



BUILT ENVIRONMENT TRUST
SUPPORTS PEOPLE TO
BUILD A BETTER WORLD

Building a Better World

Three Little Pigs and the Recycled Houses!



Sustainability | Learning Points

- Recycling
- Experimenting
- Materials
- Energy
- Environment
- Architecture

1

INTRODUCTION

What is the built environment?
Why are building materials important?
Examples of building materials.

2

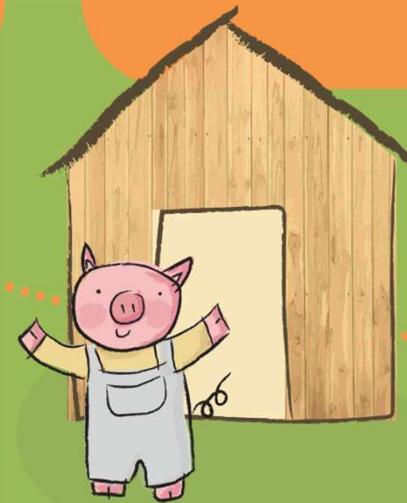
THREE LITTLE PIGS

Using this familiar story to help understand different building materials.

3

YOUR TASK...

Students to use their imaginations to add to the Three Little Pigs story.



INTRODUCTION

What is the 'built environment' ?

It includes all the human-made spaces, places and buildings we inhabit.

buildings

roads and streets

neighborhoods

housing

energy networks

cities

factories

water supply

shopping centers

transportation

public space

schools



INTRODUCTION

Why is the 'built environment' important?

The materials it is made from have a big impact on the environment.



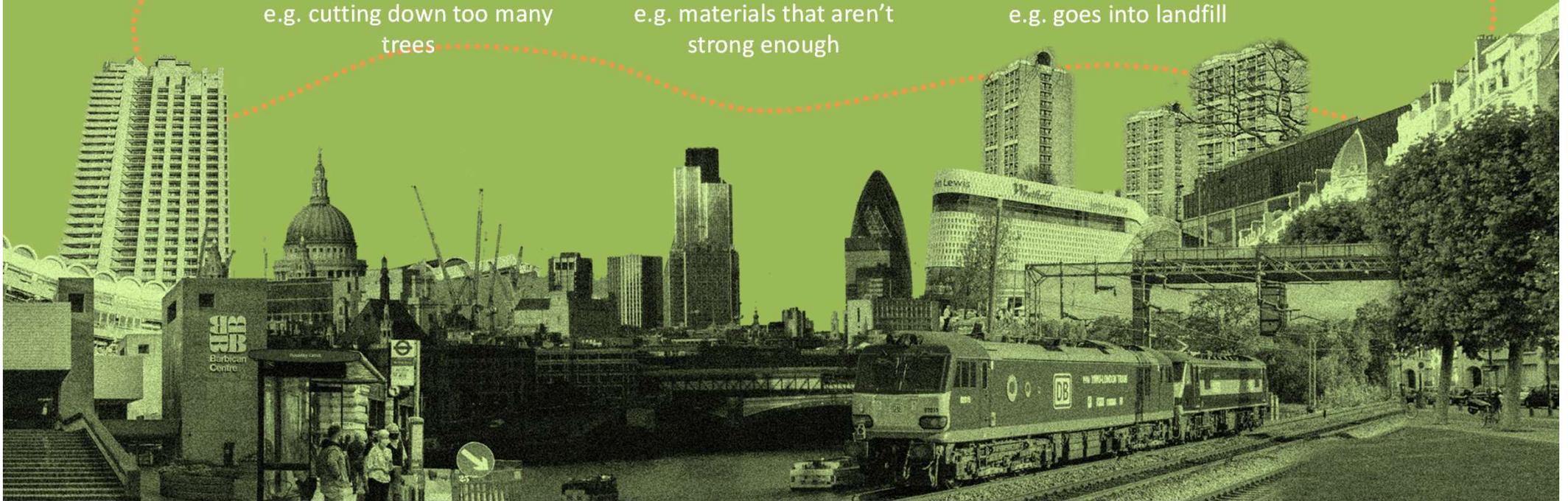
Where materials come from
e.g. cutting down too many trees



How materials are used
e.g. materials that aren't strong enough



What happens after use
e.g. goes into landfill



INTRODUCTION

Learning about materials can help to reduce waste!

