

Northern Powergrid: Risks and Hazards

www.northernpowergrid.com/education



Learning Objectives

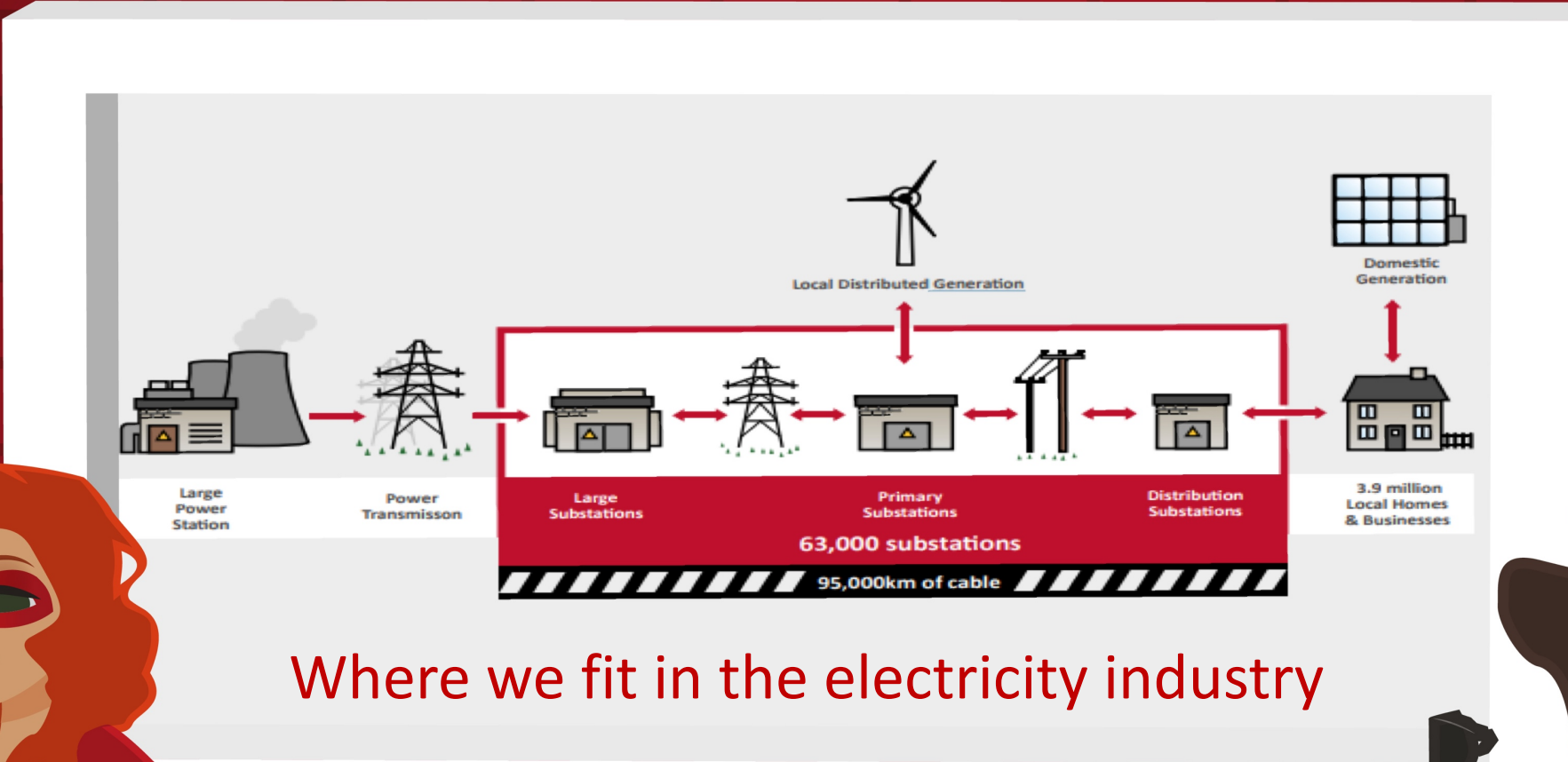
- To identify risks associated with electricity
- To draw conclusions about safety risks from data
- To be able to communicate hazards associated with electricity to target audience



Who are Northern Powergrid?

