

## The Role of Hydrogen in the Energy Transition



#### Learning objective

Add your chosen Learning objective to this slide (see lesson plan)

Vocabulary









Battery (cell)



Independent variable



Solid 



Gas



Dependent variable

Electrolysis

Hydrogen  $\left( H_{2} \right)$ 

 $\left( O_{2} \right)$ Oxygen

**%** Metal

🕀 🖟 Fuel



Comparative or fair test  $\bigotimes_{\mathbf{F}}$  $\bigcirc$ Irreversible Renewable Greenhouse gas

#### Odd one out





### RWE are planning to produce a lot of hydrogen!

We need to test some factors so we can advise them on ways to make their processes work most efficiently.

This is an electrolyser being delivered to a new hydrogen production factory in Lingen, Germany, for RWE. It will produce hydrogen that can be used as a clean fuel.



What variables can we change to try to produce more hydrogen?

Make a list.



#### Planning a fair or comparative test





https://taps.pstt.org.uk/wpcontent/uploads/2023/05/Planning-Boards-for-Fair-Tests-SE-March23.pdf

#### Deciding on a question

What do you predict will happen and why do you think that?



# Collecting data and drawing conclusions







https://taps.pstt.org.uk/wpcontent/uploads/2023/05/Planning-Boards-for-Fair-Tests-SE-March23.pdf

#### Our Conclusions



Groups reports their conclusion to the rest of the class



How could you communicate what you have found out to RWE?



### Meet some of the RWE green hydrogen team

In this short video some of the team working to produce green hydrogen talk about their roles at RWE.

Click on the picture or the link below to watch the video (2 mins and 20 seconds)

RWE personnel video on Vimeo