Where does it come from?



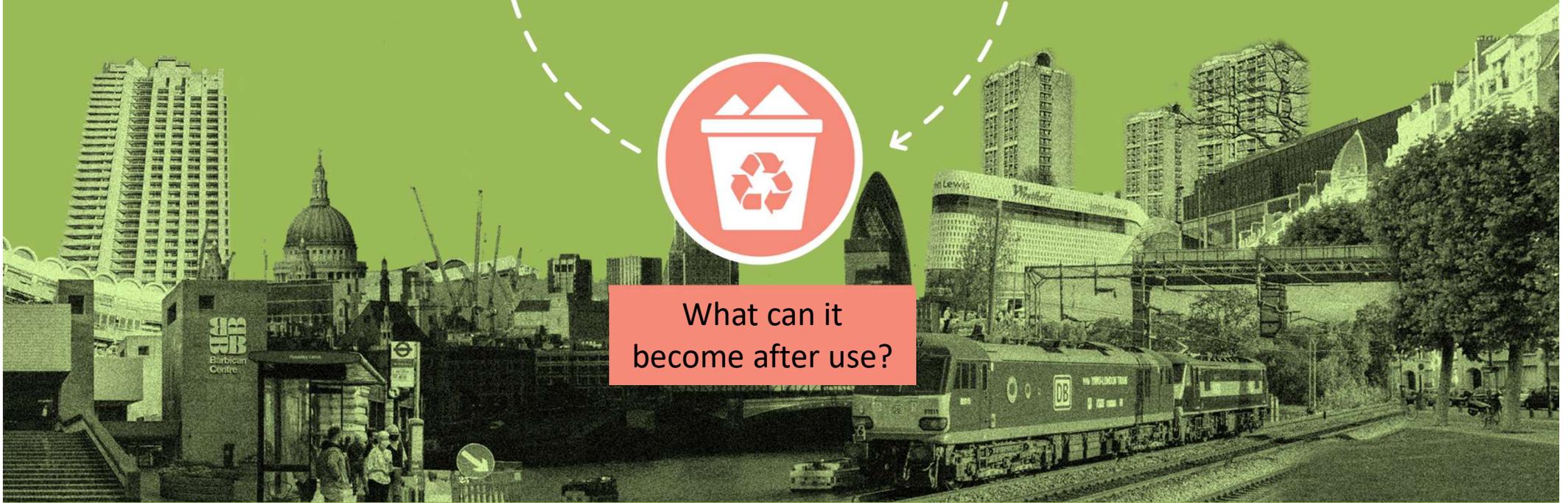
How can it be used?