You may not know who we are but we keep the lights on, the kettles boiling and the phones charged for 8 million people across the Northeast, Yorkshire and northern Lincolnshire.

Put simply, we make sure the electricity you buy from your energy supplier gets to you safely, whenever you need it. And, if your power ever gets interrupted, for whatever reason, be it extreme weather or emergency maintenance, we'll be there immediately to fix it.



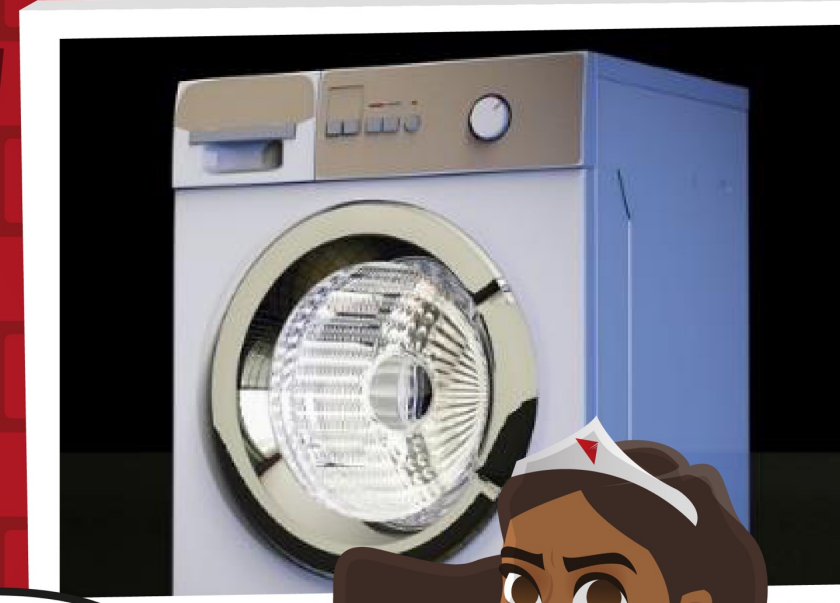
Where we fit in the electricity industry



Write down as many words/
phrases you can associated with:

ELECTRICITY

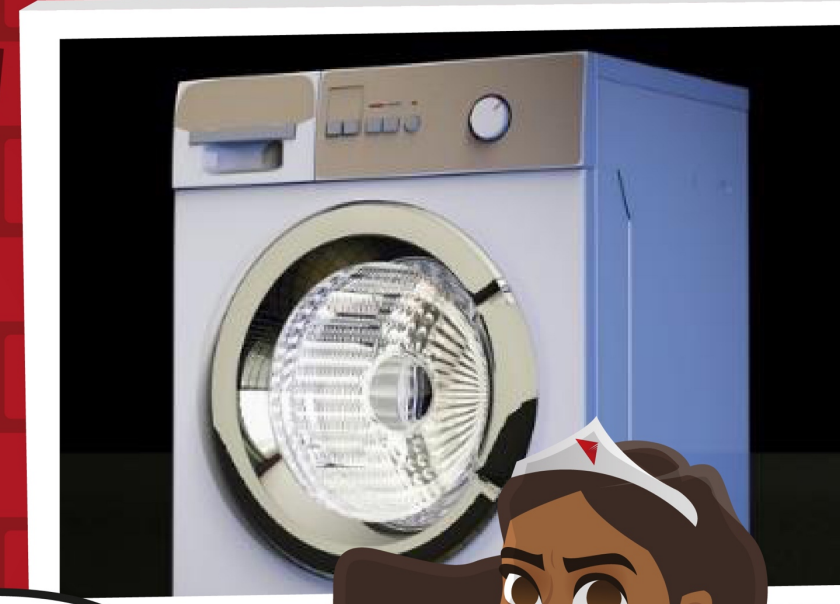
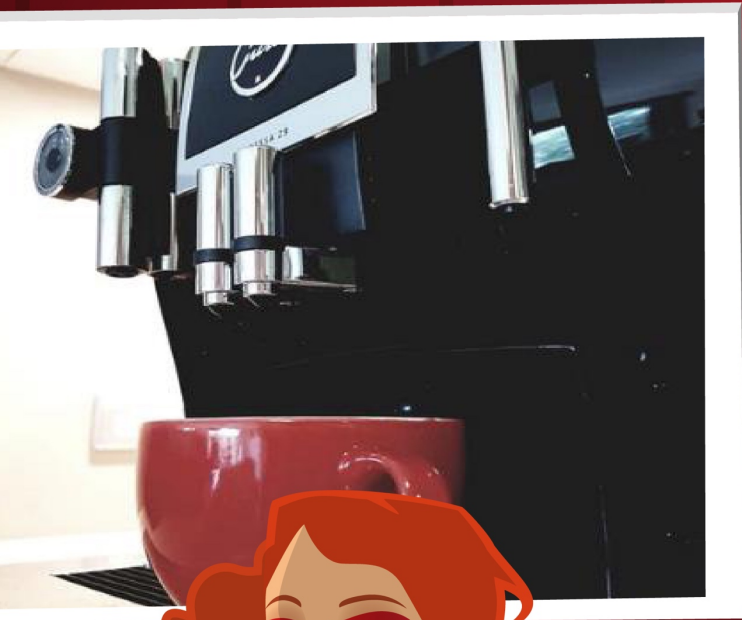




