FLEET Schools: Activity 1: What is electricity

Learning Intentions

Students will think critically about how electricity has changed the world, where it comes from, how we generate and use electricity and the risk, benefits and acceptability of these uses.

Materials

None

Teacher Notes	Teaching Notes: Running the activity
We observed and harnessed electricity way before we understood how it worked. Electricity is a range of phenomena associated with the flow of charge.	Create small student groups Students brainstorm how they think electricity has changed the world. Students could consider the following questions:
Value of electricity	
Electricity might mean children can pump and purify their water, they can switch on a light at night and	What would the world, their life would be like without electricity?
read a book, do their school work, have better access to healthcare because, for example, many medicines, and especially vaccines need	For instance, how cold/hot it would be, how dark it would be? How would you feel?
refrigeration. Electricity enables us to get those medicines to these children and others.	How many things do you do in a day that require electricity?
Our production of electricity	How would you do those same tasks
Think about how we produce electricity from fossil	without electricity?
fuels (gas and coal), nuclear, solar, wind, hydro? What are the benefits and risks with each of these sources? What risks are acceptable and why? For example, <u>US and UK university research</u> has found that about 8 million people die each year from fossil	How might electricity help children such as yourselves, but from areas in developing nations that today still don't have electricity in their homes or village?
fuel pollution.	Where does our electricity come from? How do we generate it?
There are many other reasons we should reduce our energy consumption and change the way we use electricity.	What are some of the problems with how we generate and use our electricity?