Material
Life - Cycle



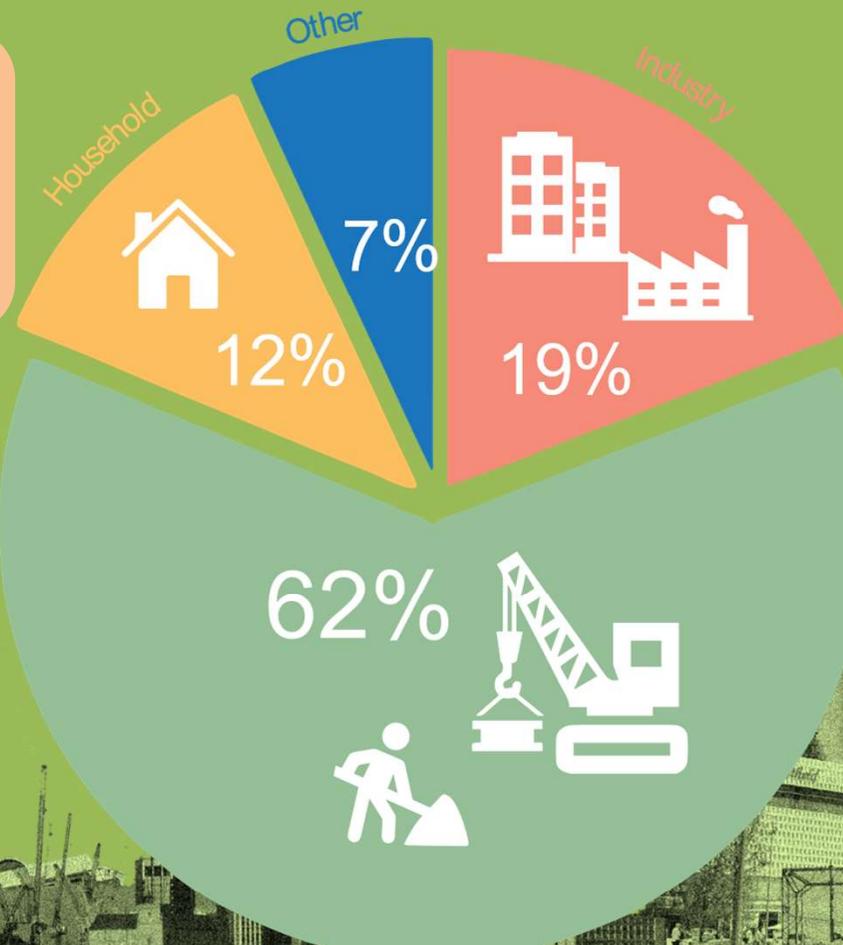
What can it become after use?



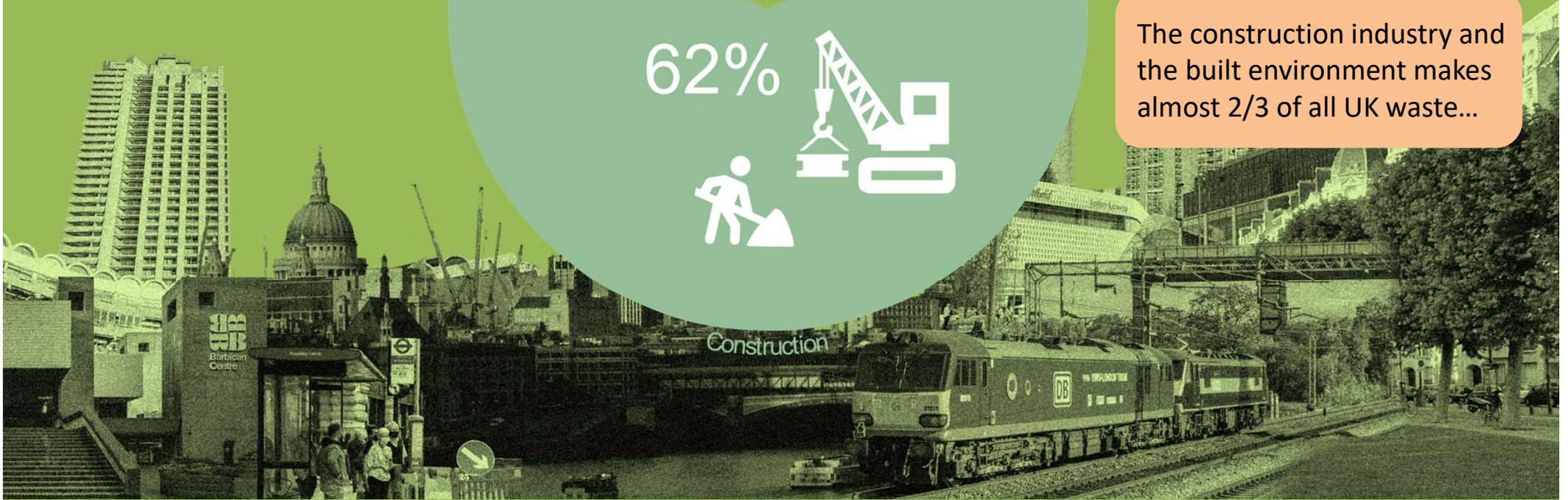
INTRODUCTION

WASTE is a big problem in the UK
and the built environment has a huge part to play...

