

NICER Curriculum: Home Learning Challenges

Year Group: **4**

Challenge: ***How can we design a product that solves a problem?***

Challenge Pack: ***Crazy Contraptions***

Outcome: ***Product design and pitch***

How Hungry are you for a Home Learning Challenge? How many Challenge dishes will you choose?

Choose which Home Learning Challenges you would like to complete from the Menu of Dishes below.

How Hot do you like your Meal?! The hotter the dish you chose, the more challenging it will be! Yellow: Warm, Orange: Medium, Red: Hot

Small Dish Challenges

You could chose to complete just 2 of these, or more, or chose 1 to start you off before moving on to a Large Plate Challenge!

Choose inventions and create a simple timeline to put them in the right order of when you think they were invented.

Chose 2 everyday inventions. Research when they were invented and who by and why they created the invention.

Plan an interview for a famous inventor or entrepreneur. Write your questions into an email or letter, ready to send!

Large Plate Challenges

You could chose to complete just 1 of these spending a number of weeks on this and building up your learning every time!

Choose 3 pieces of things that could be counted as waste. For each item plan a new product that could be made out of them. Create a design and name for each of your products and how people will use it.

Create an idea for a futuristic invention. What problem of the future is it going to solve? Create a design for your product and write an advert.

Keep a record of things over a series of weeks that you find difficult to do. Gather a few examples, and then chose one problem that you would like to solve. Can you create an idea for an invention that solves this?

Name:		Class:	
Small Dishes		Large Plates	
Choose inventions from the present day and things from the past by researching. Create a simple timeline to put them in the right order of when you think they were invented. Then add the dates on the inventions underneath.		Choose 3 pieces of things that could be counted as waste such as an empty plastic bottle, a glass jar, or a piece of fabric (or your own idea!). For each item plan a new product that could be made out of them. Create a design and name for each of your products and how people will use it. You could even make one of these items for yourself.	
Chose 2 everyday inventions that make our lives easier and help us do tasks that would be difficult to do. Research when they were invented and who by, and see if you can find out why they created the invention.		Create an idea for a futuristic invention. What problem of the future is it going to solve? How this is a problem and what affect does it have on people? How is your invention going to solve this problem? Create a design for your product and write a short advert to explain to people how it will be used in the future.	
Plan an interview for a famous inventor or entrepreneur. What kind of things would you like to ask them? Write your questions into an email or letter, with an introduction of yourself, ready to send!		Keep a record of things over a series of weeks that you find difficult to do – an example might be that you can't fit your bottle in the small sink at school to fill up! Gather a few examples, and then chose one problem that you would like to solve. Can you create an idea for an invention that solves this? Create a presentation of your idea.	

Which dishes have I chosen?

What have I completed and created?

How have I found completing the Challenge Pack Homework?