Which has
the higher
wattage?

What do you
think wattage
refers to?

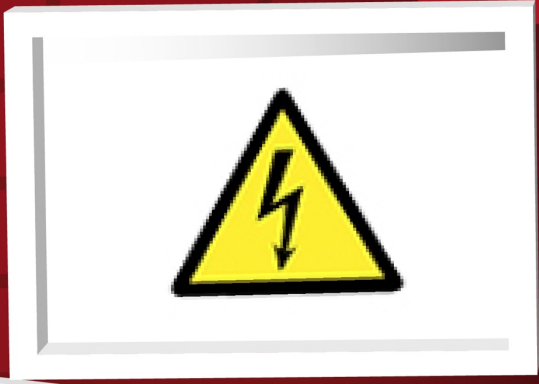




Worksheet 1: Order the pictures from the highest to lowest wattage. Put them into a hierarchical pyramid.

Think about why you have ordered them in such a way and be ready to feedback to the class.





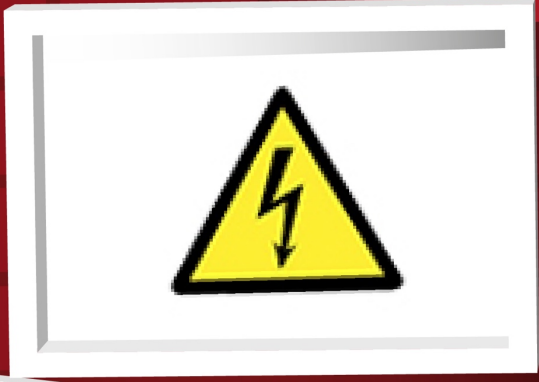
Look at the symbols below.
What does each one mean?
Extension activity: Where
might we see these?





Switch off
when not
in use

CAUTION
(electric
voltage)



Danger
of Death

Symbols and
their meaning





Spot the hazards

Can you see all 4 hazards?

1. Overloaded power strip
2. Electrical equipment near a water source
3. Unattended child near a plug socket
4. Kitchen appliance with a frayed wire



Spot the
hazards

Can you see all 4
hazards?

Extension

What other household
electrical hazards can
you think of?



Two
Dangers Of
Electricity

What
Are
They?



READ, PAIR, SHARE.
What makes electricity dangerous?

Read the article provided and in pairs discuss with a pair: what makes electricity dangerous from a scientific point of view?



This symbol is often seen outside the home. The Danger of Death sign means that there is a risk of electrocution and that you should not get too close to where it is displayed as you could get an electric shock that could cause a serious injury or even death.