In the UK we make around
222 million tonnes of waste
each year
(this is about the same weight
as 1 million aeroplanes!)



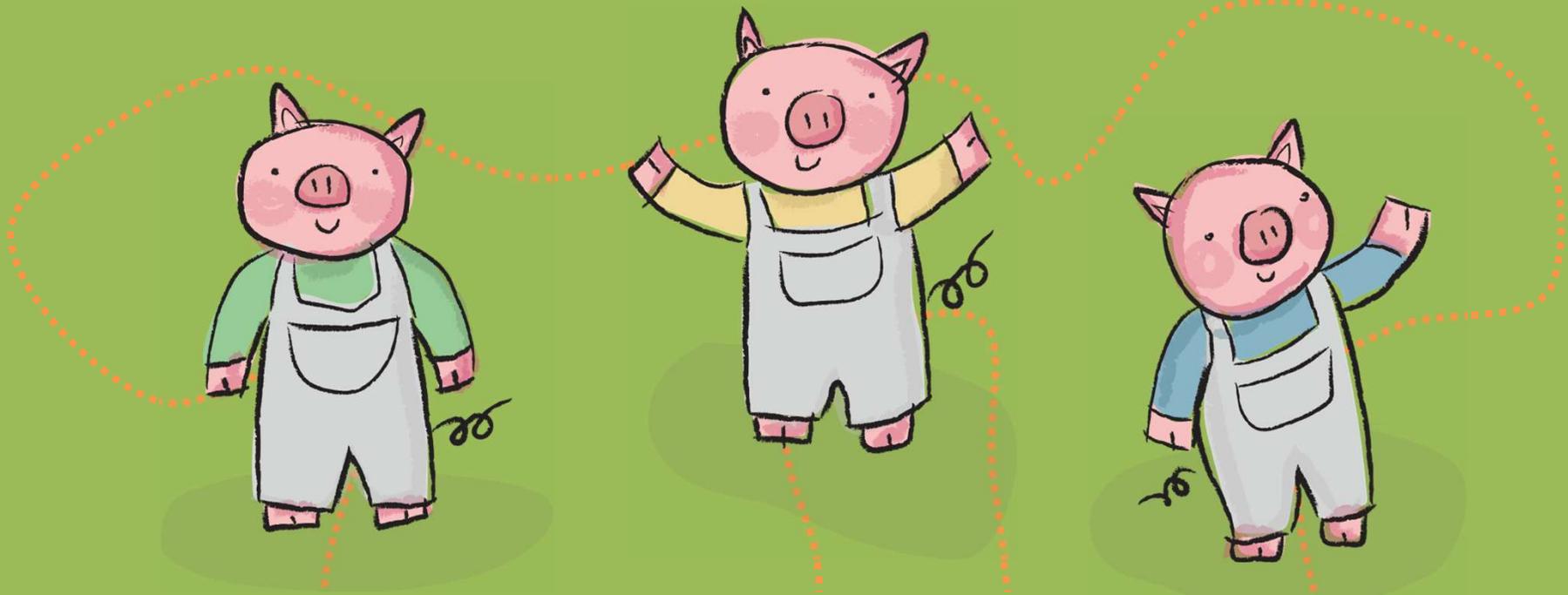
The construction industry and
the built environment makes
almost 2/3 of all UK waste...



The Three Little Pigs

Who knows the story of the Three Little Pigs?

