

**ExxonMobil**

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January 2021 – Spring Term

**#SolveItWithSTEM@Home**

**Infant and Primary Activity Pack**

*Friday 15<sup>th</sup> January 2021*

# Welcome and Happy New Year!



Hello everyone and Happy New Year! The Fawley STEM team hopes you have had a lovely Christmas and New Year break.

There have been a lot of lockdown changes recently and the Fawley STEM team wanted to give you some fun activities if you are currently learning from home...



...and we have decided to kick-off 2021 with a fun, educational pack based on **Recycling, Reducing and Re-using Waste!**

Recycling and ways in which to reduce waste, can be applied in our day-to-day lives. We hope the following activities will inspire you to recycle, reduce and re-use!...

...don't forget you can share these packs with your family and friends online – just visit [www.fawleyonline.org.uk](http://www.fawleyonline.org.uk)

We hope you enjoy and see you next week!

**Alice**



# Activity: What can you recycle in each room?

The objects below can be found in your bathroom, kitchen and living room or bedroom. Work out which items can be recycled and colour in the ✓ or ✗ if you think it can or can't be recycled...you can colour in the words too!

The answers will be provided in next week's pack.

Bathroom	Kitchen	Living room/bedroom
✗ ✓ Toilet roll tubes	✗ ✓ Washing up liquid bottles	✗ ✓ Old magazines
✗ ✓ Plastic shampoo bottles	✗ ✓ Floor wipes	✗ ✓ Face wipes
✗ ✓ Toothpaste tubes	✗ ✓ Dishwasher tablet box	✗ ✓ Tissues
✗ ✓ Bleach bottles	✗ ✓ Furniture polish aerosol tin	✗ ✓ Hairspray aerosol tin
✗ ✓ Nappies		✗ ✓ Cardboard packaging from online shopping
✗ ✓ Shower gel containers		

# Experiment: Juice Box Balloon Car

(Make sure you have an adult help you with this activity)

## Items Required:

- 1 x Empty juice box/carton
- 1 x Balloon
- 1 x Bendy plastic straw
- 1 x Rubber band
- 2 x Round toothpicks/cocktail sticks
- 4 x Disposable water bottle caps (same size and shape)
- Sticky tape
- Coins (just in case they are needed as a weight)

## Instructions:

- **Ensure an adult helps you with this part of the experiment** – starting with the wheels, make a tiny hole in the middle of each bottle cap. Once all four bottle caps are ready, push each cap onto the end of a toothpick – ensuring you have 2 bottle caps per toothpick. Please **see Image 2** to help you.
- Choose one side of the juice box to be the bottom of the car. Using tape, stick the toothpicks to the bottom of the juice box. Be sure not to tape too tight; we want the wheels to still spin. Turn the juice box over.
- Now to create the power! Place your balloon onto the short end of your bendy straw. Hold in place using your rubber band, being sure to wrap until tightly sealed to the straw. Tape the straw onto the top of your juice box, allowing the long end of the straw to hang off the end of the juice box. Please see **Image 1**.
- Test your car. Blow some air into the balloon through the straw and pinch the straw shut so that the air doesn't escape. Place your car onto a smooth, flat surface and let it go! If the back end of the car comes up, you may want to tape down with a coin or two to add some weight. Please see **Image 2**.

This experiment is a great way of **reusing items** you were going to throw away! You can also **recycle** some of these materials...



Image 1

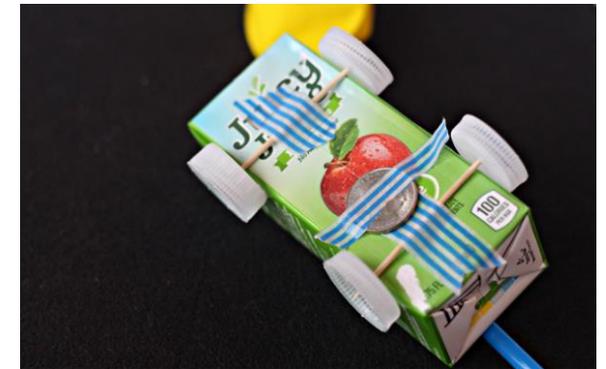


Image 2

# Maths: Recycling addition problems



Marcus and his friends are starting a recycling project to help the school raise some money for charity. They were asked to collect different materials and create useful things from them. **Write down an answer to each question – answers will be provided in next week's pack.**

If Marcus was able to gather 25 milk bottles, and John was able to gather 20 milk bottles, how many milk bottles do they have available for recycling?

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Chris, tasked to lead the newspaper collection, was able to obtain 42 newspapers and 10 magazine from their neighbourhood. If his sister, Lily, helped him and was able to get 23 more newspapers from another block, how many newspapers were they able to collect together?

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Andy decided he would gather tin foil wrappers. If he was able to pick up 34 wrappers around the village and his best friend Max was able to collect 15, how many wrappers were gathered in total?

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After collecting materials, they started making recycled products to sell during the school's recycling fair. If Marcus made 26 pen holders from the milk bottles and Annie was able to make 37, how many pen holders were made?

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If the group was able to make 65 recycled material products from what they gathered and the teachers were able to make 28, write an equation to show how many recycled products they will be able to sell at the fair.

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We hope you enjoyed this week's activities.

Another pack will be on its way to you next week...

Best wishes

The ExxonMobil Fawley #SolveItWithSTEM Team!

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