

The Great Question Ponder

Great
Science
Share
for SCHOOLS

AGE RANGE: 5–14 years

This talking task engages pupils of all ages in sharing ideas and opinions when pondering questions related to sustainability.

Designed with the support of the Climate Adapted Pathways for Education (CAPE) team, using Huthwaite International's verbal behaviour strategies and linking with Thinking, Doing, Talking Science (TDTScience) PMI, the **Great Question Ponder** poses questions and statements for group discussion before or on the Great Science Share for Schools' day.

13 CLIMATE ACTION



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



**Is electricity
a positive impact
on our world?**



Use the **Great Question Ponder Prompts** to encourage pupils to improve their discussion by using different verbal behaviours when talking together.

CAPE offer factual insights into myths that many people may consider true. Teachers can use these to inspire pupils to adapt their thinking.

RESOURCES

Great Question Ponder Prompt
Teacher Myth Busting Memos
Sustainable Science PMI

Question Ponders linked to GSSfs Guided Enquiries

What is better - long lasting, expensive clothes or affordable clothes with a shorter lifespan?

How are the Olympic games fair if athletes have different training opportunities?

Does your carbon footprint really matter?

Are scientists the best people to tackle climate change?

Great Question Ponder Prompts

These cards should be used to encourage pupils to use different ways of talking when exploring key questions.

Reacting Behaviours

Supporting

When you say you agree with someone or like their idea

That's a good idea!
Yes, I agree with you!
I like what you say.

Disagreeing

When you say you don't agree with what someone is saying

I disagree with what you say.
I don't think that's right.
I don't think that will work.

Clarifying Behaviours

Summarising

Bringing together what has been said in a shorter way

So if we put all the ideas together, what we have said is...

Testing Understanding

Checking you've understood and that others understand you

Do you mean that...
Can I check you've told us that...

Giving Information

Telling people things

The facts are...
The information I have is...
What we know is...

Seeking Information

Asking questions and trying to find things out

Do you think that...?
Can you tell me a bit more about that?
Why do you think that?

Teacher Myth Buster Memos

It's easy to take for granted the things that are said in everyday conversation. Pupils are likely to pick up on common misconceptions and these may emerge during Great Question Ponder discussions.

Below are three myth buster memos to support the pupils in understanding the facts related to the myths.



Planting trees is a great way to offset your carbon footprint

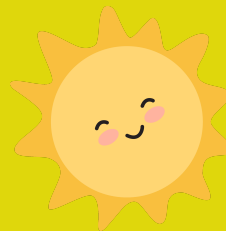
It takes around 25 years for most trees to be able to start sequestering carbon and 'offsetting' carbon footprint and indulgent electricity usage.

The mitigation of actions now are not offset through this action.



Electric cars are good to use!

They are often positioned as the answer to sustainability and climate change issues. However, unless they are charged through sustainably sourced electricity they are only part of a solution.



Renewable energy can't be generated if there is no wind or sun

The electricity generated by photovoltaic stations cannot happen in the dark and wind turbines cannot generate electricity if there is no wind. However batteries are able to store renewable electricity to be able to be used under these conditions.

CAPE

Climate
Adapted
Pathways for
Education

Sustainable Science PMI

Encourage pupils to discuss what they think are the **pluses**, **minuses** and **interesting** things about phrases such as:

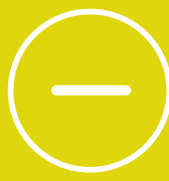


Imagine a world without electricity



“You won’t waste so much energy.”

What would be good about it?



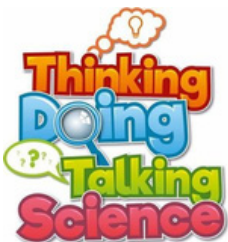
“You wouldn’t be able to watch TV.”

What would be not so good about it?



“People might be fitter.”

What would the opportunities be?



Edward de Bono is credited with inventing the concept of Positive, Minus, Interesting (PMI) as a creative lateral thinking strategy. Given a specific scenario, pupils are encouraged to consider positives, minuses and interesting points.

- Asking pupils to consider positives, minuses then interesting ideas one at a time gives structure and focus and maximises the opportunity for Higher Order Thinking.
- After practice with the approach, pupils could choose whether their idea is positive, minus or interesting.
- To increase the challenge, the teacher can ask groups of pupils to focus on one category (positive, minus or interesting) and think of as many ideas as they can which fall into this category.

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