This story can help us learn about different building materials.



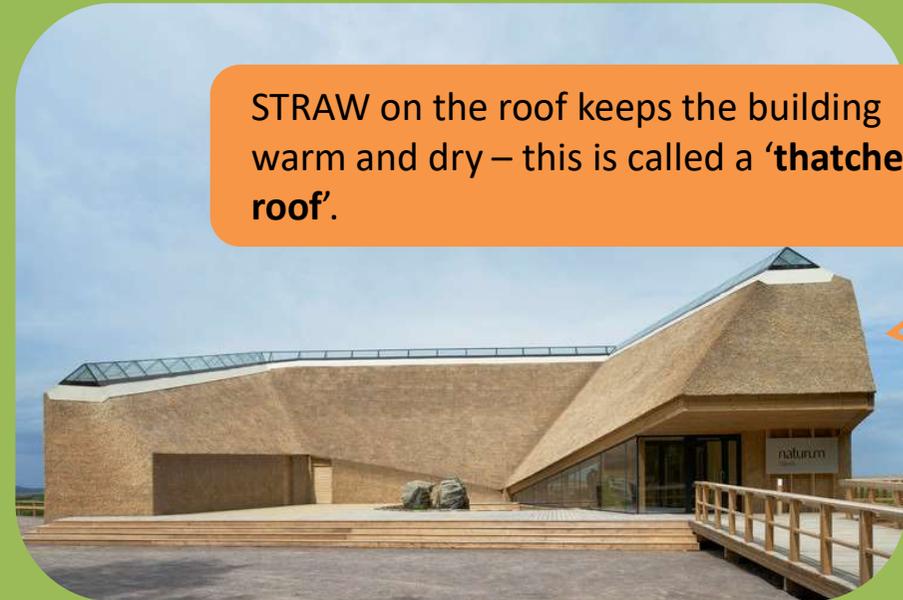
One day, three little pigs left their home to build their own houses...

The Three Little Pigs

The first little pig met a farmer pulling a cart of STRAW that was grown in the field. The straw looked very warm – just right for building a house! The farmer gave the little pig some straw to begin building their house...



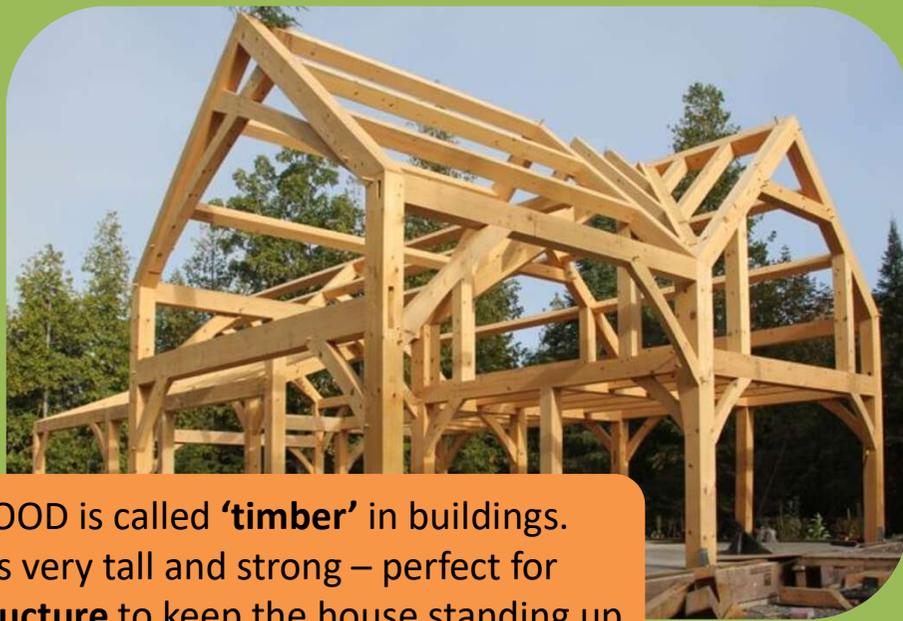
STRAW in the walls keeps building very warm – this is called **'insulation'**



STRAW on the roof keeps the building warm and dry – this is called a **'thatched roof'**.

