CAYTON MEDIUM TERM CURRICULUM PLAN SCHOOL YEAR 5 – SPRING 2



Learn from yesterday, seek today and aim for tomorrow

September 2023

ScienceDriver: Reversible and Irreversible Changes

Key Enquiry: Could you be the next CSI investigator?

ScienceDriver

Working Scientifically				
Set up an investigation when it is appropriate e.g. finding out which materials dissolve or not	Able to present information related to scientific enquiries in a range of ways including using IT such as power-point and iMovie			
Set up a fair test when needed e.g. which surfaces create most friction?	Use diagrams, as and when necessary, to support writing			
Set up an enquiry based investigation e.g. find out what adults / children can do now that they couldn't when a baby	Is evaluative when explaining findings from scientific enquiry			
Know what the variables are in a given enquiry and can isolate each one when investigating e.g. finding out how effective parachutes are when made with different materials	Clear about what has been found out from recent enquiry and can relate this to other enquiries, where appropriate			
Use all measurements as set out in Year 5 mathematics (measurement), including capacity and mass	Their explanations set out clearly why something has happened and its possible impact on other things			
Use other scientific instruments as needed e.g. thermometer, rain gauge, spring scales (for measuring Newtons)	Able to give an example of something focused on when supporting a scientific theory e.g. how much easier it is to lift a heavy object using pulleys			
Able to record data and present them in a range of ways including diagrams, labels, classification keys, tables, scatter graphs and bar and line graphs	Keep an on-going record of new scientific words that they have come across for the first time			
Make predictions based on information gleaned from investigations	Able to relate causal relationships when, for example, studying life cycles			
Create new investigations which take account of what has been learned previously	Frequently carry out research when investigating a scientific principle or theory			

What I need the children to learn	Possible learning experiences
Properties and changes in materials	
Compare properties of everyday materials	
Soluble/ dissolving	
Reversible and irreversible substances	
Compare and group materials based on	Crime Scene Investigation
their properties (e.g. hardness, solubility,	Test materials (stand alone)
transparency, conductivity, [electrical &	Lifting fingerprints off a glass/ cup by
thermal], and response to magnets	dusting
Know and explain how a material dissolves	Chromatography to identify pen
to form a solution – <i>make salt crystals</i>	Use filter paper
Know and show how to recover a substance	Soil sample from shoe of culprit
from a solution	Sieve different soils to identify a particular
Know and demonstrate how some materials	substance e.g sand
can be separated (e.g. through filtering,	Make a blood coloured vinegar and a blood
sieving and evaporating)	coloured water – children to test by adding
Know and demonstrate that some changes	bicarb to both – the one that produces
are reversible and some are not	bubbles shoes CO2 (carbon dioxide) in the
Know how some changes result in the	blood
formation of a new material and that this is	
usually irreversible	

History

What I need the children to learn	Possible learning experiences
LOCAL STUDY	
A local study linked to one of the periods of time	
studied under chronology; or	
A local study that could extend beyond 1066	
 Know about a period of history that has strong connections to their locality and understand the issues associated with the period. Know how the lives of wealthy people were different from the lives of poorer people during this time 	Victorian Britain/ Scarborough recap from KS1 – extend knowledge and use correct dates and terminology e.g. ACE
A local history study. Examples (non-statutory) a depth study linked to one of the British areas of study listed above -a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066) -a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality Can I revisit the Victorian period on a timeline, this time placing events, people and changes of British, local and world history using appropriate	Holiday knowledge built on from KS1 - Scarborough Spa Town, The Grand Hotel, Tram and focus on RAILWAYS and their significance Compare Scarborough now to the past- work for adults e.g. workhouses in the past to fishing industry Clothing, daily life and gender roles of rich vs poor men and women and links to British Values
dates, chronological conventions and time periods? e.g. Ancient Rome (753 BCE - 476 CE).	
Do I know about a period of history that has strong connections to my locality and understand the issues associated with the period?	
Can I compare the system of ruling in the Victorian period with other British periods of history?	
Can I understand how the lives of wealthy adults (quick recap of lives of Victorian children from KS1) were different from the lives of poorer adults (e.g. workhouses, fishing industry) locally during the time of the Victorians?	
Can I recap and build on my knowledge from my local history study in Key Stage 1 e.g. gender roles of men vs women then and today, making links to British Values?	
Can I understand how the introduction of the railway hugely influenced society at the time?	
Can I look again at the changing role of the Queen vs Prime Minister, comparing the role of Queen Victoria with the role of Queen Elizabeth I today?	
Key Skills Plot significant events, dates, people and changes to British, local and world history on a	

