



British Glass



# Glass Guardians

in partnership with Friends of Glass

**Learning objective:**

**To know the importance  
and impact of recycling glass**



Raise your hand if...

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You know what  
recycling means.



Raise your hand if...

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You know at least  
one material that  
can be recycled.



Raise your hand if...

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You know where  
the recycling bin is  
at home



Raise your hand if...

You think we should  
recycle more

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What materials can be recycled?





**These materials can all be recycled!**

What do these things have in common?

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Cardboard



Plastic



Steel cans



Glass



Aluminium cans



All these materials are used for packaging.

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Why do we need packaging for lots of our food, drink and toiletries?



## Why do we need packaging for lots of our food, drink and toiletries?

It keeps them clean.

It means things can be transported efficiently.

It stops goods from getting damaged.



## Packaging is made from lots of different natural resources:

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Cardboard is made from trees.



Plastic is made from oil.



Steel is made from iron and carbon.



Glass is made from sand, limestone and soda ash.



Aluminium is made from a mineral called bauxite.



## What is the impact on the environment?

### What happens when packaging is made?

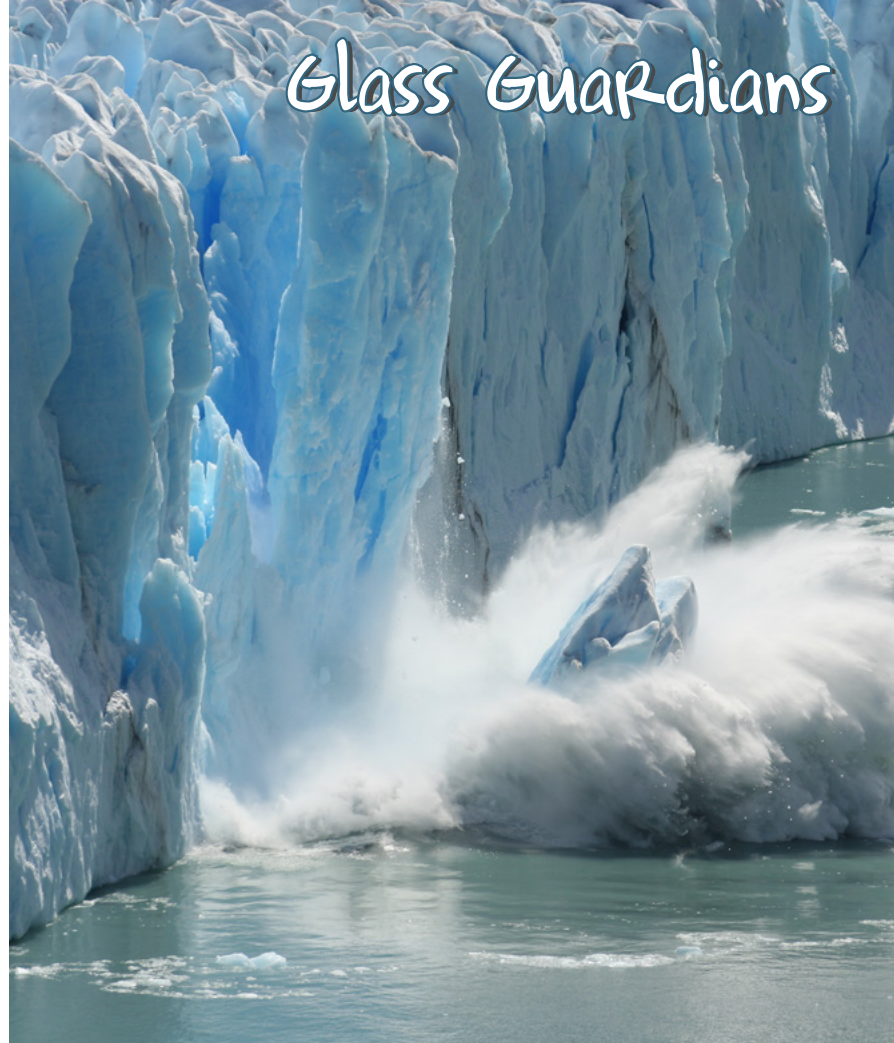
The process of turning natural resources into other materials **uses energy** and **releases CO<sub>2</sub>**.

CO<sup>2</sup> emissions in our atmosphere can cause our planet to heat up, this is called **global warming**. It is causing the **ice in the Arctic to melt and sea levels to rise**.

