***Guildford Grove Curriculum – Quality of Education – INTENT – IMPLEMENTATION – IMPACT**
'Knowledge is power. Information is liberating.' Kofi Annan

TOPIC: Inventors and Engineers | **Year Group: 4**

	1	2	3	4	5	6	7
English **Spelling**	The shirt machine Narrative The 'I' sound spelt 'y'	The shirt machine Narrative Suffixes -ness and -ful following a consonant	The shirt machine Narrative Prefixes sub- and tele-	Wallace and Gromit Diary The 'sh' sound spelt 'ch' and 'ss'	Wallace and Gromit Narrative Suffixes -less, -ness, -ful and -ly	Isambard Kingdom Brunel Biography Statutory word list	Inventors and Engineers week Instructional writing
Maths	Equivalent fractions Converting units of measure	Adding and subtracting fractions Money	Recognise decimal equivalents to tenths Converting units of measure	Solving measure and money problems involving fractions Time	Solving measure and money problems involving fractions Time	Time	DT **Knowledge:** Designing products fit for purpose. **Skills** Sketch and model alternative ideas Develop one idea in depth Combine modelling and drawing to refine ideas Plan the sequence of work using a storyboard Record ideas using annotated diagrams Build frameworks using a range of materials e.g. wood, card corrugated plastic to support mechanisms Use bradawl to mark hole positions Use hand drill to drill tight and loose fit holes
Science	Electricity **Knowledge** • 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 **Skills** • 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. **Vocabulary** Circuit, Cells, Wires, Bulbs, Switches, Conductor, Insulator						
PSHE	**Respecting ourselves and others**		**Families and friendships**	**Safe relationships**			

<table>
<tr><td></td><td colspan="2">Respecting differences and similarities; discussing difference sensitively</td><td>Positive relationships, including online</td><td colspan="3">Responding to hurtful behaviour; managing confidentiality; recognising risks online</td><td rowspan="6">Use glue gun with close supervision
Cut strip wood, dowel, square section wood accurately to 1mm
Join materials using appropriate methods
Cut accurately and safely to a marked line
Justify their decisions about materials and methods of construction
Reflect on their work using design criteria stating how well the design fits the needs of the user
Identify what does and does not work in the product.
Make suggestions as how their design could be improved

Vocabulary
Circuit, Cells, Wires, Bulbs, Switches, Conductor, Insulator</td></tr>
<tr><td>Art and Design</td><td colspan="2"></td><td></td><td colspan="3"></td></tr>
<tr><td>Computing</td><td colspan="7">Knowledge
- Use sequence, selection and repetition in programmes (Scratch, HoC).
- Use logical reasoning to explain how simple algorithms work.

Skills
- To be able to type a short sequence of instructions and to plan ahead when programming devices on and off screen.
- To work collaboratively to create a stop/start coding programme.
- To use the correct terminology from previous years for coding (loop, blocks).</td></tr>
<tr><td>Design and Technology</td><td colspan="2"></td><td></td><td colspan="3"></td></tr>
<tr><td>Geography</td><td colspan="2"></td><td></td><td colspan="2">Knowledge
Understand how the human and physical characteristics of the UK have changed over time.

Skills
Use maps, atlases, globes and digital/computer mapping (Google Earth) to locate countries and describe features studied
Learn the eight points of a compass, and four-figure grid references.
Use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Vocabulary
Map, plan, compass, NSEW, features</td><td></td></tr>
<tr><td>History</td><td colspan="3">Knowledge
Case studies of British inventors and engineers and how their work changed life in Britain

Skills
- place some historical periods in a chronological framework (chronological understanding)</td><td colspan="2"></td><td>Knowledge
Case studies of British inventors and engineers and how their work changed life in Britain</td></tr>
</table>

	- use sources of information in ways that go beyond simple observations to answer questions about the past (historical enquiry) - communicate his/her learning in an organised and structured way, using appropriate terminology (organisation and communication) **Vocabulary** Progress, technology, Victorian, global			**Skills** - place some historical periods in a chronological framework (chronological understanding) - use sources of information in ways that go beyond simple observations to answer questions about the past (historical enquiry) - communicate his/her learning in an organised and structured way, using appropriate terminology (organisation and communication) **Vocabulary** Progress, technology, Victorian, global	
Modern Foreign Languages	**Knowledge** French – Jolie Ronde Revision - colours Parts of the body Zoo animals (etre – to be) Christmas **Skills:**				

	• To practise simple questions and answers that share information such as name, birthday, likes. • To take part in a conversation using familiar question and answers. • To begin to learn about Christmas in another country • Pronounce words showing a knowledge of sound patterns (or listen to and accurately repeat particular phonemes in songs and rhymes and begin to make links to spellings **Vocabulary:** Je suis J'ai nom anniversaire J'aime Joyeux Noël	
Music		
Physical Education	**Knowledge** • I can help praise and encourage others in their learning. • I show patience and support others, listening carefully to them about our work. I am happy to show and tell them about my ideas. **Skills** Dynamic balance to agility and static balance **Key Vocabulary** • Praise • Encouragement • Patience • Support	
Religious Education	**How can a synagogue help us to understand the Jewish faith?** • explore the key features of a synagogue and what they reveal about Jewish beliefs using a 'virtual' visit or photos. • recognise diversity, learning about similarities & differences both within and between religions & beliefs, and the importance of dialogue between them • make connections between differing aspects of religion and belief and consider the different forms of expression **Skills:** • Make links between Jewish beliefs and the synagogue • describe the impact for Jews of the synagogue as a place of study, prayer and gathering • comment on any connections between a synagogue and a church or between Jewish and Christian beliefs **Vocabulary:** Synagogue Shema Torah worship **How can artists help us understand Christmas?** • Study the importance of Jesus within the Christian faith by reflecting on and comparing different cultural expressions of Christian beliefs about his birth. • Explore their understanding of Jesus being 'incarnate' **Skills:** • describe and suggest meanings for the symbolism used, • Make connections with Christian belief about Jesus being God 'incarnate' • describe similarities and differences in the way Christian belief is conveyed through symbolism in the art studied **Vocabulary:** Symbolism incarnate nativity beliefs	