The Three Little Pigs

The second little pig met a carpenter with a cart of WOOD that was grown in the forest. The wood looked very long – just right for building a house! The carpenter gave the little pig some wood to begin building their house...



WOOD is called '**timber**' in buildings. It is very tall and strong – perfect for **structure** to keep the house standing up

Image: Timber2U Direct



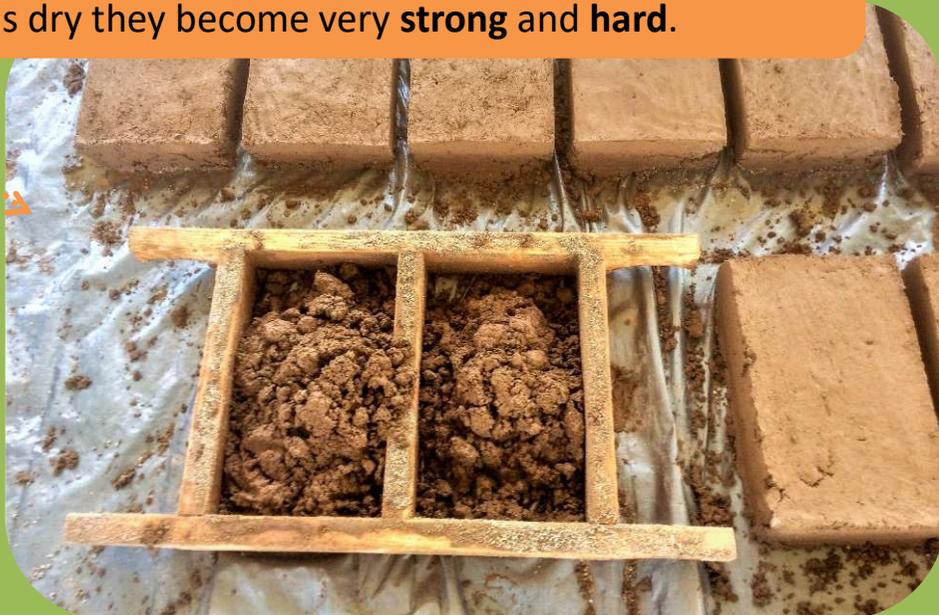
WOOD can be used for almost every part of a house – the roof, walls, floors, doors and even furniture!

Image: Grand Designs 'wavy wooden house' by Tom Raffield

The Three Little Pigs

The third little pig met a builder with a cart of MUD BRICKS made from clay dug up from the ground. The bricks looked very strong – just right for building a house! The builder gave the little pig some bricks to begin building their house...

MUD BRICKS are made by digging up **soil** from the ground and filling up brick moulds. When the mud is dry they become very **strong** and **hard**.



