CAYTON SCHOOL

MEDIUM TERM CURRICULUM PLAN
YEAR 6 – SPRING 1

Learn from yesterday, seek today and aim for tomorrow

September 2023

Science Driver: Electricity

Key Enquiry: How can you light up your life?

Science Driver

Working Scientifically	
❑ Know which type of investigation is needed to suit particular scientific enquiry e.g. looking at the relationship between pulse and exercise	❑ Use a range of written methods to report findings, including focusing on the planning, doing and evaluating phases
❑ Set up a fair test when needed e.g. does light travel in straight lines?	❑ Clear about what has been found out from their enquiry and can relate this to others in class
❑ Know how to set up an enquiry based investigation e.g. what is the relationship between oxygen and blood?	❑ Explanations set out clearly why something has happened and its possible impact on other things
❑ Know what the variables are in a given enquiry and can isolate each one when investigating	❑ Aware of the need to support conclusions with evidence
❑ Justify which variable has been isolated in scientific investigation	❑ Keep an on-going record of new scientific words that they have come across for the first time and use these regularly in future scientific write ups
❑ Use all measurements as set out in Year 6 mathematics (measurement), including capacity, mass, ratio and proportion	❑ Use diagrams, as and when necessary, to support writing and be confident enough to present findings orally in front of the class
❑ 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	❑ Able to give an example of something they have focused on when supporting a scientific theory e.g. classifying vertebrate and invertebrate creatures or why certain creatures choose their unique habitats
❑ Make accurate predictions based on information gleaned from their investigations and create new investigations as a result	❑ Frequently carry out research when investigating a scientific principle or theory
❑ Able to present information related to scientific enquiries in a range of ways including using IT such as power-point, animoto and iMovie	

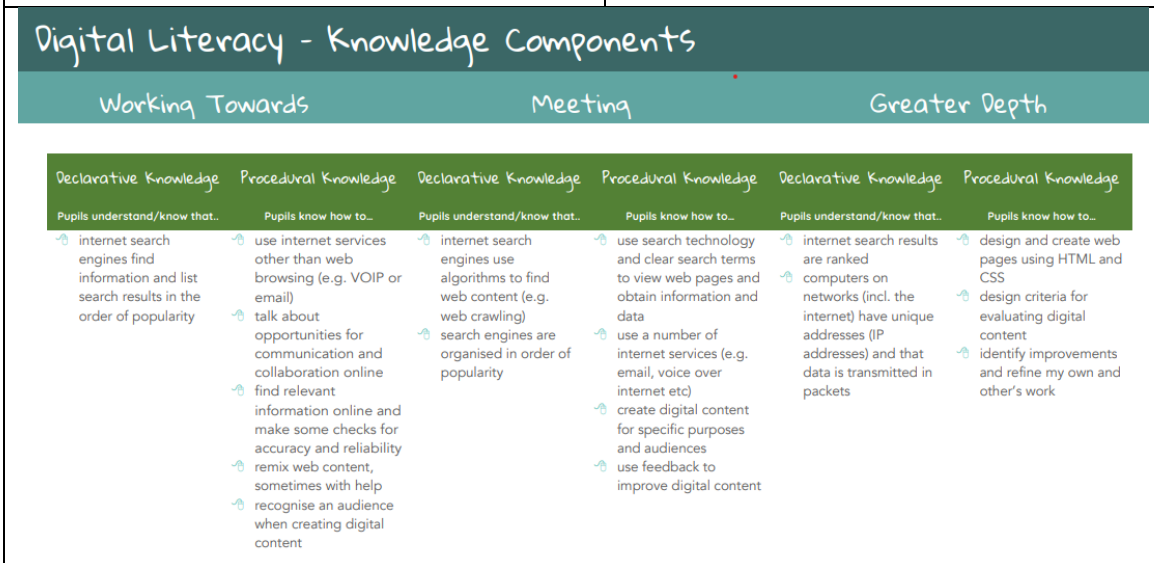
What I need the children to learn	Possible learning experiences
Electricity	
• *Electrical components* • *Simple circuits* • *Fuses and voltage*	
• Compare and give reasons for why components work and do not work in a circuit • Draw circuit diagrams using correct symbols	***Match correct pictures of circuits to practically setting them up***

