

Year 4 – Autumn 2 (November & December)

Topic: Electricity & Sound (Science)

Electricity

- Which things need **electricity** to work?
(appliances, washing machine, refrigerator, TV, phone, lamp, lights, computers, tablets)
- What is static electricity?
(lightening, volts, charges, attraction)
- How has the light bulb changed daily life?
(scientist, discover, light bulb, time line, electricity)
- How has the discovery of electricity changed daily life?
(inventions, household appliances, cooking, cleaning, laundry, grooming)
- Can I make a **circuit**?
(wire, component, cell, buzzer, switch, bulb/bulb holder, crocodile clip, complete/ incomplete circuit)
- How do **switches** work?
(complete/ incomplete circuit, switches, break in circuit, conductor, metal, paper clip, electrical flow)
- Which materials are good **electrical insulators/conductors**?
(electrical conductor/ insulator, electric shock, electrocute, metal, plastic, paper, wool, rubber, water)
- Why are **water** and **electricity** dangerous together?
(electric shock, electrocute, electrical flow, charges, conduct)
- How can we stay safe around electricity?
(cover, cell, battery, battery operated, mains powered, electricity, socket, plugs, wires, dangers, volts, electrocute, charges, conduct)
- How can we use electricity safely in the home?

Sound

- What is sound?
- How does the **ear** allow us to hear **sound**?
(vibrate, vibrations, media/medium, echo, ear drum, ear canal, pinna, Ossicles, cochlea, nerves)
- How can I make a pair of ear protectors?
- How do different **musical instrument** make **sound**?
(wind, percussion, string, guitar, flute, recorder, drums, cymbals, violins, pitch, chords, tighter, looser, harder, softer)
- How can you change the volume of a sound?
- How can you change the pitch of a sound?
- What can a **deaf people** do and what adjustments can we make to help them?
(ear protector, earmuff, , hard of hearing, hearing impaired, hearing test, diagnosed, sign language, lip-reading, deafness, hearing aid)

Computing:

- What are sensors?
- Where can you find sensors in everyday life?
- What data could you collect with a data logger?
- How can you process collected data?

French: À l'école (at school)

- Can you name different subjects that you study at school?
(à l'école, les sujets, l'anglais, le français, les sciences)
- How can you explain what you like and dislike about school?
(j'aime, j'adore, je n'aime pas, je deteste)
- Can you give reasons for your opinions? *(j'adore les sciences parce que c'est interessant)*
- Can you ask your friends for their opinions?
(Qu'est ce-que tu aimes à l'école? Pourquoi? Pourquoi pas?)
- Can you tell the time using o'clock and half past?
(à dix heures, à douze heures et demie)
- Can you explain what time you do each activity at school, and create a timetable?
(à neuf heures et demie, j'ai l'anglais, à douze heures, je lit un livre)

Music:

- Can you **improvise** patterns on the Glockenspiel using a simple scale?
- Can you name all the notes in the c and G minor pentatonic scale?
(C Eflat F G Bflat C) and (G Bflat C D F G)
- Can you name **up to 3** tuned percussion instruments? (Xylophone, Marimba, Glockenspiel, Steelpan, piano, Timpani, Chimes)
- Can you name a genre/style of music that uses tuned percussion?
(e.g. Dance of the Hours, from La Gioconda Ballet Music Ponchielli Marching Through Georgia Folk Song Yankee Doodle Dandy Folk Song)
- Can you tell me the name of **up to 3** a famous tuned percussionist from around the world?
(e.g. Marina Lambrini Diamandis, Ray Cooper, Hal Blaine, Dawn Landes, Dave Maric Colin Currie, TS Nandakumar, Evelyne Glennie, Steve Reich, Aya Suzuki)

DT Mechanisms

- How does the levers and gears work in your product?
- What is the **purpose** of your product? What are the **strengths** and **weaknesses** of your product?

RE: Why Jesus is inspiring to some people (Christianity)

- Can you retell the story of feeding 5000, one of Jesus' miracles? And how did Jesus inspire people through this story?
- What are the parables of 'The Two Builders' and 'Unforgiving Servant' and what is the key message?
- What impact does Jesus have on a Christian's life?
- Why is Jesus important to Christians today?
- How can inspiration make people more determined to be good?
- Recall the story of Buddha and the teaching about life and its sufferings.