MEDIUM TERM CURRICULUM PLAN
YEAR 6 – SPRING 1

Learn from yesterday, seek today and aimfor tomorrow

September 2021

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* *Make own circuits through a DT project and accurately draw symbols on their planned*

• Know how the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer	*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**

Art

What I need the children to learn	Possible learning experiences
Using Sketchbooks	
create sketch books to record their observations and use them to review and revisit ideas	
• explain why different tools have been used to create art • explain why chosen specific techniques have been used know how to use feedback to make amendments and improvement to art • know how to use a range of e-resources to create art	*Use pencils to create the appearance of light and dark on an object*

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	***Create and design a light-up spine*** ***The design needs a window/ some context for a light bulb***
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	***Create the circuit for book spine***
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*	
• know how to test and evaluate designed products • explain how products should be stored and give reasons evaluate product against clear criteria	***Evaluate against original design 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	***Reflection, light source, object, shadows, travels, reflect, circuit, battery, bulb, wire***

• use knowledge to improve a made product by strengthening, stiffening or reinforcing	

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	***Team games to promote social skills in Real PE 3*** ***Invasion games like football, netball, bench-ball***
Gymnastics	
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**
• 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 • 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	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 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. **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

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

Foreign Languages

What I need the children to learn	
Speaking	
speak in sentences, using familiar vocabulary, phrases and basic language structures	
• hold a simple conversation with at least 4 exchanges • use knowledge of grammar to speak correctly	
Reading	

develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases	
• understand a short story or factual text and note the main points • use the context to work out unfamiliar words	
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 a paragraph of 4-5 sentences • substitute words and phrases	

Cayton Creation

Shadow Puppet Show

Cayton Conclusion

Making own night lights

English

What I need the children to learn	Possible learning experiences

Mathematics

What I need the children to learn	Possible learning experiences
Refer to the White Rose SOL online https://whiterosemaths.com/resources/primary-resources/primary-sols/ Decimals Percentages Algebra	