



RECYCLING

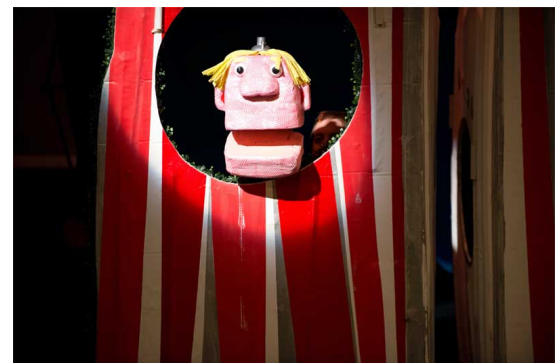
Cinderella Green Recycling Queen and Bin Goblins (for ages 3-7)

Science from Puppetry

Communication and language

EYFS NC Listening and attention:

Children listen attentively in a range of situations. They listen to stories, accurately anticipating key events and respond to what they hear with relevant comments, questions or actions. They give their attention to what others say and respond appropriately, while engaged in another activity.



Understanding the world

EYFS NC

Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

Expressive Arts and Design: Creating with Materials

EYFS NC

Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; Share their creations, explaining the process they have used;

Make use of props and materials when role playing characters in narratives and stories.



Everyday Materials

Y1 NC

Distinguish between an object and the material from which it is made
identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock

Describe the simple physical properties of a variety of everyday materials

Compare and group together a variety of everyday materials on the basis of their simple physical properties.

Uses of Everyday Materials

Y2 NC

identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Learn the words!

For children to use and become familiar with the vocabulary of the different types of material, they need to use those words in conversation. You could:

- Sort materials according to how they feel
- Sort materials according to how they look
- Sort materials according to properties – e.g. floating, waterproofing

Identifying Everyday Materials – making bin goblins

Emma uses card tubes, fabric scraps, paper, sticky tape, plastic, string and many other types of materials as she builds her puppets. Look out for all the different properties of those materials as you use them to make your own puppets. Think about which materials are best for which part of the puppet. Which need to be flexible – which need to be rigid.

Ask questions such as:

- What can you see?
- What does it feel like?
- Is that the same/different?
- Is it strong or weak?
- Can you fold/stretch/ bend/cut it?
- Which material do you want to use for the ...?
- Which is the best material for...?



Identifying Everyday Materials – sorting cans

Drinks cans are made from aluminum or steel. They can only be recycled if they are separated first. You might want to show videos of cans being sorted at a recycling centre.

<https://www.youtube.com/watch?v=BuBIDn9kkY8>

Steel cans are attracted to a magnet. Aluminium cans are not.

Next, provide magnets (large ones that cannot be swallowed) and cans (put tape over sharp edges where the ring pull has been removed). Allow the children to explore the cans with the magnets. Provide tubs for the cans to be sorted into.

Ask questions such as:

- What is happening?
- What can you feel?
- Which magnet is stronger?
- Can you sort the cans?

Identifying Everyday Materials – sorting items for recycling

Introduce the children to recycling in the classroom by setting up 3 bins: food waste, recyclable items and general waste. Encourage them to use the food waste bin at the end of snack time when fruit skins may be thrown away. Encourage them to put waste paper and plastics into the recycling. (NB plastic pens and glue stick plastic tubes can be recycled at certain shops – Ryman's has a scheme: <https://www.ryman.co.uk/environment>)

Uses of Everyday Materials - sorting the castle packaging

Gather a set of clean packaging. Include plastic bags and wrappers, cardboard boxes, plastic tubes, plastic bottles, foil containers and tetra-packs. Ask the children to sort them into groups. Look for the reasons why certain foods or household products come in certain packets – toothpaste in a tube, shampoo in a bottle, cereal in a box, soup in a carton etc

Ask questions such as:

- What do you think comes in this packet?
- Why is the packet made of this material?
- What else could be used instead of this material?

Uses of Everyday Materials - composting packaging

Choose a few items to bury in the school ground. If you don't have any soil, this can be done in a largish trug full of compost. Water the ground regularly if it doesn't rain. After a month, dig up the items and see what has changed. Plastic won't change but card and paper will be breaking up by then.

Ask questions such as:

What has happened?

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- Which ones have changed?
- What do you think would happen if we left it even longer?



Children often have misconceptions. These will become obvious as the children engage in these activities. **Listen out for them** and encourage them to keep trying things until they have worked out what is happening. Children are often surprised by the following things:

- All metals are attracted to a magnet
- Only fabrics are materials
- Only building materials are materials
- Only writing materials are materials
- The word 'rock' describes an object rather than a material
- 'Solid' is another word for hard.

As you talk to the children, you might like to **ask these key questions:**

- What can you see?
- What are you wondering?
- What is happening?
- What do you think will happen?
- What shall we try next?

Other video resources which might be useful:

<https://www.bbc.co.uk/bitesize/topics/zrsgk7/articles/z9w26sg>

<https://www.youtube.com/watch?v=SSIVXZrWMK4>

Free resources:

<https://wrwa.gov.uk/wp-content/uploads/2020/04/What-Happens-To-Your-Recycling-KS1.pdf>

<https://schools.recyclenow.com/resources/>

<https://www.eco-schoolsni.org/eco-schoolsni/documents/006512.pdf>

<https://www.kidsagainstplastic.co.uk/tag/recycling>