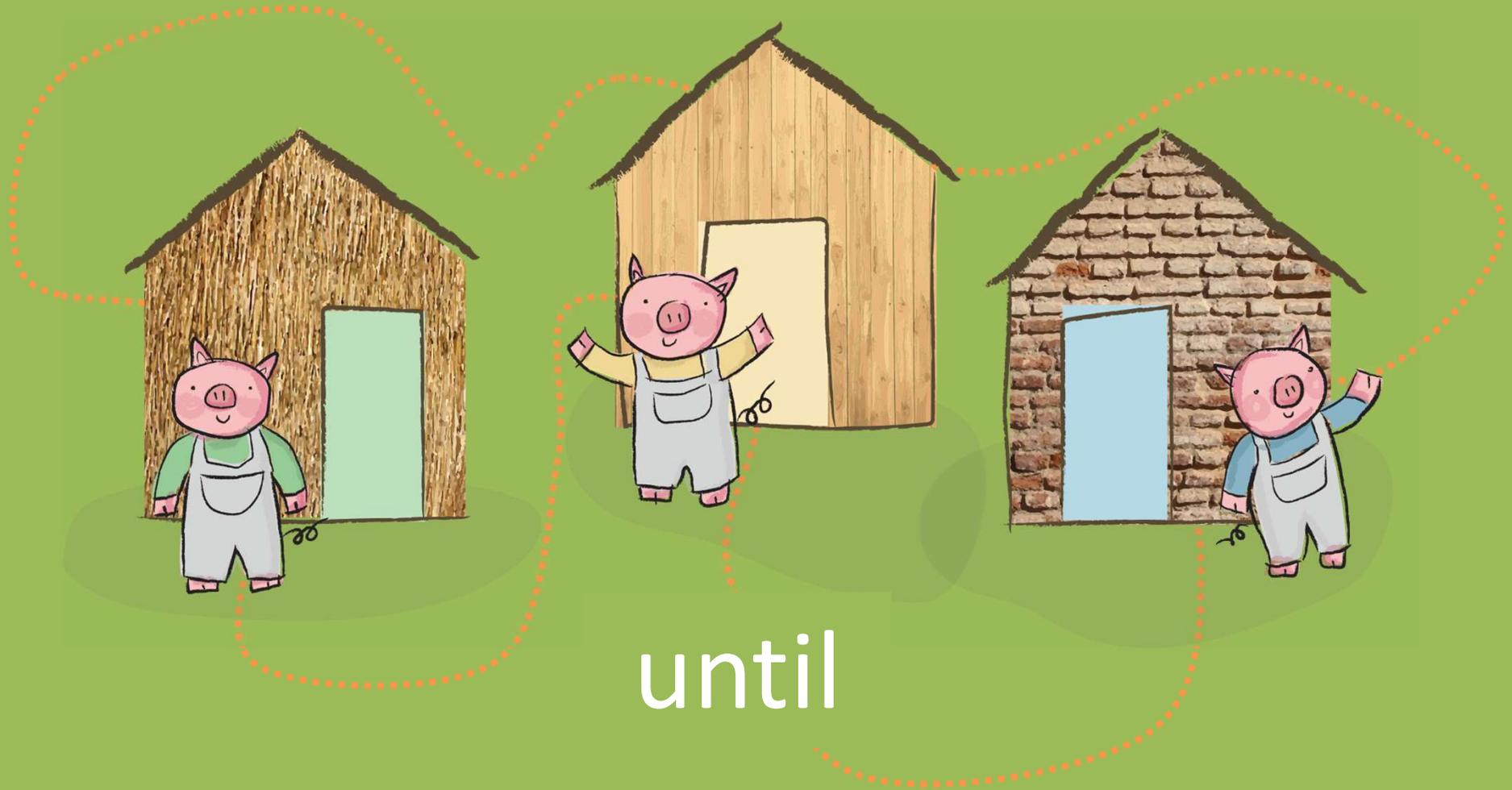
MUD BRICKS have been used all around the world for thousands of years!

Image: Archaeology Southwest

Image: Ancient Egyptian mud brick houses

The Three Little Pigs

All three little pigs were happy in their houses made of **STRAW**, **WOOD** and **MUD BRICKS**...



...

The Three Little Pigs

The big bad wolf came along -
He HUFFED and he PUFFED
and he blew their houses down!



In real life,
buildings can come
down for several
reasons:

Demolition

Earthquakes

Storms

Fires

Floods

The Three Little Pigs

BUT!

That's not the end of the building material life cycle, and not the end for the three little pigs.



Can you help to continue the story...