• Know how the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer	***Make own circuits through a DT project and accurately draw symbols on their planned series circuit*** ***Use a data logger to test the actual brightness of bulbs in lux*** ***Add more bulbs, wires etc***
Light	
• *How light travels* • *Reflection* • *Ray models of light*	
• Know how light travels • Know and demonstrate how we see objects • Know why shadows have the same shape as the object that casts them • Know how simple optical instruments work e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.	***Twinkl –explains how to do experiments on power-point*** ***Experiment with the angle of incidence and the angle of reflection and the 'normal'*** ***Measure the angles*** ***Make a periscope, look at how the instruments work in real life***

Computing

What I need the children to learn	**Possible learning experiences**
Search engines	
Pupils should be taught to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	
• be aware that some search engines may provide misleading information	**Class Discussions**
Networks	
National Curriculum Objectives - Pupils should be taught to: *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*	**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).**
<u>iNetwork unit – Digital Literacy</u> Lesson 1: iConnect • To understand that a computer network is a group of computers that are connected • To know that computer networks allow users to communicate and share Lesson 2: iRoute • To understand that the internet is many networks that are connected to each other • To know that a router sends/receives information as packets of data Lesson 3: iTrace • To know that computers connected to the Internet have their own address • To understand that services involving web pages on the internet are known as	https://www.icompute-uk.com/members-area/uks2/index.html and select Year 6 and then iNetwork unit

the World Wide Web and that websites can be traced to a particular webserver Lesson 4: iSearch • To know that internet search engines maintain, and rank, a list (or index) of other websites available on the world wide web • To use clear search terms when conducting internet searches in order to find things out Lesson 5: iCreate • To know that web pages are written in HTML • To recognise and use basic HTML syntax	



Music

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

What I need the children to learn	Possible learning experiences
Unit 6 – A New Year Carol	
Listening and Appraise Music (Musicianship)	
Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians *Develop an understanding of the history of music.*	
• Identify the following instruments by ear and through a range of media: bass guitar, electric guitar, percussion, sections of the orchestra such as brass, woodwind and strings, electric organ, congas, pianos and synthesizers, and vocal techniques such as scat singing. • Discuss the structure of the music with reference to verse, chorus, bridge and an instrumental break.	
Singing and Voice	

• *Play and perform in solo and ensemble contexts using their voices with increasing accuracy, fluency, control and expression*	
• Sing with and without an accompaniment. • Sing syncopated melodic patterns.	**Video with QR qrcode monkey website**
• Notation	
• *Use and understand staff and other musical notations*	
• Identify: • Stave • Treble clef • Time signature	
• Playing Instruments	
• *Play and perform in solo and ensemble contexts and playing musical instruments with increasing accuracy, fluency, control and expression*	
• Rehearse and learn to play one of four differentiated instrumental parts by ear or from notation, in the tonal centres of C major, F major, G major, D major, E major, A major, E♭ major, D minor and F minor. Play a melody following staff notation written on one stave and using notes within an octave range (do–do); make decisions about dynamic range, including very loud (fortissimo), very quiet (pianissimo), moderately loud (mezzo forte) and moderately quiet (mezzo piano).	**Glockenspiels and bars as a whole class**
• Improvising	
• *Improvise and compose music for a range of purposes using the inter-related dimensions of music*	
• Explore improvisation within a major scale, using the notes: C, D, E, F, G G, A, B♭, C, D G, A, B, C, D F, G, A, C, D	
• Composing	
• *Improvise and compose music for a range of purposes using the inter-related dimensions of music*	
• Start to use structures within compositions, eg introduction, multiple verse and chorus sections, AB form or ABA form (ternary form). • Use simple dynamics. • Use rhythmic variety.	**Use Charanga with pupil logins to experiment with the notation maker.**
• Performing	
Listen with attention to detail and recall sounds with increasing aural memory *Play and perform in solo and ensemble contexts using their voices with increasing accuracy, fluency, control and expression*	
• Understand the value of choreographing any aspect of a performance. • A student or a group of students rehearse and lead parts of the performance.	**Performance to parents to celebrate unit. Videos to send out on Class Dojo.**

• Vocabulary	
• Style • Indicators • Melody • Compose • Improvise • Cover • Pulse • Rhythm • Pitch • Tempo • Dynamics • Timbre • Texture • Structure • Dimensions of music • Neo Soul • Producer • Groove • Motown • Hook • Riff • Solo • Blues • Jazz • Improvise/improvisation, • By ear • Melody • Solo • Ostinato • Phrases • Unison • Urban Gospel • Civil rights • Gender equality • Unison • Harmony	

