

# STEM Home activities

June 2020

Here are a number of fun activities that could be completed at home with your children over the coming weeks. Some activities are more difficult than others so feel free to choose one which best matches your own child's ability. These activities will help aid your children's natural curiosity about the world around them and help foster a positive attitude towards Science, Technology, Engineering and Maths.

## Activity 1

### Investigating a Toy

- 1) Choose a toy from your play room
- 2) Ask yourself the following the questions: What materials is it made from? Are there any forces included in the design? How would you improve upon it? Do you need this toy or do you want it?
- 3) Task: *Due to Covid19 all the toy shops are closed! Your friends and siblings need new toys to play with. Can you design the best toy ever? Design a poster advertising your new toy and take a picture to send to your teacher (you can include a drawing of the toy, materials it is made from, if it is electronic or not, what age you think it is for, how much it will cost etc. etc.)*



Activity 2:

'Design and make a sensory hopscotch'

- 1) Before making ask yourself: What size will each square be?, What materials will be used for each section? What design will you use in each box?, What materials feel better to step on?, How heavy will your throwing object be? Do you want it roll or bounce?, Can I use any recyclable materials? Etc. etc.
- 2) Enjoy playing hopscotch at home with your family and younger brothers and sisters
- 3) Don't forget to take a picture and send it to you teacher



### Activity 3:

#### Build a playground

- 1) Build a mini playground for a lego figure or doll at home.
- 2) Before drawing a sketch of your playground ask yourself the following: What do I want to include in my playground, What materials will I use?, 'Is it inclusive for all children?' etc. etc.
- 3) Using household materials/ recyclables create your mini playground. You can use the following task card as a guide, or to make it more difficult/easier for your child:  
<https://www.pdst.ie/sites/default/files/Design%20a%20playground.pdf>
- 4) Don't forget to take a picture for your teacher!!

Activity 4: Design a kitchen of the Future

Kitchens are evolving. Think about what smart home technology is infiltrating in our kitchens. Your task is to design a kitchen of the future, in particular for 50 years in the future

Use the following task card to help you

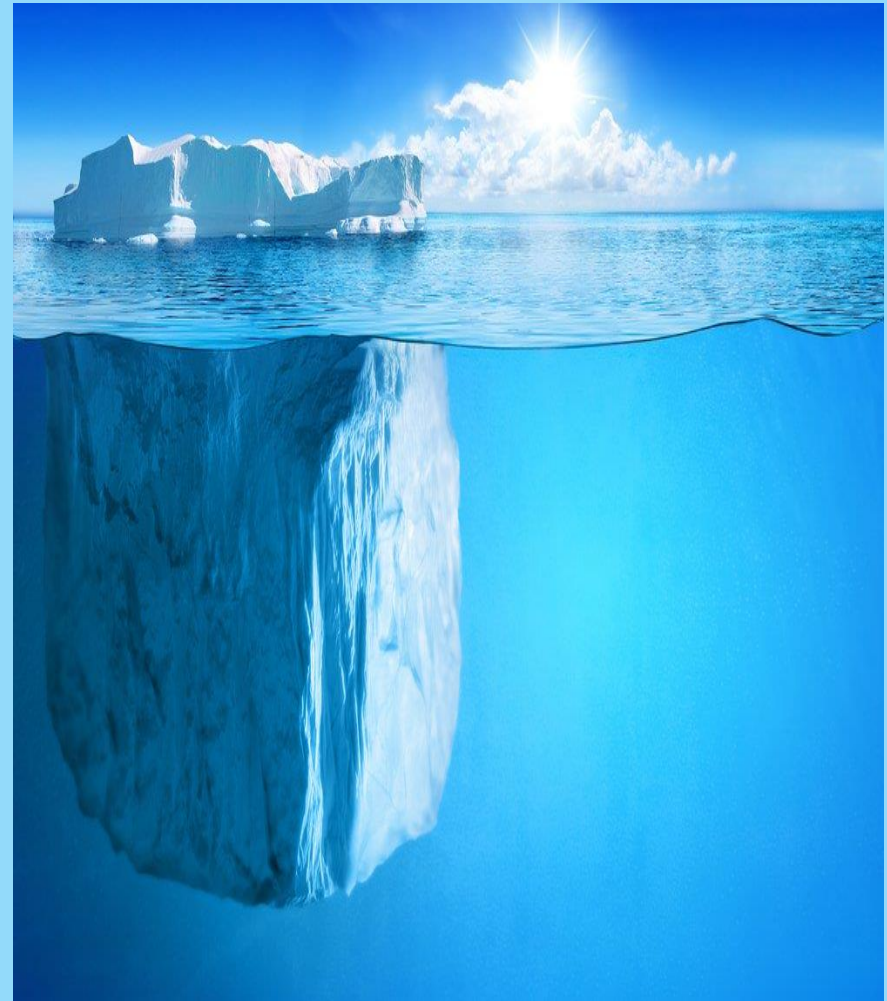
<https://pdst.ie/sites/default/files/Design%20a%20Kitchen%20of%20the%20Future.pdf>:



### Activity 5:

#### Ice Escape

- 1) Put a lego figure in a plastic cup of water and freeze for a couple of hours in the freezer
- 2) Tell your child that their job is to try and help the lego figure escape from the iceberg.
- 3) You could try: hitting it with a spoon, salt, warm water etc. etc. – children will see what is reversible Vs irreversible. For example Ice is reversible because it can turn back to water etc. etc.
- 4) Please use the following task card as a guide  
<https://pdst.ie/sites/default/files/Ice%20Escape%20Revised%20Task%20Card.pdf>



### Activity 6:

#### 'Worry Puppet'

- 1) Design and make your own 'worry puppet' using household materials or materials from your green bin. You might like to use either of the following links as a guide <http://www.iamanartist.ie/construction/can-work-like-construction-artists/> or <https://www.cushelle.com/everyday-fun/craft-ideas/how-to-make-puppets-for-kids-the-easy-way/>
- 2) You can use the puppet as a stimulus to talk to your child about any fear or anxieties they may have e.g. 'How are you feeling about returning to school?', 'Do you miss your grandparents/friends etc. etc.'

