

Science – Sustainable Energy

Learning Intention: 5/6F will investigate the driving question, “How can we ensure that we are using energy in a way that is sustainable?”

Success Criteria:

Students will;

- Research one energy type e.g. hydro, solar, wind, coal, natural gas
- Evaluate the sustainability and efficiency of their energy type
- Share their findings with the class e.g. create a book, interactive poster, padlet, nearpod lesson, video etc.
- Design and build a solar powered machine

Outcome/s being addressed:

Explains how energy is transformed from one form to another ST3-8PW-ST

Energy Type: _____

Research notes: Find out, is it renewable? What impact does it have on the environment? Are there problems with using it? Is it ready to be used now? If not, when will it be ready? Does it get your thumbs up? Why/Why not?

I will share my knowledge by (your choice how you would like to publish and share your research):

Image of research project (photo of poster or screenshot of digital presentation)

Photo of solar powered machine

Explain your machine design

Exploring Batteries with Bloom's Revised Taxonomy

Remembering

List as many uses for household batteries as you can think of.

Name as many different sized batteries as you can. Write down all the places where you can buy batteries.

List the prices of different batteries by looking through store catalogues.

Understanding

Describe the composition of a battery.

Draw and label the parts of a battery.

Describe how a battery works.

Applying

Demonstrate or draw a series of diagrams illustrating how to properly insert a battery into a torch, a tape recorder or alarm clock.

Analysing

Determine ways the battery has changed the following markets: toys, small appliances, and health aids.

Evaluating

What criteria would you set up to evaluate a particular brand of battery? How would you use these criteria to select your next battery?

Creating

Invent a new toy that operates on batteries. Draw your design and indicate how and where the batteries are to be installed.