

Example time table:

Time	Activity & Group
Half an hour	Arrive and set up
One Hour session	Activity 1
One Hour session	Activity 2
	School Break time (if there is one)
One Hour session	Activity 3

Each activity should last an hour and can be run on its own without the other activities if required.

There will be three groups of students (approx. 6-10 in each group depending on numbers) who will rotate round the workshops, each workshop lasts an hour.

Activity 1: Renewable Energy – Wind Power!

Making a miniature wind turbine!

Overview:

This activity will involve the pupils looking at different types of renewable energy, in particular wind power. They will look at how windmills work, examples of different types of turbines., why they have blades, and why they are the specific shape.

What you need to do:

1. Have a discussion with the group about renewable energy
 - Ask them to name as many renewable energy sources as possible.
 - Discuss why renewable energy is better for the environment than coal.

2. Introduce the idea of wind power- use the picture sheet to talk about different types of wind turbines.

3. Give out the instruction sheet and equipment and explain that the objective is to create a wind turbine that is capable of lifting a paper cup off the floor.

4. If most are able to complete this task within the hour, they can then move on to see how many paper clips can be lifted in the cup as a little competition.

Equipment list:

- Sheets of strong, thick card.
- tape
- String
- Scissors
- Plastic/paper cups
- Pencils (rounded ones preferred over hexagonal)
- Paper clips
- Table surfaces (to attach the model turbines)

Activity 2: Carbon Footprint

Students will look at what a “carbon footprint” and why it is important to be maintained. Pupils will also explore ways in which they can reduce theirs and consider the environmental importance of keeping their carbon footprints low.

Part one – Icebreaker quiz. Students will be asked a quiz question about energy saving,

What you need to do:

1. Get the group to form small teams of approximately 4 per team, give them one minute to come up with a team name.
2. Write all the team names down to keep score.
3. If they have the answer they have to put their hands up and say their team name. First team to answer correctly gets the point.

Part two – How big is your carbon footprint?

Students will take it in turns to calculate their carbon footprint using the online survey. We will then have a brief discussion and look at how many students have large/small carbon footprints and why that might be.

What you need to do:

1. Ask them if they know what the phrase ‘carbon footprint’ means.
2. Hand out the Quiz sheets – Get them to work out their carbon footprint individually and then as a team and lastly as a whole group.
3. Have a brief discussion about why some people have small or large carbon footprints and what they might be able to do to reduce these.

Part three- Offset your carbon footprint.

Students will learn what it means to 'offset' and also other ways they can lower their footprint. As a start to offsetting their footprint, each student will plant a seed to take home with them, as plants absorb carbon dioxide.

What you need to do:

1. Explain what 'offsetting' means and talk about other ways they can lower their carbon footprint.
2. Explain that as a start to trying to reduce their footprint they will be planting a seed to take home, as plants absorb carbon dioxide.
3. Demonstrate how to plant a seed, give out the equipment and supervise them planting their own seeds.

Equipment:

- Aprons
 - Plant pots
 - Seeds
 - Compost
 - Tarpaulin
 - Tables
 - bin bag
 - laptops/computers
-

Activity 3 - Recycling challenge

In this activity pupils are required to choose a piece of rubbish commonly found in recycling and using this as a starting point they need to design a new product of their choice.

They then Design a poster and logo for your new product to explain:

- What it is
- How it works
- What it's made of

They then present their idea back to the rest of the group, mentioning things such as why this is better than buying a brand new product and the positive impact this would have on the environment on a large scale.

What you need to do:

1. Briefly introduce the idea of recycling – what is it, why it's important, what things you can/can't recycle.
2. Ask them to split into smaller teams approx. 4 in each.
3. In their teams get them to pick some recycling and explain that their task is to make a new, useful product out of their rubbish.
4. Give them half an hour to come up with either an idea and a poster, or to actually make the 'product'
5. Get them to tidy away and then present their new product to the rest of the group.

Equipment:

- Large sheets of paper
- Coloured marker pens
- Recycling,
- Tape
- Scissors