Can you name
any electricity
dangers outside
of the home?



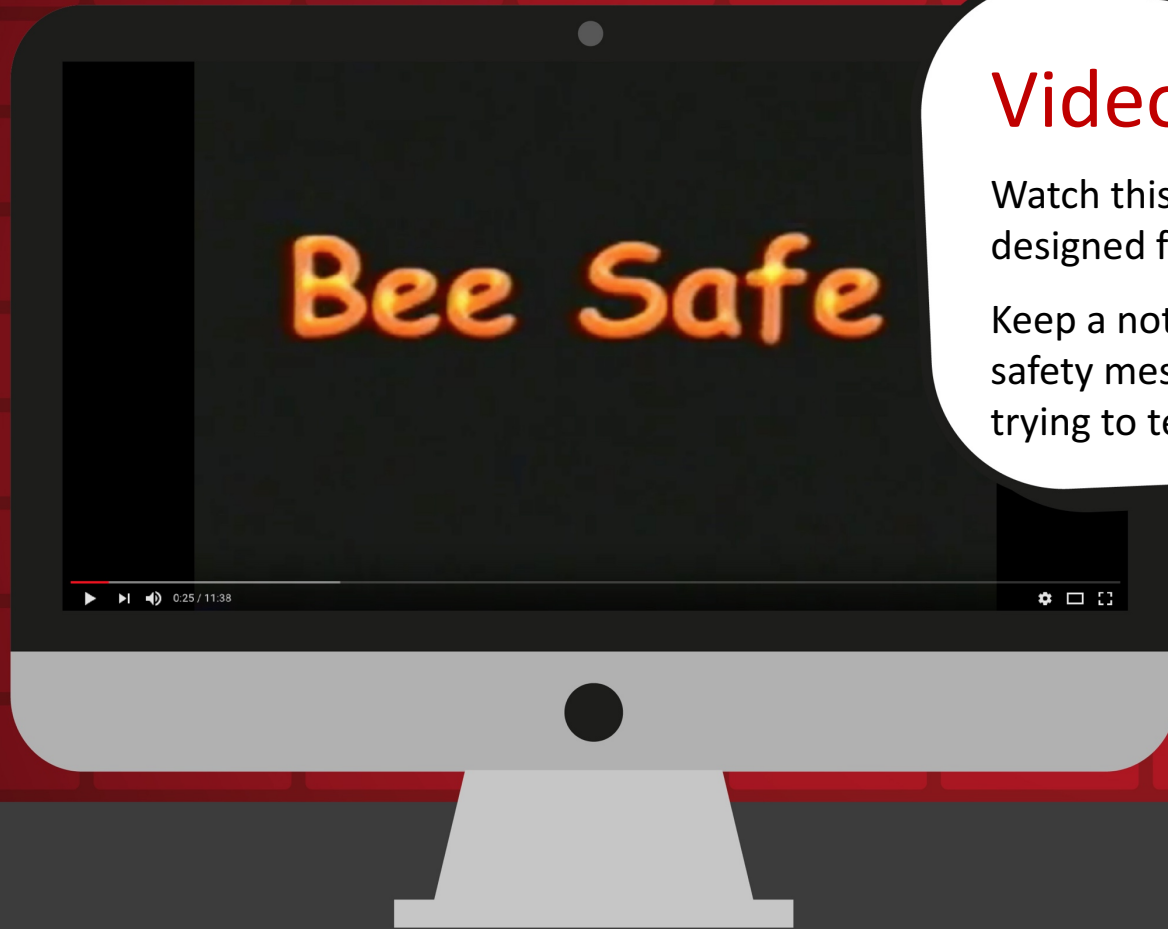


Dangers Outside
The Home:
Roleplay Activity



LESSON TWO:
Risks/ Hazards





Video Task:

Watch this 'Bee Safe' video designed for a younger audience.

Keep a note of the key electrical safety messages this video is trying to teach.





Video Task:

What were the strengths and weaknesses of this video?





