ISSUE 05 SPRING 2019





CLEAPSS COMMENT

Welcome to our Spring 2019 issue of EXPLORE and what better time to have a clear-out and spring-clean..... But how can you repurpose items rather than throwing them away? This issue is devoted to helping you and your children do just that.

Throughout history, humans have made things and then changed them to be used for different purposes. You may have seen container units, used on ships and lorries, repurposed as shops, playground storage, or even as housing.

In fact you and your children have probably already repurposed many items. For example, when making things from cereal boxes, altering clothes, shoes and hats to become costumes, or by transforming car tyres in to planters. Indeed, who doesn't have an old tee shirt that is now a duster?

Such is the popularity of repurposing that many TV programmes focus on people using materials they have found in places like household waste sites. Sometimes the new items go on to be sold and are valued by their new owners as much as the original item would have been.

Items that lend themselves to being repurposed are ones where materials can be added or that can be taken apart, so that parts of the original object can be used differently. If your children are repurposing something then they're likely to need additional materials that can be cut, glued and painted in order to make their new creations.

So read on to find out more about our Jazzing up junk competition along with some of our own repurposing ideas. Our Teaching idea uses old drink bottles and our Doing things safely article highlights some safety considerations to think about before your children start any junk repurposing projects.

Very importantly this issue also contains your school's new CLEAPSS website log-in details, along with advice for leaders about risk assessments.

At the start of this term we attended the ASE conference in Birmingham, it was great to talk to many of you about how you're using our resources. Don't worry if you were not able to attend, the new resources we show-cased can be found on our website.

As always don't forget if you need help you can call us on the Helpline 01895 251496 or email us via primary@cleapss.org.uk

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Design & Technology, food and art adviser at CLEAPSS

TEACHING IDEAS



Launching rockets into the air is guaranteed to make a science lesson exciting and memorable. Our Straw shooter rocket activity enables children to make one and investigate launching it in to the air without leaving their classroom.

OVERVIEW

Put some plasticine into the opening of an empty carbonated drink bottle. Mould it around the edges to make a good seal, make a small hole and push a narrow straw into the hole. Make sure there are no gaps around the plasticine.



Take a wider straw, pinch together one end and stick some tape over the pinched end to make it airtight.



Slide the wider straw over the narrow straw sticking out of the bottle.

Point the shooter/ rocket away from people and give the bottle a hard squeeze.



Having explored how to make the straw fly, why not investigate changing the launch angle or amount of force applied to the bottle to see if it affects the distance travelled? You could also try adding fins to the wide straw. Does it fly further?



What makes things zoom, whizz, slide or fall?

The answer is forces; pushes or pulls that can make things move, stop or change shape. This activity can be linked to forces, pushes and pulls, space and flight and is perfect as an independent practical investigation.

Why does it fly?

When you squeeze the bottle, some of the air inside is pushed out and zooms though the narrow straw. It then travels along the thicker straw to the sealed end, where it has nowhere else to go. So, the air pushes against the sealed end of the wider straw and makes it fly away.

Troubleshooting

Make sure there are no air gaps around the plasticine or at the sealed end of the straw.

For full details search **Straw shooter rocket** on the CLEAPSS website. An alternative activity for younger children is also available where they launch a rocket using their own breath. Search **Blast off** for full details.

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LEADERSHIP

RISK ASSESSMENT N() [

Often, when people think about 'doing a risk assessment' they imagine filling out a form listing the hazards including any substances or equipment being used, and then populating a grid with numbers that symbolise how dangerous each hazard is.

At CLEAPSS we do not believe in forms. Instead, think about the risk assessment process:

WHAT ARE YOU GOING TO TO KEEP YOUR CHILDREN SAFE **DURING THE** PRACTICAL ACTIVITY?

The law says that it is the employer's responsibility to provide its employees (you) with risk assessments and safety advice. As a member of CLEAPSS, your employer has devolved this to us.

Does this mean that aetting a risk assessment from CLEAPSS is all you need do?

Nearly...but not quite. Our resources are 'model risk assessments'. You need to consider what we say about the activity/substance/equipment in relation to what you know about your children. In most cases this will simply mean doing what we suggest. However, you may, having read our advice, decide your children need extra support to remain safe. This is fine and exemplifies how the process is, essentially, about thinking.