Design Technology

What I need the children to learn	Possible learning experiences
Designing	
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*	
• use market research to inform plans and ideas. • follow and refine original plans • justify planning in a convincing way show that culture and society is considered in plans and designs	**Research attractive shop fronts in Scarborough** **School trip?** **How different would they look at night time**
Making	
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 wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	
• know which tool to use for a specific practical task • know how to use any tool correctly and safely • know what each tool is used for explain why a specific tool is best for a specific action	**In groups – design a shop front** **Cardboard – junk modelling** **Use tool of choice to create elements** **Can they add circuits in?**
Evaluating	
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*	**But them all together and decide which one looks most attractive** **Turn lights off so that lights show up** **Have a competition**
• know how to test and evaluate designed products • explain how products should be stored and give reasons evaluate product against clear criteria	
Technical Knowledge	
apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] *understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]* *apply their understanding of computing to program, monitor and control their products.*	
• use electrical systems correctly and accurately to enhance a given product • know which IT product would further enhance a specific product • use knowledge to improve a made product by strengthening, stiffening or reinforcing	***Reflection, light source, object, shadows, travels, reflect, circuit, battery, bulb, wire***

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	

• demonstrate stamina and increase strength	
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	
• agree and explain rules to others • work as a team and communicate a plan lead others in a game situation when the need arises	
Gymnastics	**Unit 3 – Cognitive 6 x Gym Lessons**
develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]	
• combine own work with that of others sequences to specific timings	
Dance	
perform dances using a range of movement patterns	
• develop sequences in a specific style choose own music and style	
Outdoor and Adventurous Activity	
take part in outdoor and adventurous activity challenges both individually and within a team	
• plan a route and a series of clues for someone else plan with others, taking account of safety and danger	
Evaluate	
compare their performances with previous ones and demonstrate improvement to achieve their personal best	
• know which sports they are good at and find out how to improve further	
Real P.E.	
Unit 3 Social • I can give and receive sensitive feedback to improve myself and others. I can negotiate and collaborate appropriately.	
Nigel Carson Sessions	

PSHE

What I need the children to learn	**Possible learning experiences**
Dreams & Goals	**Resource links from: Jigsaw**
<u>Knowledge</u> • Know their own learning strengths • Know how to set realistic and challenging goals • Know what the learning steps are they need to take to achieve their goal	In this Puzzle the class talk about their own strengths and further stretching themselves by setting challenging and realistic goals. They discuss the learning steps they'll need to take as well as talking about how to stay motivated. The children explore various

• Know a variety of problems that the world is facing • Know how to work with other people to make the world a better place • Know some ways in which they could work with others to make the world a better place • Know what their classmates like and admire about them **Social and Emotional Skills** • Understand why it is important to stretch the boundaries of their current learning • Set success criteria so that they know when they have achieved their goal • Recognise the emotions they experience when they consider people in the world who are suffering or living in difficult circumstances • Empathise with people who are suffering or living in difficult situations • Be able to give praise and compliments to other people when they recognise that person's achievements **Water Safety Curriculum** Can I become familiar with how to stay safe around the water including beaches, canals and rivers? Two lessons- 1: beach water safety and flags. 2: canals and rivers – activities resource 3- see teacher guidance. **Please use the learning objectives from the Jigsaw website which may vary slightly from the above (this ensures that we always have the up to date learning outcomes).**	global issues and explore places where people may be suffering or living in difficult situations – whilst doing this they reflect on their own emotions linked to this learning. The class also talk about what they think their classmates like and admire about them as well as working on giving others praise and compliments. Key vocabulary: Dream, Hope, Goal, Learning, strengths, Stretch, Achievement, Personal, Realistic, Unrealistic, Feeling, Success, Criteria, Learning steps, Money, Global issue, Suffering, Concern, Hardship, Sponsorship, Empathy, Motivation, Admire, Respect, Praise, Compliment, Contribution, Recognition. **Please see the link below**

https://jigsawlivestcmsuk.blob.core.windows.net/umbraco-media/lzebuhel/07-ages-10-11-jigsaw-skills-and-knowledge-progression-for-parents.pdf

Religious Education:
For this unit there is 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 ……..

Remember this units runs over both Spring 1 and Spring 2 term. Please be mindful of this when planning your lessons.

