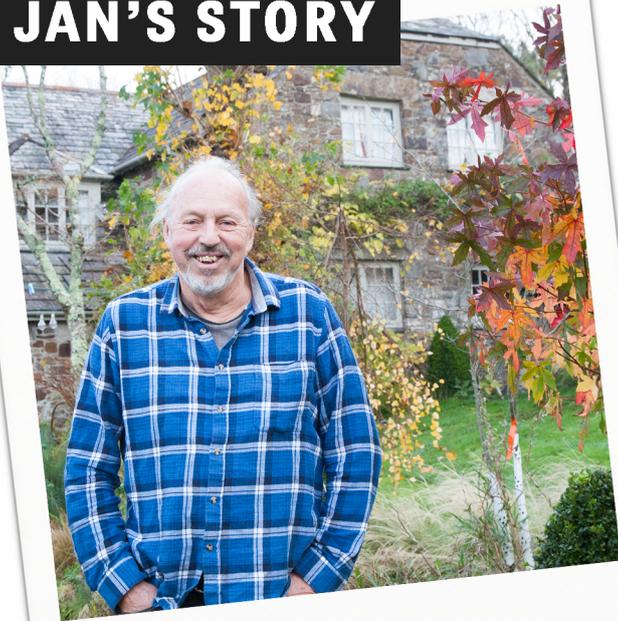


JAN'S STORY



Everything we do, from the products we buy and the food we eat to the way we travel, releases greenhouse gases into the atmosphere, and so has an impact on the planet's climate.

Jan has an admirable attitude to waste and energy. His lifelong habit of frugality, instilled in him as a child, means that he has a much lighter impact on the planet than most. Installing renewable energy to power his home, growing his own food and reusing and repurposing discarded items, Jan has created a beautiful and efficient living space.

We don't all have the skills or time to lovingly craft our homes this way. However, there are other ways that we can achieve similar outcomes, and as our systems change it will be much easier for us to make decisions that stop our money translating into environmental harm.

You can read more about [energy and air pollution here](#). We have also suggested some links at the end of this toolkit.

THIS TOOLKIT

This toolkit has been devised to help KS3 pupils think about climate change in relation to their own experiences and locality.

Using Jan's digital story as a starting point, we hope to encourage discussion and the sharing of memories and experiences around the themes of **energy** and **consumption**.

To delve deeper into these themes we have outlined a series of activities and ideas for you to adapt to your class needs, time availability and teaching method. Whether you dip in for an hour or run with an idea for a whole term, there's scope for interpretation and creativity. It can be cross curricular and incorporate literacy, art, design, and science and gives scope for classroom work and independent research.

GET THINKING

Before you start it might be helpful to unpick some of these terms through a class discussion as pupils will need to have an understanding of what they mean. Here are some thoughts and ideas you might want to explore to get the ball rolling.

ENERGY

Think of all the different types of energy that you can. Make a list and confer with a partner. We require energy for so many aspects of our daily life, such as to heat our homes and bring us the food we eat. Think of all the things in your life that need energy. Where does this energy come from? What is the main source of energy in your home? How does this work and is it efficient? Have you ever been without power in your home? If so, what did it feel like? If this happened in the future how would you cope and would you be prepared for it?

Are you an energetic person? Give yourself a score out of 10 to show this. What do you need to keep your energy topped up and your body functioning? What drains your energy and what do you do when this happens? Find out how the human body can be a power source.

RENEWABLE

Have you heard this word before and in which context? What does it mean? A renewable resource is a resource which can be used repeatedly because it is replaced naturally. What do you use in your life that is renewable? For example oxygen, fresh water, solar energy and timber. Think of as many renewable sources of energy as possible. Solar, biomass, wind, ocean energy, hydropower, geothermal, tidal, hydrogen. Do you have any experience of any of these sources? Fossil fuels are not renewable. Why is this? They take millions of years to be made, and cannot be renewed in our lifetime or even a nation's lifetime. Do you see any examples of renewable energy sources around Bude? Find out which countries have the most renewable energy sources. What sources are they?

CONSUMPTION

Have you come across this word and in what context? What does it mean? Consumption is the act or process of consuming and applies to food and resources. When you buy something you are a consumer. What types of things do you consume? What does the word overconsumption mean? Have you ever overconsumed? Do you think some countries consume more than others?

BIOMASS

Have you heard this word before and in what context? Did you spot the example in Jan's story? This word is made up of 2 words, bio and mass. What do they each mean and how do they have a meaning together? Biomass is plant or animal material used as fuel to produce electricity or heat. Think of all the different types of biomass that could be available to generate energy? What was Jan using to generate energy and where might he have got this from? Is biomass renewable?

REPURPOSE

Have you heard this word before and in what context? What do you think it means? It is made up of 2 words, re and purpose. What do they each mean and how do they have a meaning together? Jan does a lot of repurposing. Can you spot all the examples in his story? What is the difference between this and recycling?

GET SHARING

To help you relate this story to your lives, you might like to use these prompts to share some of your own experiences and reflections.

This could be done in pairs, small groups or as a class. It's a good opportunity to practice your listening skills, taking it in turns to share with each other.