timeline using correct terminology e.g. Ancient
Rome (753 BCE - 476 CE).
Compare gender roles of men and women
during Victorian times with today making links to
British Values.
Study the impact of the railway on British
society and our local area during the Victorian
times.
Compare the changing powers of the British
monarchy over time.
Key Vocabulary
Peasantry, workhouses, debtor's prison,
constable, refractory cell

Computing

What I need the children to learn	Possible learning experiences
Logical Reasoning	
	Possible learning experiences Please use the learning objectives from the icompute website which may vary slightly from the above (this ensures that we always have the up to date learning outcomes). https://www.icompute-uk.com/members-area/uks2/index.html and select Year 5 iCrypto unit
electronically over distances	
 Lesson 5: iCrack Code Understand the algorithm of a simple shift cipher To use frequency analysis to decipher encrypted text Lesson 6: iEnigma To understand the importance of cryptography historically and today To understand how the Enigma Machine operates 	

Working Towards		Meeting		Greater Depth	
Declarative Knowledge Pupils understand/know that	Procedural Knowledge Pupils know how to	Declarative Knowledge Pupils understand/know that	Procedural Knowledge Pupils know how to	Declarative Knowledge Pupils understand/know that	Procedural Knowledg
I need to be aware of appropriate language to use in digital communications	use cameras, video, email, messaging, blogs and other forms of digital communication	 there are many different ways to communicate digitally you need a strong password to secure accounts 	 use a range of digital tools to communicate send group communications publish to a wide audience (e.g. creating videos, podcasts or web content) 	 you can communicate using a wide variety of methods inside and outside of school you need to be safe and responsible when communicating digitally 	 use digital communication to collaborate and communicate inside and outside of school (e.g. email, blogs and other digital tools) evaluate the effectiveness of a rang of digital communication tools

Music

Charanga Music Scheme - https://charanga.com/site/

What I need the	children to learn	Possible learning experiences
Unit 4 – The	e Fresh Prince of Bel-Air	
Listening and App	praise Music (Musicianship)	
Appreciate and u	nderstand a wide range of	
high-quality live and recorded music drawn		
from different tro	nditions and from great	
composers and m	nusicians	
Develop an under	rstanding of the history of	
music.		
features that dist Century Orchest Roll, South Afric	ollowing styles and any key musical tinguish the style: 20th and 21st ral, Gospel, Pop, Minimalism, Rock n' an, Contemporary Jazz, Reggae, Film Funk, Romantic and Musicals.	
Singing and Voic	е	
Play and perf	form in solo and ensemble	
contexts usin	g their voices with increasing	
accuracy, flue	ency, control and expression	
different styles o		Video with QR qrcode monkey website
	about how connected you feel to the to connects in the world.	
Notation		
Use and under	erstand staff and other musical	
notations		
the treble clef), t	e and symbols on the stave (such as he name of the notes on lines and in , a flat sign and a sharp sign.	
Playing Instru	uments	
Play and perf	form in solo and ensemble	
contexts and	playing musical instruments	
with increasi	ng accuracy, fluency, control	
and expression		
	earn to play one of four differentiated ts by ear or from notation, in the tonal	Glockenspiels and bars as a whole class

