

**Year 6: Spring 2 (February & March)**

<p><b>Topic: Bright Sparks (Science)</b></p> <ul style="list-style-type: none"> <li>• What is a <b>fossil fuel</b> and where do they come from? <i>(fossil fuel, mine, shaft, oil field, oil well, oil rig, carbon)</i></li> <li>• How do <b>fossil fuels</b> generate <b>electricity</b>? <i>(generator, power station, turbine, cooling towers, national grid, pylon, transformers, sub stations)</i></li> <li>• How does <b>electricity</b> get to <b>my house</b>? <i>(cooling towers, national grid, pylon, transformers, sub stations, electricity meter, fuse box, wiring, socket)</i></li> <li>• Does <b>changing</b> the number of <b>components</b> in a <b>circuit</b> effect how they well they work? <b>(recap y4 learning of circuits)</b> <i>(circuit, series, cell, component, bulb, motor, amp, switch, wires, current, volt, voltage,)</i></li> <li>• What is the effect of <b>changing</b> the number of <b>cells</b> in a <b>circuit</b>? <i>(cells, energy, increase, decrease, brighter, dimmer)</i></li> <li>• What <b>symbols</b> do we use for <b>circuit components</b>? <i>(bulb, cell, motor, wires, switch, battery, amp, volt meter)</i></li> <li>• What is <b>global warming</b> and how do some scientists think it will harm the planet? <i>(global warming, global temperature, climate change, green house gas, green house effect, carbon dioxide, gulf stream, polar caps, glaciers, sea levels, carbon storage)</i></li> <li>• What is <b>nuclear energy</b>? <i>(nuclear power, nuclear reactor, nuclear waste, radiation)</i></li> <li>• What is <b>sustainable energy</b> and how is it generated? <i>(Renewable/ sustainable energy, solar panel, wind farm, geothermal, hydro, dam, tidal power, bio-fuel)</i></li> <li>• What are the <b>advantages and disadvantages</b> of <b>sustainable energy</b>?</li> <li>• How can we <b>save electricity</b> and why is this important? <i>(conserve, energy, Renewable/ sustainable energy, solar panel, wind farm, geothermal, hydro, dam, tidal power, bio-fuel)</i></li> <li>• Which <b>bulbs</b> are most <b>energy efficient</b>? <i>(filament, halogen, Florescent, LED, light source)</i></li> <li>• How does <b>light</b> travel so I can see things? <i>(light rays, light waves, surface, reflect, eyes, beam, speed of light)</i></li> <li>• What is a <b>periscope</b> and how does it work? <i>(reflective surface, beam, periscope)</i></li> <li>• Why do <b>shadows</b> look like the object and how can I change their size? <i>(shadow, block, silhouette)</i></li> </ul>	<p><b>Art:</b></p> <ul style="list-style-type: none"> <li>• What is <b>spirituality</b>? <i>(a higher power that is loving and guiding e.g. God, nature, spirit, the universe, the creator)</i></li> <li>• What was important about the Renaissance period and who were the most influential artists?</li> <li>• What is Da Vinci famous for painting?</li> <li>• What is Michelangelo famous for painting?</li> <li>• How have you created your own Renaissance style painting?</li> </ul>
<p><b>Computing: Crumble Controller</b></p> <ul style="list-style-type: none"> <li>• What is a microcontroller?</li> <li>• What output devices can be connected to a microcontroller?</li> <li>• What does an infinite loop do?</li> <li>• What is a conditional loop?</li> </ul>	<p><b>French: un aventure à Paris (travels in Paris)</b></p> <ul style="list-style-type: none"> <li>• Which landmarks can you name? <i>(Arc de Triomphe, Tour Eiffel, Notre Dame, Sacré Coeur, le Louvre, la Seine)</i></li> <li>• Name at least three facts about your chosen landmark. <i>(Notre Dame, c'est la cathédrale la plus populaire. Le Tour Eiffel, c'est le monument le plus célèbre)</i></li> <li>• Name some topic vocabulary that you used in your advert.</li> <li>• Which words and phrases did you use in your advert?</li> <li>• What can you tell me about the French Revolution? Who do you agree with? The people or the monarchy?</li> </ul> <p><b>Music: guitar</b></p> <ul style="list-style-type: none"> <li>• Can you improvise a lead melody using the <b>pentatonic scale in G</b>? (G, A, B, D, E, G)</li> <li>• What <b>chords</b> can you play? Can you show the positions of them? (G, A, D, C, F)</li> <li>• Can you name 3 or more <b>stringed instruments</b>? (e.g. Pipa, Guitar, Lyre, Berimbau, Qin, Zither, Piano.)</li> <li>• Can you name a popular <b>genre/style</b> that use stringed instruments? (e.g. Folk, Jazz, Blues, Rock.)</li> <li>• Can you name up to 4 famous composers/guitarists from around the world? (e.g. Andrés Segovia, John Williams, Sharon Isbin, Ana Vidovic)</li> </ul> <p><b>DT: Fabric</b></p> <ul style="list-style-type: none"> <li>• What electrical system has been included in your design?</li> <li>• Can you explain what an exploded diagram looks like?</li> <li>• What sewing pattern/stich did you use to join your fabric together?</li> <li>• What did your peers say about your product?</li> </ul> <p><b>RE: Christians and Humanists (continuation)</b></p> <p>What are codes for living in terms of actions, words and thoughts?</p> <p>List some codes for living non-religious people use.</p> <p>What is the difference between fairness, justice, forgiveness and free choice?</p> <p>What codes for living do Christians try to follow through the stories of The Good Samaritan and Crucifixion?</p> <p>What are values and how are they different between groups of people?</p> <p>What makes 'peace' a valuable value on life?</p> <p>How can values impact a community?</p>