Mash Topics www.purplemash.com
- Clicker 6
- Microsoft Office: Word, PowerPoint, Excel

Suggested Equipment:

- Tablets
- Digital Cameras
- Tuff Cams
- Recordable Microphones
- Film Production Equipment, e.g. lighting, green screen, tripod
- Data Loggers

Incorporate across all topics

To include:

- **Computing:** E-Safety and Digital Literacy
- **Computing:** Programming and Computer Science
- **Computing:** Creative use of ICT
- **PHSE:** Health and Wellbeing
- **PHSE:** Relationships
- **PHSE:** Living in the Wider World

PHSE

Pupil should have the opportunity to learn:

- ✓ what positively and negatively affects their physical, mental and emotional health (including the media)
- ✓ how to make informed choices (including recognising that choices can have positive, neutral and negative consequences) and to begin to understand the concept of a ‘balanced lifestyle’
- ✓ to recognise opportunities to make their own choices about food, what might influence their choices and the benefits of eating a balanced diet
- ✓ to recognise how images in the media do not always reflect reality and can affect how people feel about themselves
- ✓ to reflect on and celebrate their achievements, identify their strengths, areas for improvement, set high aspirations and goals
- ✓ to deepen their understanding of good and not so good feelings, to extend their vocabulary to enable them to explain both the range and intensity of their feelings to others
- ✓ to recognise that they may experience conflicting emotions and when they might need to listen to their emotions or overcome them
- ✓ about change, including transitions (between Key Stages and schools), loss, separation, divorce and bereavement
- ✓ to differentiate between the terms, ‘risk’, ‘danger’ and ‘hazard’
- ✓ to deepen their understanding of risk by recognising, predicting and assessing risks in different situations and deciding how to manage them responsibly (including sensible road use and risks in their local environment) and to use this as an opportunity to build resilience
- ✓ to recognise their increasing independence brings increased responsibility to keep themselves and others safe
- ✓ that bacteria and viruses can affect health and that following simple routines can reduce their spread
- ✓ that pressure to behave in an unacceptable, unhealthy or risky way can come from a variety of sources, including people they know and the media
- ✓ to recognise when and how to ask for help and use basic techniques for resisting pressure to do something dangerous, unhealthy, that makes them uncomfortable, anxious or that they believe to be wrong
- ✓ school rules about health and safety, basic emergency aid procedures, where and how to get help
- ✓ what is meant by the term ‘habit’ and why habits can be hard to change
- ✓ which, why and how, commonly available substances and drugs (including alcohol and tobacco) could damage their immediate and future health and safety, that some are legal, some are restricted and some are illegal to own, use and supply to others
- ✓ how their body will, and emotions may, change as they approach and move through puberty
- ✓ about human reproduction
- ✓ about taking care of their body, understanding that they have autonomy and the right to protect their body from inappropriate and unwanted contact their body autonomy and rights; understanding that actions such as female genital mutilation (FGM) constitute abuse, are a crime and how to get support if they have fears for themselves or their peers
- ✓ Strategies for keeping physically and emotionally safe including road safety (including cycle safety- the Bikeability programme), safety in the environment (including rail, water and fire safety), and safety online (including social media, the responsible use of ICT and mobile phones)
- ✓ the importance of protecting personal information, including passwords, addresses and the distribution of images of themselves and others
- ✓ about people who are responsible for helping them stay healthy and safe and ways that they can help these people

Pupil should have the opportunity to learn:

- ✓ to recognise and respond appropriately to a wider range of feelings in others
- ✓ to recognise what constitutes a positive, healthy relationship and develop the skills to form and maintain positive and healthy relationships
- ✓ to recognise ways in which a relationship can be unhealthy and who to talk to if they need support
- ✓ to be aware of different types of relationship, including those between acquaintances, friends, relatives and families,
- ✓ that civil partnerships and marriage are examples of stable, loving relationships and a public demonstration of the commitment made between two people who love and care for each other and want to spend their lives together and who are of the legal age to make that commitment
- ✓ to be aware that marriage is a commitment freely entered into by both people, that no one should enter into a marriage if they don’t absolutely want to do so
- ✓ that their actions affect themselves and others
- ✓ to judge what kind of physical contact is acceptable or unacceptable and how to respond
- ✓ the concept of ‘keeping something confidential or secret’, when we should or should not agree to this and when it is right to ‘break a confidence’ or ‘share a secret’
- ✓ to listen and respond respectfully to a wide range of people, to feel confident to raise their own concerns, to recognise and care about other people’s feelings and to try to see, respect and if necessary constructively challenge their points of view
- ✓ to work collaboratively towards shared goals
- ✓ to develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves
- ✓ that differences and similarities between people arise from a number of factors, including family, cultural, ethnic, racial and religious diversity, age, sex, gender identity, sexual orientation, and disability (see ‘protected characteristics’ in the Equality Act 2010)
- ✓ to realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours (including cyber bullying, use of prejudice-based language, how to respond and ask for help)
- ✓ to recognise and manage ‘dares’
- ✓ to recognise and challenge stereotypes