	centres of C major, F major, G major, E _b major, C minor and D minor.	
•	Improvising	
•	Improvise and compose music for a range	
	of purposes using the inter-related	
	dimensions of music	
	Experiment with using a wider range of dynamics, including very loud (fortissimo), very quiet (pianissimo), moderately loud (mezzo forte) and moderately quiet (mezzo piano).	
•	D, E D, E, F D, E, F, G D, E, F, G, A Start and end on the note D (D minor)	
•	Composing	
•	Improvise and compose music for a range	
	of purposes using the inter-related	
	dimensions of music	
•	Compose song accompaniments, perhaps using basic chords.	Use Charanga with pupil logins to experiment with the notation maker.
•	Use a wider range of dynamics, including fortissimo (very loud), pianissimo (very quiet), mezzo forte (moderately loud) and mezzo piano (moderately quiet).	
•	Performing	
List	ten with attention to detail and recall sounds	
wit	h increasing aural memory	
Pla	y and perform in solo and ensemble contexts	
usi	ng their voices with increasing accuracy,	
flue	ency, control and expression	
•	Include instrumental parts/improvisatory sections/composed passages within the rehearsal and performance.	Performance to parents to celebrate unit. Videos to send out on Class Dojo.
_	Vocabulary	

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•	Rock	
•	Bridge	
•	Backbeat	
•	Amplifier	
•	Chorus	
•	Bridge	
•	Riff	
•	Hook	
•	Improvise	
•	Compose	
•	Appraising	
•	Bossa Nova	
•	Syncopation	
•	Structure	
•	Swing	
•	Tune/head	
•	Note values	
•	Note names	
•	Big bands	
•	Pulse	
•	Rhythm	
•	Solo	
•	Ballad	
•	Verse	
•	Interlude	
•	Tag ending	
•	Strings	
•	Piano	
•	Guitar	
•	Bass	
•	Drums	
•	Melody	
•	Cover	
•	Old-school Hip Hop	
•	Rap	
•	Synthesizer	
•	Deck	
•	Backing loops	
•	Funk	
•	Scratching	
•	Unison	
•	Pitch	
•	Tempo	
•	Dynamics	
•	Timbre	
•	Texture	
•	Soul	
•	Groove	
•	Bass line	
	Brass section	
•	Harmony,	

Art and Design

What I need the children to learn	Possible learning experiences
Drawing, painting and sculpture	
improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]	
 know how to create an accurate print design following given criteria. use images which have been created, scanned and found; altering them where necessary to create art. 	Create shading for finger prints Sketch out the detail in the lines using shading Print using finger prints
 Use tools to create texture and pattern Show life like qualities and real life proportions Create a clay finger print 	

Physical Education – Follow Real P.E. and supplement with NC P.E. experiences

What I need the children to learn	Possible learning experiences
Athletics	
use running, jumping, throwing and catching in isolation and in combination	
controlled when taking off and landing	Setting targets for improvements and
throw with increasing accuracy	competition
combine running and jumping	Use basic skills to complete athletics and
	sports games Links to Real PE 4
Competitive Games	
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	
 gain possession by working a team and 	
pass in different ways	
 choose a specific tactic for defending and 	
attacking	
• use a number of techniques to pass, dribble	
and shoot	
Gymnastics	
develop flexibility, strength, technique, control	
and balance [for example, through athletics and	
gymnastics]	
make complex extended sequences	
combine action, balance and shape	
perform consistently to different audiences Dance	
perform dances using a range of movement	
patterns	
compose own dances in a creative way	
 perform dance to an accompaniment 	
 dance shows clarity, fluency, accuracy and 	
consistency	
Outdoor and Adventurous Activity	
take part in outdoor and adventurous activity	
challenges both individually and within a team	
follow a map into an unknown location	
use clues and a compass to navigate a	
route	
 change route to overcome a problem use new information to change route 	
Evaluate	
compare their performances with previous ones	
and demonstrate improvement to achieve their	
personal best	
 pick up on something a partner does well and also on something that can be 	
improved	
know why own performance was better or	
not as good as their last	
Real P.E.	
Unit 4 Applying Physical	
I can use combinations of skills confidently	
in sport specific contexts. I can perform a	
range of skills fluently and accurately in	
practice situations.	

