

Little Inventors North 2030 Resource Guide

The aim of **Little Inventors** resources is to allow children to express the far reaches of their imagination. To inspire children to think up and draw original, ingenious, funny, fantastical or perfectly practical invention ideas. **There are no limits!**

Little Inventors North 2030 offers a fun way to think about the future of the North with a focus on sustainable living. Developed for the *Great Exhibition Of the North* (getnorth2018.com), **Little Inventors North 2030** offers a truly unique chance for children to power their imagination and start to imagine their own future through invention – as thoughtful and problem-solving beings.

Children will be able to draw and submit their own inventions to appear on a dedicated Little Inventors **online gallery**, where they will be reviewed by the Little Inventors team! Their idea might even be chosen as team favourite, turned into an animation or even made into a **real object** by one of our Magnificent Makers and shown as part of the Great Exhibition of the North this summer!

Familiarise yourself with the resources available before the workshop

Start by downloading the challenge pack.

North 2030 Challenge presentation

Use this presentation on a whiteboard or computer to support you while delivering the workshop.

Printed materials

Per student

Activity sheet: Your life in 2030

Drawing sheet: Draw your invention

Activity sheet: Tell your story!

For teachers

Challenge cards

Curriculum links

Tools or materials needed during the session

Make sure you have plenty of black pens and colouring pens available.

Using the resources

This guide suggests how you might want to use the Little Inventors resources to run a structured workshop over a single or double lesson. Customisable and extended activities are also provided to enable all children to make the most of the resources.

Get started!: *Life in the North in 2030*

Explain that in this challenge, children will get to think about ***what life will be like in 2030***, when they are an adult.

They will think specifically about sustainability and what this means to consider how their future world can be a place that everyone can enjoy living in. They will then record their thoughts on what they think their own life will be like in the future.

Open the ***North 2030 Challenge presentation*** and go through the slides with your class:

- Slide 2 showcases the Great Exhibition of the North 2018.
- Slide 3-4 introduce Little Inventors and the North 2030 Challenge.
- Slide 5 asks student to consider life in 2030 and imagine what it will be like.
- Slide 6 focuses on the issues around sustainability and its meaning.
- Slides 7– 9 consider some of the specific scientific advances that may have taken place by 2030 that could transform the way we live, the way we entertain ourselves, and the sort of clothes we might wear.
- Slide 10 asks children to consider how specific aspects of their own lives may change before the first activity.
- Slide 11-13 introduce the activity sheets: ***My life in 2030***, ***drawing sheet*** and ***story sheet***
- Slide 14 gives guidance on how to upload the invention to the website.
- Slide 15 offers further links to relevant websites about sustainability and the future in the North – includes videos!

Have a class discussion on ***inventions and life in 2030***, for example:

- what is an invention?
- Can you name some well known inventions?
- What about ordinary objects? Why were they invented?
- Think about 2030 and how the world might have changed. What do you think will be different in everyday life?
- Inventions are used to solve problems - can you think about problems or things that could be made more interesting or fun, now and in the future?
- Can you think of things which are difficult to do now, and how they might be easier to do in the future?

You could also get children to look at the Little Inventors video with our Sunderland born Chief Inventor Dominic Wilcox on littleinventors.org to give them more context about what it's like to be an inventor.

Activity sheet: My life in 2030

Once children have had a chance to think about life in the future, hand out the activity sheet called *My life in 2030* for them to add their thought to what their own life might look like in the future.

Differentiation:

Instead of writing their description, children could draw themselves or their home and add keywords to explain how they see their future selves and lives.

Extension activity:

You could ask children to imagine a new city in the North in 2030 and get them to discuss what the main differences could be, considering an increase in population, the issue with pollution but also advances in technology.

Children could create a real time capsule to leave for children in the future containing notes and artefacts of life in 2018.

Drawing sheet: My invention!

Once children have had a chance to develop their ideas a little through discussion in *Get started!* and the *My life in 2030* activity sheet, give them a Little Inventors North 2030 drawing sheet to draw and explain their invention.

Make sure that children put their name and age on the worksheet.

First, ask them to draw using a black pen as an outline, and add colours to their invention to bring it to life. Ask them to label parts on their drawing to explain how it works.

Secondly, ask children to **name and explain** their invention - what does it do? Who is it for? What is it made of? How big is it?

Children can draw more than one invention if they have time.

Differentiation:

Children make a video or audio recording to explain how they got their idea in their own words.

Extension activity:

Children could research the materials required for their invention, what their properties are, and review their invention idea to see how this information might change their design.

Challenge cards

A set of optional cut out challenge cards are available to help children who might need a bit more inspiration or theme to come up with their invention idea.

Extension activity sheet: Tell your story!

Once the children have drawn their invention idea, hand out the Tell your story! activity sheet. Children have the option of **drawing or writing** their story to show the challenge of the future, who their invention is for and what it is. This could be done as a creative home task or within the session if time allows.

Differentiation:

The drawing can take the shape of a comic strip or single picture, or children may prefer to describe these things in words, depending on ability.

Extension activity:

children could create a poster to advertise their invention using their persuasive writing skills in the development of the strapline and slogan.

Round-up

Ask children to reflect on their inventions and **discuss them with a partner** as noted on the slide. Gather all the student invention drawings in a gallery around the classroom/ workspace.

Get children to discuss their favourite ideas — what do they like and why? Encourage positive feedback throughout.

- What do they think of their invention?
- What are its strengths and weaknesses?
- Do they think their invention could count as sustainable?
- How will they approach problems in the future?
- Why are inventions useful?
- How will they approach problems in the future?

Following up:

Give children extra Little Inventors drawing sheets to come up with more invention ideas at home. Make sure you scan or take a clear picture of the invention ideas and upload them to **getnorth.littleinventors.org**.

Alternatively you could ask the children to upload them, checking first that the quality of the images for a chance to be selected and their ideas made!