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| Date | Time | Class/Set | Lesson No | No. in class | | Room |
| 10/03/20 | 09:00 | Yr9FPh | P1 | Boys: 16  Girls: 11 | | 59 |
| **Your targets from weekly training meetings relevant to this lesson** | | | | | | |
| TS1 Set high expectations which inspire, motivate and challenge.  TS2 Promote good progress and outcomes by pupils  TS3 Demonstrate good subject and curriculum knowledge  TS4 Plan and teach well-structured lessons  TS5 Adapt teaching to respond to the strengths and needs of all pupils  TS6 Make an accurate and productive use of assessments  TS7 Manage behaviour effectively to ensure good and safe learning environment  TS8 Fulfil wider professional responsibilities | | | | | | |
| **Background of the class context of your teaching and learning plan and your expectations** | | | | | | |
| Targeted Support:  SEND  *J.B.*  EAL  R.Z., M.D., A.R., L.C., M.S., R.S., A.P., G.J., S.H., Z.A., S.S., S.C., A.A., A.K., N.M.  All students are able to communicate read and write in English.  Gifted& Talented/ More able students  *J.I., O.K., F.A., A.P., E.M., G.I., R.B., M.D*  **Differentiation**  Differentiated starter.  Images to represent key concepts.  Extra challenge questions on the board.  Some students struggle with writing pace, optional printouts are available for the main tasks.  I will be regularly checking with students to check understanding. *J.B., A.G., A.K., S.S., E.P.* | | | | | Additional Adults:  *S.P.*  *R.C.* | |
| Relevant Curriculum Statements | | | | | | |
| *Key words*: Current, Amp / Ampere, Coulomb  *British values:* Democracy, Individual liberty, Mutual Respect.Encouraging the students to help each other during the lesson and share their knowledge. Making sure that students have resources and the opportunity to stretch their learning and challenge themselves in the lesson.  *Culture/ Science capital:* Michael Faraday , Georg Ohm , James Clerk Maxwell, Thomas Edison, Lewis Latimer, Lise Meitner, WW2. | | | | | | |
| **Pre-supposed knowledge / Possible Concepts / Misconceptions / Alternative Ideas** | | | | | | |
| *Prior learning:* students know the different states of matte, most students know what internal energy is and the effects on a substance when heat is applied.  *Skills:* observation, making predictions, making connections, mathematically manipulate a formula.  *Misconceptions*: batteries do not store electrons/ charge.  *Curriculum links*: Chemistry- ions in seawater. History- WW2 dates.  *Literacy:* Glossary given at the start of the chapter. Definitions of words throw-out the lesson. | | | | | | |
| **Learning points and success criteria:** | | | | | | |
| * **Define electric current** | | | | | | |
| * **Use the appropriate formula to calculate electric charge.** | | | | | | |
| * **Describe what makes metal an electrical conductor.** | | | | | | |

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| **Time** | **Teacher Activity**  What are you doing? Additional adults in room? | **Pupil Activity**  What are the pupils doing? **Evidence of progress? Refer to Learning Points.** |
| 10 mins | * Get ready for the lesson. * Hand the chapter glossary. * Starter on the board (★ Sketch and label the parts of the atom.   ★★ Why are the symbols/ signs bellow important?  ★★★ Name some uses of electrical current.  Challenge: draw a simple circuit.)   * Circulate the room. | * Get ready for the lesson. * Attempt starter. * Identify starting point.   **Progress**   * Recall previous already existing knowledge. * Think creatively. * Collaborate for answers. |
| 10  mins | * Feedback answers. * Introducing the learning objectives. * Why do we learn about current and circuits? * Who?- culture/ science capital/ British values. * What is current?- short explanation. * Task: 1) Sketch a working, symbol circuit using the following equipment (Battery, Bulb, Switch, Wires). * 2) If you were an electrician fixing circuits in a house what safety “rules” or steps will you consider? * Challenge ★★★   Why are sockets are not allowed in bathrooms or shower rooms?   * Circulate the room. | * Contribute to the answers.   **Progress**   * Check answers. * Self- marking. |
| 10 mins | * Feedback answers. * Electri village story. * Energy stick demonstration- constant flow of charge. * Targeted questions/ class participation. | * Takes notes as necessary. * Participate in the demonstration.   **Progress**   * Visualize concepts. * Ask questions. |
| 10  mins | * Story take away theory. * Challenge ★★★ * Produce an equation that linked all the variables (current, charge and time). Provide units * Current and charge formula. * AFL task- Rearrange for Q   Rearrange for t  Example   * Challenge ★★★ available. * Circulate the room. | * Make notes as appropriate. * Stretch understanding via challenge. * Attempt task.   **Progress**   * Mathematically manipulate the formula. * Apply knowledge. * Check understanding, |
| 10 mins | * Go through answers. * Insulators and conductors theory. * AFL task- Match up (definitions and examples). * Challenge ★★★   Why is sea water a good conductor?  What do you think cables are made out of and why?   * Wires theory. * Why are wires made of plastic part and a metal part? * Circulate the room. | * Contribute to the answers. * Stretch understanding via challenge. * Attempt task.   **Progress**   * Check answers. * Self- marking. |
| 10 mins | * Exit ticket handed out. * Go through answers. * Consolidate the lesson. * Collect homework on the way out. | * Attempt exit ticket. * Recap key concepts. * Check answers.   **Progress**   * Self-reflect on progress and understanding. * Green pen marking. |

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| **Resources needed:** printouts, glue, energy stick. |
| **Health and Safety issues and Risk Assessment**: Students will be following the basic lab safety rules which include; no drinking water or eating and place all belongings under the bench. Students are not expected to walk around the room without specified purpose. |
| **Homework set: NA** |