# Curriculum Links – Batteries

**Year 7-8**

- Scientific knowledge has changed peoples' understanding of the world and is refined as new evidence becomes available.
- Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures
- Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations
- People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity
- Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge
- Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed
- Measure and control variables, select equipment appropriate to the task and collect data with accuracy
- Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships in data using digital technologies as appropriate
- Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence
- Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements
- Use scientific knowledge and findings from investigations to evaluate claims based on evidence
- Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate

| | Demonstrated inquiry | Prescribed inquiry | Structured inquiry | Guided inquiry | Open inquiry |
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| Questions | No question | Teacher provides question | Learner sharpens question | Learner selects question | Learner poses questions |
| Plans | No planning | Teacher provides procedure | Teacher discusses possible plans | Learner guided while planning | Learner determines plans |
| Conducts | Teacher conducts | Learner told how to conduct and record | Learner sharpens plan and conducts | Learner guided while conducting and recording | Learner conducts and records |
| Analyse | Teacher analyses | Leaner told how to analyse data | Teacher discusses possible analyses | Learner guided in analysis | Learner analyses data identifying trends |
| Problem Solve | No problem solving | Teacher provides reasoning and links | Teacher discusses reasoning and conclusion | Learner guided in reasoning and formulate conclusion | Learner reasons to formulate conclusions |
| Communicate | No conclusion | Teacher writes conclusion | Learner writes conclusion | Learner guided on justifying findings and communicating | Learner justifies findings and conclusions |