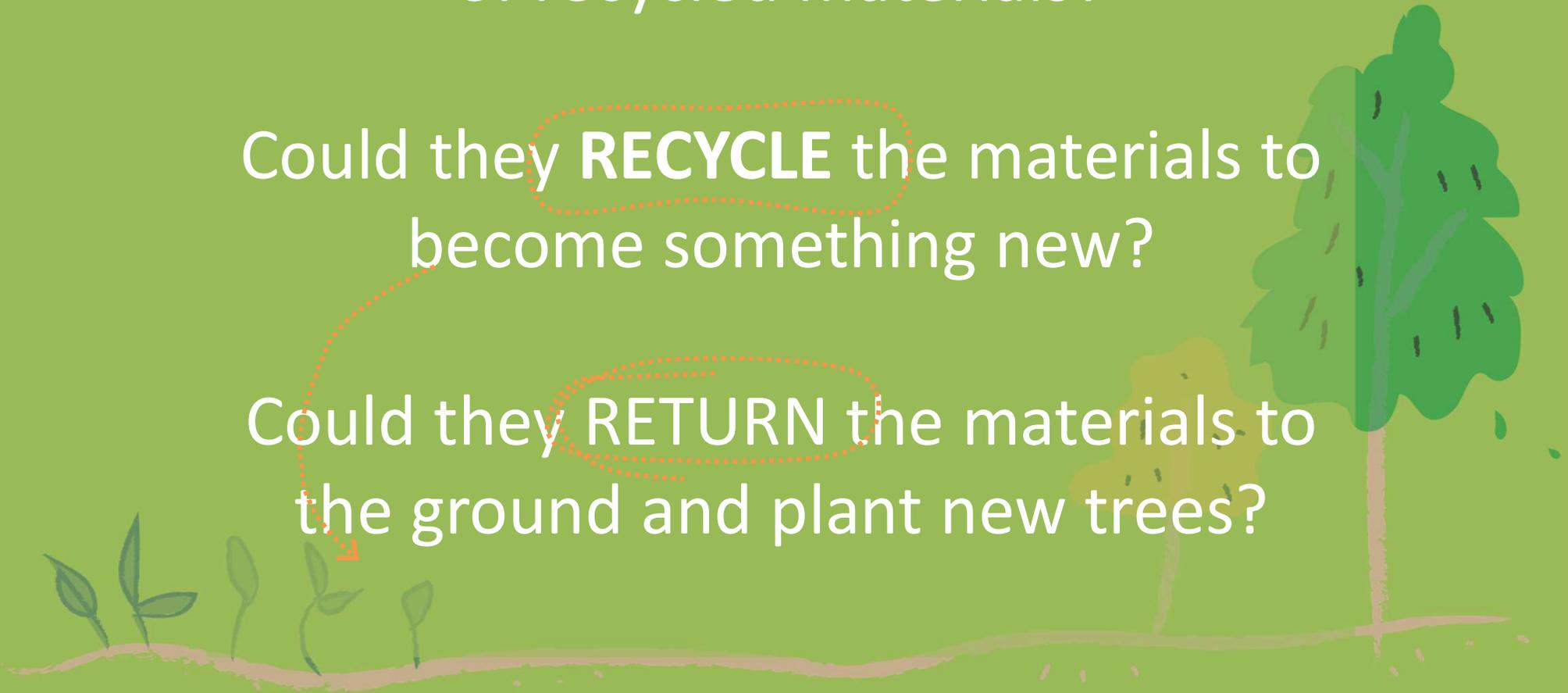
Your Task ...

Can you help the three little pigs come up with **RECYCLED HOUSE** ideas?

Could they **REBUILD** their houses out of recycled materials?

Could they **RECYCLE** the materials to become something new?

Could they **RETURN** the materials to the ground and plant new trees?



Your Task ...

Here are some examples of other
RECYCLED buildings...



This building is made of recycled glass bottles!



This building is made of old wooden doors!



This building is made of old car windshields!

Image 1: Carrabelle Bottle House

Image 2: Circular Pavilion by Encore Heureux Architects and Cruard

Image 3: Masons Bend Community Centre by Forrest Fulton Architects