The natural materials used are precious to us and our world.

These natural resources take a long time to be replaced, and **sometimes cannot be replaced at all**.

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**What is the impact on the environment?**

**What happens when packaging is thrown away?**

It goes to **landfill**.

It costs councils to dispose of it in landfill or incinerate (burn).

The **materials are lost**, so **more natural resources have to be used**

**More energy is used** if natural resources have to be processed.

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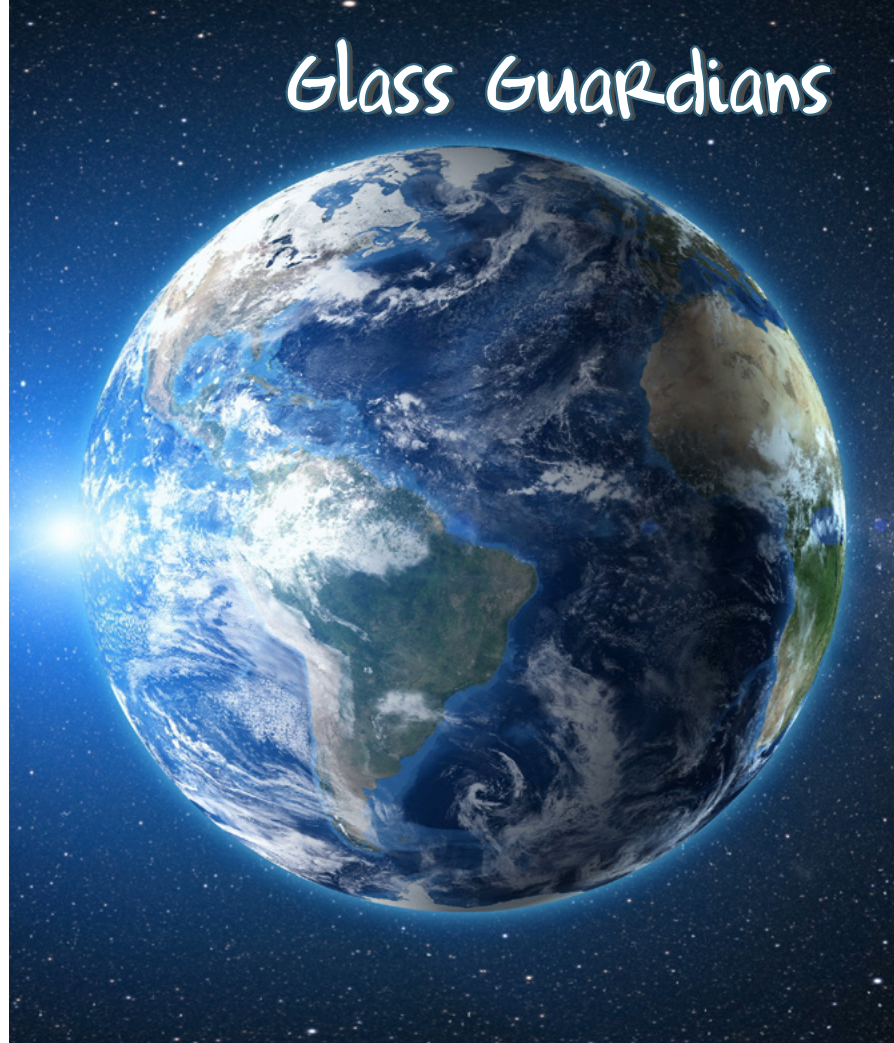
## What can we do to minimise the environmental impact of packaging?

You can become a **GLASS GUARDIAN** and learn more about materials to help others look after the planet.

You will complete four missions in class with your teachers to become a **GLASS GUARDIAN!**

What can Glass Guardians do themselves and encourage other people to do?...

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# Recycle!

The benefits of recycling are:

- Less **natural resources** have to be used.
- It **costs councils less** to recycle than to send waste to landfill/incineration, so they can spend money on better things for the community.
- It **saves energy**.
- It **reduces CO<sub>2</sub> emissions**, which helps prevent global warming.

Some materials can be recycled over and over again without losing quality.  
One of those materials is glass!



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# How is glass recycled?

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## Design a superhero!

### Recycling needs a hero!

We're challenging you to create your very own Glass Guardians Superhero to champion the cause of glass recycling. You'll need to decide on their name, their power, and how they will go about saving the world – one piece of glass at a time!

