DUNSFORD
COMMUNITY ACADEMY

27th April, 2020

Summer Term Week 3: Design & Technology Week

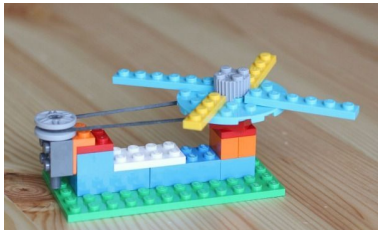
Dear Dunsford Families,

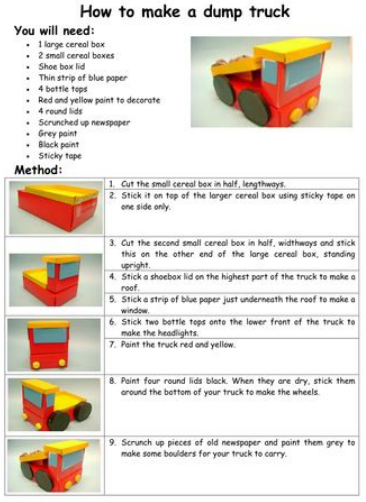
Welcome to our third project-themed week and this time it is 'Design & Technology'!

We have endeavoured to find activities that are not too hard to resource at home as we are aware that trips to the shop / hardware store are not advisable in the current situation. Hopefully, the resources you will need are either already in your homes or in some cases, will require just a small addition to your food shop and will not go to waste.

We have four exciting project ideas for you to try - feel free to have a go at all of them, or to choose the one which most excites you and your child(ren). As you will see, they can be done by anyone and the sky's the limit in terms of your creativity! We cannot wait to see the products that you design. Please send them to us via Facebook, email through the office dunsford@lapsw.org or add directly to the Kingfisher Classroom page. We will also add any photos from the schools Facebook page to the Kingfisher Google Classroom page, so that everyone can see them. We can't wait to enjoy your creations and share them together as a school community.

Activities are listed below, please feel free to choose activities from a higher year group for an extra challenge. Do look on the school website page called 'Home Learning' for further resources to support you with the different projects.

Activity	Who is it aimed at?	What resources are needed?	Ideas/Inspiration
Project One: Cooking Which fruits would be good in your salad?	Nursery and Otters and Kingfishers if they would like to join in.	Task sheet - Complete with your child the 'Let's get ready to Cook' task sheet. If you are unable to print this out you can just discuss the content of it with your child. Fruit Salad - activity sheet, which can be found on the schools website site in the 'Learning at Home' tab.	
Project Two: Design & Construction Design a machine that will do a useful job.	Nursery and Otters and Kingfishers if they would like to join in.	Share the text 'The Dragon Machine' by Helen Ward. This is available as an ebook on the following link https://www.booktrust.org.uk/books-and-reading/have-some-fun/storybooks-and-games/the-dragon-machine/ We hope you enjoy this story and that it will inspire you to design or create your own machine to help you achieve something. Just like George does in this story! Maybe you could invent a machine to do a job in your home, You could make your machine from a construction kit like Lego or use clean recycled materials. Maybe you could make your machine move. **Safety reminder**: remember to use scissors or any other tools for crafting with great care. Parents/ Carers please talk to your children about how to carry scissors safely and please observe them and support them with cutting,	  

		especially if they are trying to make a hole in a piece of paper, cardboard or a plastic container as the scissors can slip and cause an injury. If you feel your child is too young to manage scissors safely, please do the cutting for them. Thank you. Optional Writing Opportunity: once you have designed and made your machine (which might move too) you could try and write a set of instructions so that someone else could have a go at making your machine in their home. You would need to tell them the following: -What resources they would need to make your machine. -A step by step list of instructions of what you did so they can copy you. - A reminder about safety. -Some labelled diagrams to help the people reading your instructions.	 

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<td>Project Three: Design & Construction

Design a bridge structure</td>
<td>Kingfishers

and Otters / Nursery if they would like to join in.</td>
<td>Look at pictures of bridges (either in information books or on the internet to get inspiration).

Task: Can you build a bridge using a construction kit, natural materials or clean recycled materials?

You could build it indoors or outside.

How tall could it be? How big a span could it have? What are the best materials to use to make sure it is sturdy enough?

What mass can it take? Can something heavy (like a tin of baked beans) rest safely in the middle of the span of your bridge?

Writing Opportunity:

Write a guide on how best to construct a bridge from your experiences. What are the ‘dos’ and ‘don’ts’ for bridge building?</td>
<td> 
 

A bridge made of Lego

 
 

A cardboard bridge

 

 
Clean recycled materials and building blocks

A drawbridge</td>
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<tr>
<td>Project Four: Science and Engineering Challenges</td>
<td colspan="3">James Dyson Foundation Engineering and Science Challenge cards - Year 6

(but accessible to Y4 and 5 too or younger children with adult support) Changing States Liquid Densities Expanding Gases Tornado in a bottle
Weather Balloon Dancing Raisins Geodesic Domes How to make a lava lamp
Spaghetti Bridges Cotton Reel Tank Build a compass</td>
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Throughout this learning, the children will need to use their technology skills of designing, making, evaluating and using their technical knowledge. There are also opportunities for children to record their thoughts, predictions and findings.

To find all of the resources you need, head to the school website. Click on the Learning tab at the top of the page, then click `Learning at Home'. This letter and supporting resources for Design and Technology Week are on that page for you.

Have an amazing week of learning! Please do take lots of photographs and share your designs, your reflections and your finished products over the next week (by email, on the school Facebook page or via Google Classroom).

Have fun and keep safe when constructing!

Best wishes,

The Dunsford Team