Have you ever collected anything that has been thrown away? What did you do with it?

How good are you at using your hands? What was the last thing you made with your hands?

Have you ever repurposed any thing in your life or have anything in your home that is repurposed?

Have you ever managed to fix something? How did this feel?

Do you have anything repurposed or reclaimed in your home or garden that has an interesting story attached to it?

Have you ever made something from discarded materials? Describe it. How did this feel?

What do you think about buying repurposed goods versus brand new goods?

Have you ever seen any interesting uses of repurposed materials?

What would help you cut down on buying new and replace this with buying second hand?

How does it feel using your hands to transform something?

What was the last thing you bought new? Did you think about where this was made and how it got to you?

What do you throw away? Could this be reduced in any way?

What happens to the things you no longer use or want? Could you think of an alternative place for them to go?

What do you think about the amount of things that are thrown away today? What can we do about this?

Can you think of something you owned which broke and couldn't be repaired? How did you feel? What happened to it?

What planet saving actions do you do that give you pleasure?

ENERGY TOP TRUMPS

A game to explore the energy requirements of household items.

Energy is complex and so this activity is bound to throw up lots of questions. But the aim is to have some fun and open up discussion and debate around the energy we use. There are no right or wrong answers and some time to conduct research will be helpful.

THINK OF AN ITEM in your home that requires energy. Fill in the categories on a blank top trump card (template at end of toolkit), giving your item a score out of 10 for each. This is quite complicated, with conflicting information, so it's about doing your research and then having fun.

You might be surprised at some of the things you find, such as how much energy data requires, for example your Xbox game not only uses energy from the mains, but also uses energy through the data it requires).

ENERGY EFFICIENCY

How much energy does this item need to power it? For efficient items that don't require much you'll put a high score, for items that require a lot of energy to power them your score will be lower.

REPAIRABILITY

How easy would it be to repair your item? Give items that are easy to repair a high score and for those which are difficult or impossible, a low score.

TIME SAVED

How much time does this item save you? If it saves you lots of time then give it a high score, for items which don't save you much time, give a low score.

LIFESPAN

Has this item got a long lifespan? If it does then it gets a high score. For things that don't last long then give it a low score.

FREQUENCY OF USE

How often do you use this item? If you use it all the time then it gets a high score, for things that rarely get used then give a low score.



RULES

Get into pairs or small groups and have a game of Energy Top Trumps. Any number of people can play.

1. Shuffle and deal the cards face down.
2. Players pick up their cards and look at their top card only.
3. Player 1 (left of dealer) chooses and calls out their best stat (e.g. 'Repairability' - 6').
4. The other players see if they can beat this stat (Highest number wins).
5. The card with the highest stat wins all of the top cards and adds them to the base of their pile.
6. The winner of the round chooses the stat for the next round.
7. The first player to get all of the cards wins!

REFLECT on how you found this challenge? Has it changed how anyone feels about their appliances and gadgets? Have any items been found to be completely pointless? Would you consider reducing the amount of electrical goods you use?

[Empty box]

Energy efficiency

Repairability

Time it saves

Lifespan

Frequency of use

[Empty box]

Energy efficiency

Repairability

Time it saves

Lifespan

Frequency of use

[Empty box]

Energy efficiency

Repairability

Time it saves

Lifespan

Frequency of use

[Empty box]

Energy efficiency

Repairability

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Repairability

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[Empty box]

Energy efficiency

Repairability

Time it saves

Lifespan

Frequency of use

[Empty box]

Energy efficiency

Repairability

Time it saves

Lifespan

Frequency of use

ON YOUR SHELF

An activity to help you think about your own consumption.

TASK Imagine you're in your bedroom looking around at all your possessions. Using the prompts below, draw some of these items on the shelves.



Something I own but have never used or worn

Something I own that I don't use or need anymore

Something I couldn't live without

Something I'd forgotten about

Something that I saved hard to buy

Something that was brought second hand

Something that needs repairing

Something I've thrown in the bin

Something I share with others

Something that could have a new lease of life when I no longer want or need it

ON YOUR SHELF CONTINUED



REFLECT Share what's on your shelf in pairs or small groups. This is a good opportunity to explore and discuss the **circular economy**.

How has doing this activity left you feeling?

Do you feel differently about any of the the objects you drew?

Might you change how you treat or use any of these objects?

When you decide you no longer need or want these objects, or if they break, what's the best possible thing that could happen to them?

Could you do anything differently when it comes to the things you buy?

Could you do anything differently when it comes to how you treat the stuff you own?

YOUR FEEDBACK MATTERS

To help us evaluate and learn, we need and appreciate your feedback (it'll only take 2 minutes!)

Please follow the links below

Pupils

Teachers

DIVE DEEPER

BBC Bitesize ENERGY RESOURCES
INCREASING ENERGY SUPPLIES
GREEN ENERGY REVOLUTION

Get inspired by the **green revolution**, hear what **Greta Thunberg** is doing and how you can get involved.

This resource was created by **Storylines** in collaboration with the **Bude Climate Partnership**.

