



Title	<b>Carbon Cuppa Challenge</b>
Key Stage(s)	KS4, KS5,
Subject(s)	Maths, English, Technology, Problem solving, Personal & Thinking Skills
Objectives	<ul style="list-style-type: none"> <li>• To understand the contributions to carbon emissions made at different stages of the production cycle.</li> <li>• To develop constructive suggestions to reduce the carbon footprint of a cup of tea.</li> <li>• To pitch ideas to a group in a convincing manner</li> <li>• To experience effective working as a team</li> </ul>
Duration	30-40 minutes
In brief	Students predict which part of the production chain for a 'cuppa' has the biggest carbon emissions. They then watch a related video clip before being challenged in teams to suggest ideas to reduce the carbon footprint of a 'cuppa'.

## PREPARATION:

Plenty of Post-it notes are advisable. The only printing required is **one** copy of:-

- a) **slide 3** for every **pair** of students
- b) the '**Hints 1**' **A4 sheet**, ideally cut into 25 small cards
- c) the '**Hints 2**' **A4 sheet** needs no cutting ~ it is the answers for your eyes only!

Notes for the teacher are attached to each slide (in power point presentation only)

The YouTube video referenced in the notes can be found [here](#)

More information about Unilever brands can be found [here](#)

Further information about the Unilever Sustainable Living Plan can be found [here](#)



## INTRODUCTION:

Set the challenge through slides 1 & 2 (of set of 9).

Students in pairs VERY BRIEFLY discuss which part of the Production (Value) Chain they think is worst for the environment (most Carbon Emissions).

Hand out one copy of slide 3 per pair of students

### Task 1:

Answers should be inserted into the first grid shown in slide 3

The YouTube video with the answers can be found by right-clicking and opening the hyperlink [here](#) and/or embedded in slide 4. Slide 5 summarises Unilever's results.

Students may be surprised by the size of the contribution that each stage has on the environmental footprint.

Unilever point out that, although factories and distribution do use a lot of energy, water etc., they also producing every day millions of products (such as tea bags).

Consequently the environmental footprint **per product** is relatively low.

By way of a different example, we might use a bottle of radox shower gel 20/30 times and, therefore, need to heat water for a shower 20/30 times.

This explains why consumer use can contribute so much to the environmental footprint.

**Task 2:** Students think-pair-share about what can be done in order to reduce the impact of the Production/Value Chain on the environment. Student pairs are asked to write down 4 ideas on post-it-notes (slide 6).

They then combine with their other team pair(s) and select their best six ideas between them, ideally covering all 5 stages of the production cycle.





Suggestions for the teacher can be found in the notes section of the powerpoints.

These suggestions are also available as 25 small cards in the “**Hints**” document.

You **may** wish to invite teams finding it difficult to come up with their own ideas to ‘purchase’ a maximum of 3 cards to help them.

Inform the group, however, that these cards cost 2 votes each, especially important at the end of the session when the winning team will be the one voted as having the best ideas

**Task 3:** Students work in their teams in order to rank their six ideas (slide 7) and prepare their ‘pitch’ (slide 8)

Students might wish to consider factors such as feasibility, investment and impact.

‘Hints 1’ cards can still be made available during this task.

Remember the ‘Hints 2’ sheet provides the answers.

## **PLENARY:**

Students assess teams’ ideas by means of a group vote (slide 9).

Remember to deduct 2 votes for every ‘Hint’ card a team requested.

Don’t forget also to remind students that they:-

- only have **one vote each** and
- **they are not permitted to vote for their own team.**

Announce the winning team and, if time, ask them to remind everybody of their ideas.