A 'things to remember list' on your desk

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If your risk assessments are taking a long time, are very complicated, or if

assessment process.

For more information and resources about risk assessment, search risk assessment on the CLEAPSS website.

RECAP TIME



The username and password to the CLEAPSS primary website have changed. If you are a member of CLEAPSS you will be able to find this information in your school's printed copy of the magazine. Explore issue 5 is in your school now, contact your Science Leader if you are unable to locate it. Alternatively call the CLEAPSS helpline.

SEARCH

Don't forget to visit our website for new practical teaching ideas, doing things safely guidance, leadership resources and competition details. For best results use multiple key words in the search function, for example, any words you find in bold in this issue, alternatively try browsing a section. If you need extra help you can call us on the Helpline 01895 251496 or email us primary@cleapss.org.uk









TOILET ROLLS and egg boxes

are not the enemy



cause a problem. Think twice before allowing children to raid other types of bin, including home recycling, as they may contain unsuitable

items such as hidden sharp objects or old food.

Please bring in empty yoghurt pots and cereal boxes for next week...

...is a phrase often heard in primary schools. Reusing and repurposing items in school frequently means children bringing in empty household items or packaging. Sometimes, children go off on a hunt around school for items to repurpose. All normal occurrences, but what about safety? Below are some reminders of common things to consider.

Planning

It's important children think about the materials their item will be made of. The product needs to be robust,



and fit for purpose. For example, if making a chair it must be strong enough to sit on without collapsing. If the repurposed item falls apart will it expose further hazards? For example, if their

item includes a glass jar, could it break, chip or crack and cause injury?

Sourcing materials

Most items are probably safe to reuse providing they are empty, clean and not broken.

• Wash used food/drink containers in warm soapy water.

• Check fabrics, like old T-shirts, are washed and clean before use.

- Sharp objects, such as tin cans, can be used if there are no sharp edges or with any sharp edges covered with tape or something similar.
- Glass jars are fine but check for any chips or cracks.
- If paper/card is clean, then it is likely to be fine to use. A visual inspection of toilet roll inner tubes or egg boxes is all that is required in order to use these items.

Bins need a little prior thought. Paper from a paper recycling bin is not likely to

The process

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Having collected the items, out come the scissors, glue guns, string and sticky tape etc to help create a masterpiece; at this point you might need our tools and equipment model risk assessments. For example, search scissors or glue guns.

Finally consider the workspace. Make sure the children have enough room to make their product without bumping in to each other.

A common sense approach

Thinking through the planning, sourcing and process stages is likely to raise any potential safety issues. Remember foreseeing a hazard doesn't mean the project cannot happen. It may just mean that some extra safety measures are needed.

COMPETITION



Children love fairground attractions and companies such as *Lego* and *K'nex* make a variety of construction kits that enable children to build carousels, swings, slides, roundabouts and seesaws.

In D&T there are many occasions when second-hand materials provide great opportunities to construct something new and be creative. This got us thinking, could we repurpose materials, such as: card tubes, cereal boxes, paper plates, plastic bottles, straws, and shoe boxes etc, in order to design and make our own fairground ride model?

So here's our simple design for a toy carousel ride. We hope it inspires you to make your own, even better, carousel or may be some other model. Don't forget, if you're thinking of entering a model in to our competition, Jazzing up junk, then it needs to have a purpose. Perhaps you're thinking of selling models to raise money for a charity or as part of an environmental awareness project?

To make a carousel

You need to start with a solid base. Here we've used a paper plate but another material, depending on what you're making, such as card from a shoe box might work even better.



Next you'll need a central axle for the carousel to rotate around. We used the centre from a roll of aluminium foil.

To make the carousel platform we cut a hole (slightly larger than the diameter of the aluminium tube) in the middle of a



second plate and used a third paper plate (without a hole) for the carousel roof. We secured the carousel platform to the

roof using straw supports; glued the axle to the middle of the base, then slipped the carousel framework over the central axle.



Finally, we stuck cut-outs of animals to the straw supports to represent the carousel rides, so that the final model looked like a real carousel.

So over to you! Could your children make a better carousel than us? We bet they can...or are they interested in repurposing throw away items in to some other kind of model? The possibilities for turning trash in to treasure are endless.

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