Video Task:

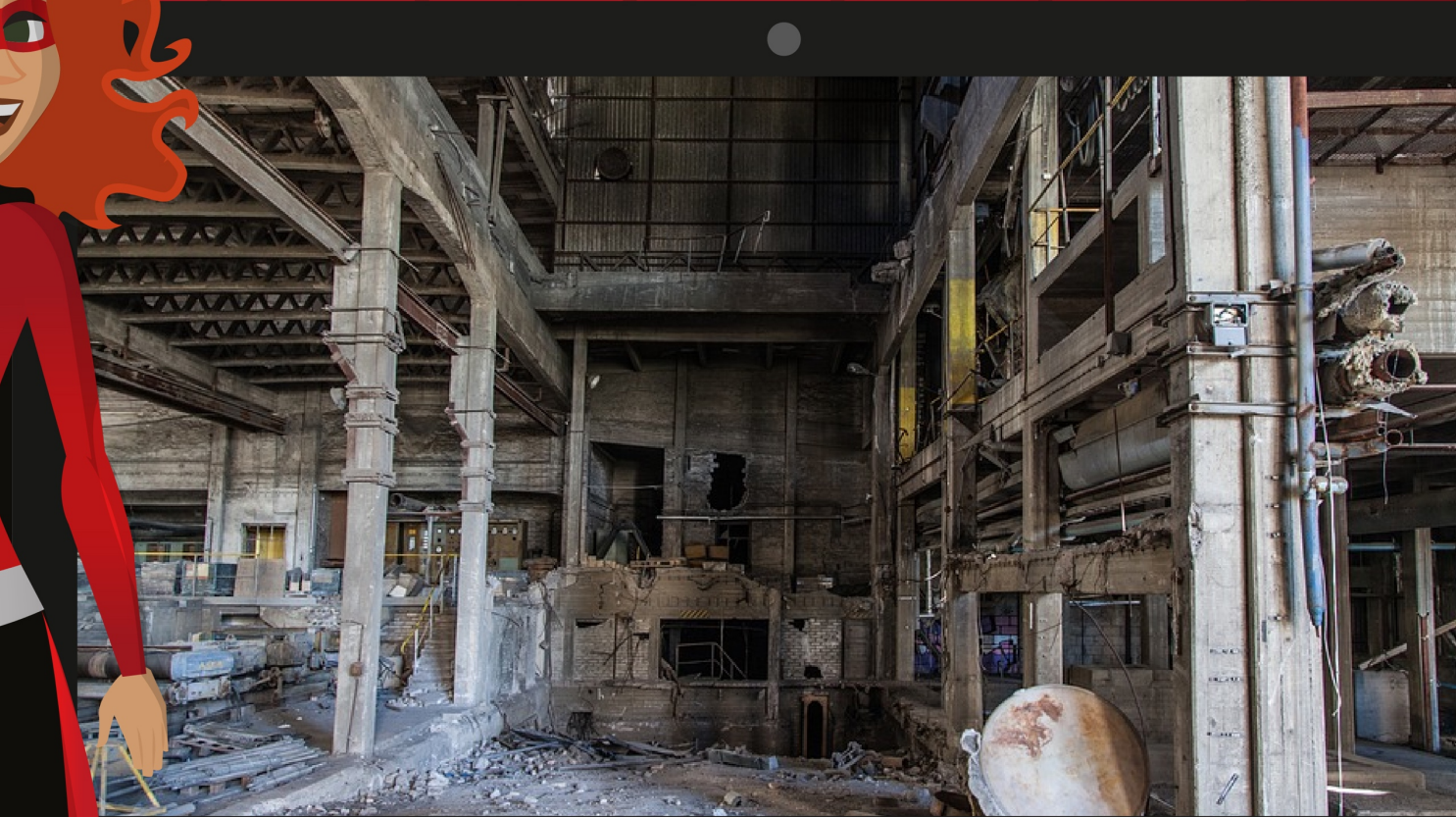
How would you make a video with the same key lessons and messages for people of your own age?



Video Task

You have been asked to create a video highlighting the dangers of urban exploration with an emphasis on electrical equipment. We want to hear your ideas!