Nigel Carson Sessi	ons
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PSHE

What I need the children to learn	Possible learning experiences
Healthy Me	Resource links from: Jigsaw
Knowledge	In this Puzzle the class look at the risks
Know the health risks of smoking	linked to smoking and how this affects the
Know how smoking tobacco affects the	lungs, liver and heart. They do the same
lungs, liver and heart	with the risks associated with alcohol
Know some of the risks linked to misusing	misuse. They are taught a range of basic
alcohol, including antisocial behaviour	emergency procedures (including the
Know basic emergency procedures	recovery position) and learn how to contact
including the recovery position	the emergency services when needed. The
Know how to get help in emergency	children look at how body types are
situations	portrayed in the media, social media and
Know that the media, social media and	celebrity culture. They also talk about eating
celebrity culture promotes certain body	disorders and people's relationships with
types	food and how this can be linked to negative
• Know the different roles food can play in	body image pressures.
people's lives and know that people can	· ····
develop eating problems / disorders related	See the link below
to body image pressure	
• Know what makes a healthy lifestyle.	Key vocabulary:
	Choices, Healthy behaviour, Unhealthy
Social and Emotional Skills	behaviour, Informed decision, Pressure,
 Can make informed decisions about 	Media, Influence, Emergency, Procedure,
whether or not they choose to smoke when	Recovery position, Level-headed, Body
they are older	image, Media, Social media, Celebrity,
 Can make informed decisions about 	Altered, Self-respect, Comparison, Eating
whether they choose to drink alcohol when	problem, Eating disorder, Respect, Debate,
they are older	Opinion, Fact, Motivation
 Recognise strategies for resisting 	
pressure	
 Can identify ways to keep themselves 	
calm in an emergency	
 Can reflect on their own body image and 	
know how important it is that this is positive	
 Accept and respect themselves for who 	
they are	
Respect and value their own bodies	
• Be motivated to keep themselves healthy	
and happy	
Sun Safety Curriculum	
Can I describe how to stay safe in the sun	
and why it is important?	
Activity- look at the power point and	
discuss. Look at the posters and then create a poster with reasons why to stay	
safe.	
Please use the learning objectives from	
the Jigsaw website which may vary	
the orgaaw website which may vary	

https://jigsawlivestcmsuk.blob.core.windows.net/umbraco-media/s1slj10y/06-ages-9-10-jigsaw-skills-and-knowledge-progression-for-parents.pdf

Religious Education:

For this unit there is 9-10 hours of classroom ideas on RE Today. Please use you log in details to access this. There is planning and Idea on how to make the LC challenges more pupil friendly. Such Can I

What I need the children to learn	Possible learning experiences
U2:4	
 If god is everywhere, why go to a place of worship? Emerging: Recall and name some key features of places of worship studied (A1). Find out about what believers say about their places of worship (C2). Expected: Make connections between how believers feel about places of worship in different traditions (A3). Select and describe the most important functions of a place of worship for the community (B3). Give examples of how places of worship support believers in difficult times, explaining why this matters to believers (B2). Present ideas about the importance of people in a place of worship, rather than the place itself (C1). Exceeding: Outline how and why places of worship fulfil special functions in the lives of believers (A3). Comment thoughtfully on the value and purpose of places of worship in religious communities (B1). 	 Find out some of the key features of places of worship: e.g. some differences between Anglican and Baptist churches; mandir; differences between an Orthodox and a Reform synagogue. Explore the duty of pilgrimage in Hinduism, which is seen as a wider part of worship. This concerns the need for Hindus to be seen by the deity worshipping at a particular shrine. Does this mean that God is concentrated more intensely in particular places? Can pupils talk about a place where people might say or feel God is somehow more 'present'? What is special about these places? Consider these definitions: 'synagogue' = 'house of assembly' (a place to get together), also called 'schul' = school (a place to learn). Answer the key question in light of these definitions. What different ways of worshipping can they find within Christians like to go to church to meet with God, and why some meet in a school or in a home; e.g. community, being part of the 'body of Christ', mutual support through prayer and encouragement, music vs meditation, silence, simplicity, nature; some don't like institutions, hierarchies, crowds! Why do Christians worship in different ways? Find out about alternative forms of Christian communities, e.g.

www.freshexpressions.org.uk Consider
the appeal of these to some Christians.