Pupil should have the opportunity to learn:

- ✓ to research, discuss and debate topical issues, problems and events concerning health and wellbeing and offer their recommendations to appropriate people
- ✓ why and how rules and laws that protect themselves and others are made and enforced, why different rules are needed in different situations and how to take part in making and changing rules
- ✓ to understand that everyone has human rights, all peoples and all societies and that children have their own special rights set out in the United Nations Declaration of the Rights of the Child
- ✓ that these universal rights are there to protect everyone and have primacy both over national law and family and community practices
- ✓ to know that there are some cultural practices which are against British law and universal human rights, such as female genital mutilation
- ✓ to realise the consequences of anti-social and aggressive behaviours such as bullying and discrimination of individuals and communities
- ✓ that there are different kinds of responsibilities, rights and duties at home, at school, in the community and towards the environment
- ✓ to resolve differences by looking at alternatives, seeing and respecting others’ points of view, making decisions and explaining choices
- ✓ what being part of a community means, and about the varied institutions that support communities locally and nationally
- ✓ to recognise the role of voluntary, community and pressure groups, especially in relation to health and wellbeing
- ✓ to appreciate the range of national, regional, religious and ethnic identities in the United Kingdom
- ✓ to think about the lives of people living in other places, and people with different values and customs
- ✓ about the role money plays in their own and others’ lives, including how to manage their money and about being a critical consumer
- ✓ to develop an initial understanding of the concepts of ‘interest’, ‘loan’, ‘debt’, and ‘tax’ (e.g. their contribution to society through the payment of VAT)
- ✓ that resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment
- ✓ about enterprise and the skills that make someone ‘enterprising’
- ✓ to explore and critique how the media present information

<p>Also to cover:</p> <ul style="list-style-type: none"> • Music: African Drumming • Music: Winter Performance - Singing • PE: Ball Skills – Basket Ball/Netball • PE: Gymnastics • Languages: Spanish 	<p>Music</p> <ul style="list-style-type: none"> ✓ Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression ✓ Improvise and compose music for a range of purposes using the inter-related dimensions of music ✓ Listen with attention to detail and recall sounds with increasing aural memory ✓ Use and understand staff and other musical notations <hr/> <ul style="list-style-type: none"> ✓ Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression ✓ Listen with attention to detail and recall sounds with increasing aural memory 	<p>Musical Instruments:</p> <ul style="list-style-type: none"> • African Drums
<p>Possible Educational Visits:</p> <ul style="list-style-type: none"> • African Drumming Workshop 	<p>PE</p> <ul style="list-style-type: none"> ✓ Use running, jumping, throwing and catching in isolation and in combination ✓ Play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending <hr/> <ul style="list-style-type: none"> ✓ Use running, jumping, throwing and catching in isolation and in combination ✓ Develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] ✓ Compare their performances with previous ones and demonstrate improvement to achieve their personal best 	<p><i>Record performances and evaluate.</i></p>
	<p>Languages</p> <ul style="list-style-type: none"> ✓ Listen attentively to spoken language and show understanding by joining in and responding ✓ Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words ✓ Engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help ✓ Speak in sentences, using familiar vocabulary, phrases and basic language structures ✓ Develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases ✓ Present ideas and information orally to a range of audiences ✓ Read carefully and show understanding of words, phrases and simple writing ✓ Appreciate stories, songs, poems and rhymes in the language ✓ Broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary ✓ Write phrases from memory, and adapt these to create new sentences, to express ideas clearly ✓ Describe people, places, things and actions orally and in writing ✓ Understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English 	