

Cut the Carbon Quiz

Workshop description:

25% of the UK's carbon emissions come from households. In this workshop students work in teams to try and reduce their carbon emissions by as much as possible. As the time ticks by which team will be energy savvy enough to cut their carbon the most?

Summary of workshop:

- Quiz on energy efficiency.
- Revealing of the answers to see which efficiency measures save the most energy.

Time: 1hr-1hr10mins

Number of students: 12-30

Suitable for years: 7-11

Misconceptions:

- That using renewable energy is more important than saving energy.
- That nuclear power is finite.

Learning outcomes

By the end of the workshop pupils should be able to:

- Name at least one fossil fuel and one source of renewable energy.
- Give one way of saving energy at home that involves installing new equipment.
- Give one way of saving energy at home that requires a change of behaviour.

Vocabulary: **KS3** – Fossil fuel, renewable, energy efficient,
KS4 – Uranium, finite

Resources: (All supplied by SWAP unless stated otherwise.)

Carbon meters, one per team

Question cards

Energy efficiency posters and answers

Team worksheets

A,B,C cards

Kitchen timer

Wipe off pens

Calculator

Prizes!

Duration

2mins

5mins

5mins

38-48mins

10mins

Teaching and Learning activities:

Introduce myself, SWAP and what we will be doing in this workshop.

Explain what is meant by the carbon footprint of a house; give some facts and figures about carbon.

Explain the rules of the quiz.

Students work in teams. Each team has their own carbon meter and the aim is to answer questions correctly so that they can choose energy efficiency measures to reduce their emissions. The team with the lowest emissions at the end wins.

Students put all of the energy efficiency measures in order from the smallest to the largest carbon dioxide savings so they can see the best things to do at home.