What I need the children to learn	Possible learning experiences
U2.7 What matters most to Christians and Humanist?	• Talk about what kinds of behaviour and actions pupils think of as bad (examples

Emerging: • Identify the values found in stories and texts (A2). • Suggest ideas about why humans can be both good and bad, making links with Christian and Humanist ideas (B3). Expected: • Describe what Christians mean about humans being made in the image of God and being 'fallen', giving examples (A2). • Describe some Christian and Humanist values simply (B3). • Express their own ideas about some big moral concepts, such as fairness or honesty comparing them with the ideas of others they have studied (C3). • Suggest reasons why it might be helpful to follow a moral code and why it might be difficult, offering different points of view (B2). Exceeding: • Examples of similarities and differences between Christian and Humanist values (B3). • Apply ideas about what really matters in life for themselves, including ideas about fairness, freedom, truth, peace, in the light of their learning (C2).	from films, books, TV as well as real life). Rank some of these ideas – which are the worst, and which are less bad? Why? • Reflect on the question: why do people do good things and bad things? Are we all a mixture of good and bad? Explore pupils' answers. Make a link with Christian belief about humans being made in the image of God (Genesis 1:28) and also sinful (the 'Fall' in Genesis 3). Why do Christians think this is a good explanation of why humans are good and bad? • Talk about how having a 'code for living' might help people to be good. • Look at a Humanist 'code for living', e.g. Be honest; Use your mind; Tell the truth; Do to other people what you would like them to do to you. How would this help people to behave? What would a Humanist class, school or town look like? • Explore the meanings of some big moral concepts, e.g. fairness, freedom, truth, honesty, kindness, peace. What do they look like in everyday life? • Find out about Christian codes for living, which can be summed up in Jesus' two great commandments: 'Love God and love your neighbour'. Explore in detail how Jesus expects his followers to behave through the use of the story of the Good Samaritan (Luke 10:25–37) and Jesus' attitude on the cross (Luke 23:32–35). • Jesus talks about actions as fruit. What does he mean? If a person's intentions are bad, can their actions produce good fruit? • Discuss what matters most, e.g. by ranking, sorting and ordering a list of 'valuable things': family / friends / Xbox / pets / God / food / being safe / being clever / being beautiful / being good / sport / music / worship / love / honesty / human beings. • Get pupils to consider why they hold the values which they do, and how these values make a difference to their lives.

	• Consider some direct questions about values: is peace more valuable than money? Is love more important than freedom? Is thinking bad thoughts as bad as acting upon them? • Notice and think about the fact that values can clash, and that doing the right thing can be difficult. How do pupils decide for themselves?

Foreign Languages

What I need the children to learn	Possible learning experiences
Listening	Language Angels **Spring 1 – The Weekend** Teaching Type: Progressive Unit Objective: To describe what activities I do at the weekend with a time and an opinion in French. By the end of this unit we will be able to: • Tell the time in French using quarter past, half past and quarter to. • Say and write in French what we do at the weekend using two or more sentences. • Integrate conjunctions and opinions into written and spoken work to make more interesting and extended sentences.
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* *Appreciate stories, songs, poems and rhymes in the language*	
• Listen to longer text and more authentic foreign language material. Learn to pick out cognates and familiar words and learn to 'gist listen' even when hearing language that has not been taught or covered.	
Speaking	
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*	
• Learn to recall previously learnt language and recycle/ incorporate it with new language with increased speed and spontaneity. Engage in short conversations on familiar topics, responding with opinions and justifications where appropriate.	
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*	
• Be able to tackle unknown language with increased accuracy by applying knowledge, including awareness	

of accents, silent letters. Decode unknown language using bilingual dictionaries. • Write a piece of text using language from a variety of units covered and learn to adapt any models provided to show solid understanding of any grammar covered. Also start to incorporate conjugated verbs and learn to be comfortable using connectives/ conjunctions, adjectives and possessive adjectives (a presentation or description of a typical school day including subjects, time and opinions.	
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.	

Cayton Creation

Shadow Puppet Show

Cayton Conclusion

Making own Night Lights

English

What I need the children to learn	Possible learning experiences
GPS (Year 3, 4, 5 and 6 scheme on Twinkl) **Hunger Games (WCR)** **Poetry and non-fiction**	**Grammar in writing and carousel** **Writing a diary, description** **READING SPINE- Complexity of the narrator: Clockwork (last half term)**

Mathematics

What I need the children to learn	Possible learning experiences
Refer to the White Rose SOL online for guide https://whiterosemaths.com/resources/primary-resources/primary-sols/ (Also- gaps and testbase) Ratio	

Algebra	