Foreign Languages

What I need the children to learn	Possible learning experiences
Listening	Language Angels
Listen attentively to spoken language and show	
understanding by joining in and responding	
Explore the patterns and sounds of language	Spring 2 - Romans
through songs and rhymes and link the spelling,	Teaching Type: Intermediate
sound and meaning of words	Unit Objective: To describe what life was like as a child during Ancient Roman times in French.
Appreciate stories, songs, poems and rhymes in	By the end of this unit we will be able to:
	• Understand the key facts of the history of Ancient Rome in
the language Listen more attentively and for longer. Understand	French.
 Listen more attentively and for longer. Understand more of what we hear even when some of the 	 Say and spell the days of the week in French.
language may be unfamiliar by using the decoding	Name some/all of the most famous Roman inventions in
skills we have developed.	French. • Write a diary of life as a rich and/or poor child in Roman
Speaking	times including the use of the negative form in French.
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	
Present ideas and information orally to a range	
of audiences	
Describe people, places, things and actions	
orally and in writing	
Communicate on a wider range of topics and themes.	
Remember and recall a range of vocabulary with	
increased knowledge, confidence and spontaneity.	
Reading/ Writing	
Develop accurate pronunciation and intonation	
so that others understand when they are	
reading aloud or using familiar words and	
phrases	
Read carefully and show understanding of	
words, phrases and simple writing	
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 in	
writing	
Understand longer passages in French and start to	
decode meaning of unknown words using cognates	
and context. Increase our knowledge of phonemes and	
letter strings using knowledge learnt.	
Write a paragraph using familiar language	
incorporating connectives/ conjunctions, a negative	
response and adjectival agreement where required. Learn to manipulate the language and be able to	
substitute alternatives (My name, my age, where I live,	
a pet I have, a pet I don't have and my pet's name).	
Grammar	

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.
 Revision of gender and nouns and learn to use and recognise the terminology of articles (define, indefinite and partitive). Understand better the rules of adjectival agreement and possessive adjectives. Start to explore full verb conjunction (I wear/ he/she wears) and also be able to describe clothes in terms of colour (my blue coat).

Cayton Creation

Rainforest in a shoebox

Cayton Conclusion

Artwork - Henri Rousseau inspired.

English

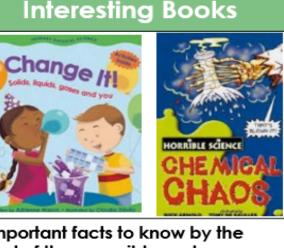
What I need the children to learn	Possible learning experiences

Mathematics

What I need the children to learn	Possible learning experiences

Year 5: Reversible and Irreversible Changes Knowledge Mat

Subject Sp	ecific Vocabulary	
solubility	Is a chemical property referring to the ability for a given substance, the solute, to dissolve in a solvent.	
conductivity	Conductivity defines a material's ability to conduct electricity.	
transparency	In general, transparency is the quality of being easily seen through.	Q.
thermal evaporation	Something that is thermal is hot, retains heat, or has a warming effect. Evaporation is the process of a substance in a liquid state changing to a gaseous state due to an increase in temperature and/or pressure.	Im en
dissolve	To dissolve is defined as to become broken up or absorbed by something or to disappear into something else.	irre •
bicarbonate of soda	A white water-soluble powder, used chiefly as an antacid, a fire extinguisher, and a leavening agent in baking.	. .
thermal	Something that is thermal is hot, retains heat, or has a warming effect.].
filtering	To filter a substance means to pass it through a device which is designed to remove certain particles contained within.].
melting	Melting is a physical process that results in the transition of a substance from a solid to a liquid.	1
separate	Separate, part, and divide mean to break into parts or to keep apart.	



Important facts to know by the end of the reversible and irreversible changes topic:

- Know what a reversible change means.
- Know what an irreversible change means.
- Give examples of reversible and irreversible changes.
- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

Sticky Knowledge about Reversible and Irreversible changes

 Irreversible changes, like burning, cannot be undone. Reversible changes, like melting and dissolving, can be changed back again. Mixtures can be separated out by methods like filtering and evaporating. A change is called irreversible if it cannot be changed back again. Examples of reversible changes: Melting is when a solid converts into a liquid after heating. An example of melting is turning ice into water. Freezing is when a liquid converts into a solid. A cooked egg cannot be changed back to a raw egg again. Mixing substances can cause an irreversible change. For example, when vinegar and bicarbonate of soda are mixed, the mixture changes and lots of bubbles of carbon dioxide are made. Burning is an example of an irreversible change.