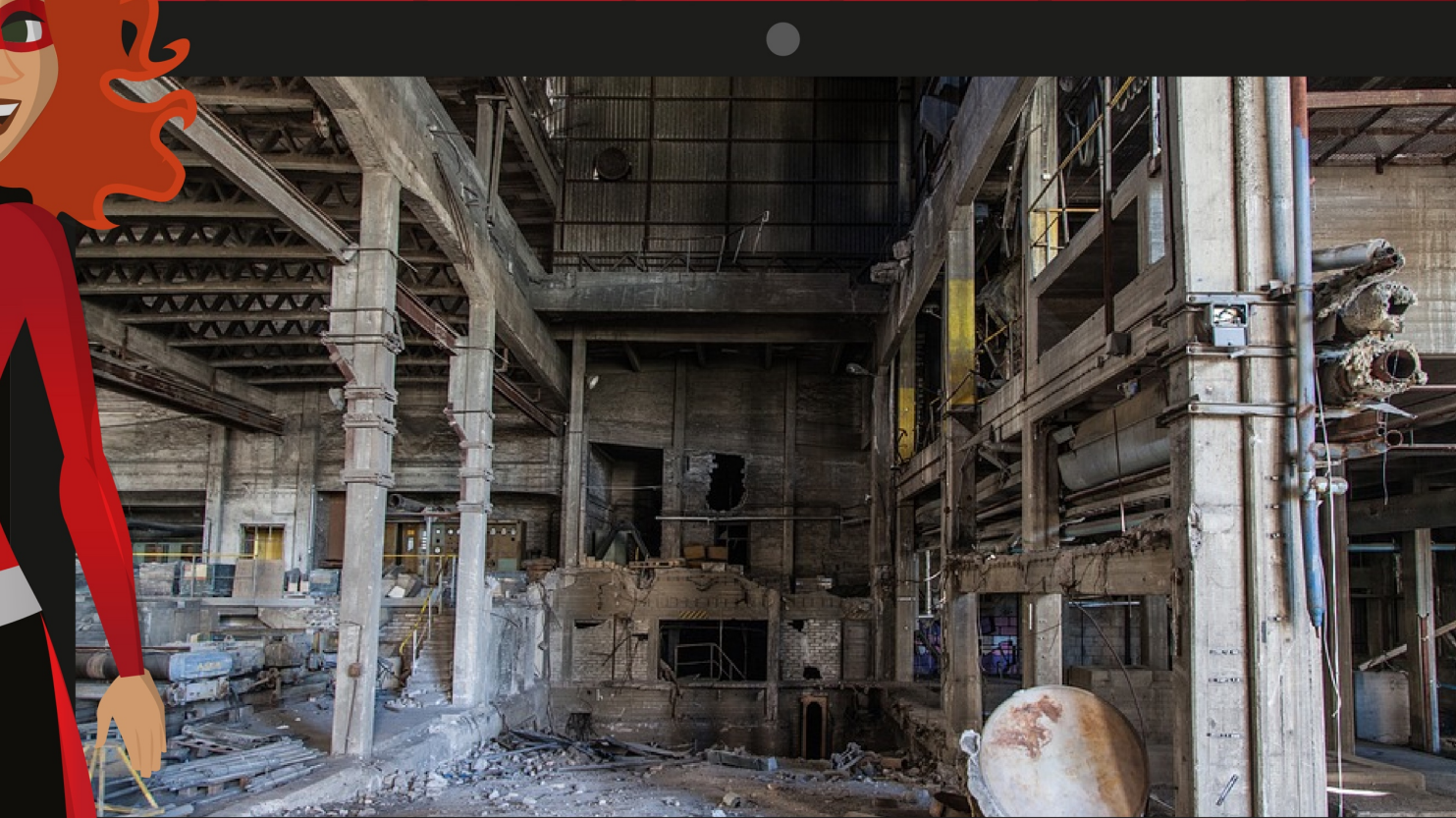
Work in groups to research, plan and create/ act out your video.



Plenary

We are going to share our videos/ ideas.

Think of two positive comments about each group's video as well as a comment for improvement.





Well done!

