

# Great Science Share for Schools

SSERC are delighted to be Great Science Share for Schools Champions once again in 2023. We are pleased to be able to share the latest update as we build up to the campaign celebration on Tuesday 13th June! Do not worry if you can't take part on the day as you can take part in Great Science Share for Schools at your convenience.

## What is the Great Science Share for Schools?

Great Science Share for Schools (GSSfS) is an award-winning campaign, first launched in 2016. It inspires 5-14 year olds to **ask, investigate** and **share** the scientific questions that really matter to them and improves learners' opportunities to work scientifically. GSSfS has gone from strength to strength, reaching over 720,000 learners in previous years and being picked up in 28 countries worldwide.

Young people are curious about the world around them, and rightly so. Great Science Share for Schools gives them the opportunity to engage in learner-led enquiry. Learners will work like scientists to find answers to the scientific questions they are interested in, questions they really care about.

Great Science Share for Schools has an annual, optional theme and this year, **'Science Around Us'** encourages learners to ask questions about a range of issues: anything from climate change, to the food they eat, to the animals living in their local area. Learners will investigate and share their science with others. But how?

## Share!

The 'share' element can take many forms but the important aspect is that learners are given the opportunity to communicate with others. They could produce and present a presentation to other learners or adults. They could produce posters, factsheets or

leaflets. Learners could use their media skills to script and film videos, songs or even raps. There really is not a standard way of sharing – be as creative as you like!

## Great Guided Enquiries for 2023

For 2023, Great Science Share for Schools have launched three brand new Great Guided Enquiries linked to the theme 'Science Around Us'. These curriculum-linked resources have been designed to develop enquiry skills and encourage learners to ask questions to prompt future investigation. To encourage awareness of science surrounding global issues, all Great Guided Enquiries are linked to the [Global Sustainability Development Goals](#). The enquiries provide a valuable opportunity for learners to apply their previous learning of key concepts. As such, they are ideal enrichment opportunities, and a chance for you to review whether learners have grasped the learning and can apply it to new contexts.

## PHYSICS Great Glider Share

Supported by The Ogden Trust, these physics resources bring the context of flight into the classroom.

This enquiry is inspired by the new text 'Gary Vity' by Jules Pottle; the story of a young girl called Rosa who is curious about the world around her.

The enquiries take this beautiful story as a stimulus and develop learners' understanding of key scientific concepts including forces and materials whilst demonstrating the ways in which engineers work. Dr Ben Parslew, an aerospace engineer from the University of Manchester, works alongside Jules to set the scene for age appropriate enquires where learners get to build and test gliders.

5-7 years olds can undertake comparative tests to establish what is the best material to use for a glider wing. 7-11 year olds can pattern seek to determine if the way they make the glider affects how far it travels. >>



11-14 year olds will hear from Ben how important it is to consider flights in a sustainable world. They will look at how changing the position of a ballast weight has an impact on the distance the glider travels.

There is a suite of resources for each age group, including a video of Jules narrating 'Gary Vity', videos to set the enquiry, teacher notes, accompanying slide decks and construction instructions and a template to make the gliders.

**BIOLOGY**  
**Great Gather and Group**

In collaboration with The Linnean Society, the new biology Great Guided Enquiries enable learners to learn about plants and classification in a unique way. By learning about mushrooms, learners will dig deep into thinking about what are the characteristics by which we classify a plant as a plant.

5-7-year-olds are encouraged by way of an observational enquiry to investigate a variety of plants using observing, grouping and classifying skills to decide whether mushrooms are plants.

'Can we identify and classify living things around us?' This is the question being asked in the enquiry for 7-11 year olds. Learners will get outdoors and observe living things, ask questions about what they find, and look at how mushrooms and different types of fungus are similar and different. They work scientifically by classifying and justifying their reasoning.



11-14-year-olds will identify and explain how mushrooms have similarities, and differences, to other species. In a practical activity, they explore the growth and management of fungus using yeasts and agar plates, considering the implication on fungal growth in a sustainable society to answer the question 'Is there much room for mushrooms in our future society?'

There are video clips and teachers' notes to support each of the three age groups.

**CHEMISTRY**  
**Great Glass Share**

With support from PSTT and The Worshipful Company of Glass Sellers, the Great Glass Share consists of two enquiries linked to materials and chemistry. Both enquiries have strong links to sustainability and climate issues, bringing a real-world context for learners to consider.

5-7-year-old learners explore possible solutions to the melting of the polar ice caps, drawing on knowledge of polar habitats and the implications of climate change for animals living there. They make

observations over time to explore the effect of glass on melting times. This enquiry takes inspiration from the 'Arctic Ice Project' in which researchers are looking at the effect of adding a thin layer of tiny, hollow, glass beads to protect the ice caps. Learners will mirror the research to see whether glass beads might reflect sunlight and reduce melting.

7-11-year-olds are challenged to answer the question 'Are double glazed windows more effective than single?' Learners gather data in a comparative test to analyse the thermal properties of a single layer of glass in comparison to a double layer and develop skills in measuring and analysis of data to answer scientific questions. The enquiry inspires curiosity about glass being used in contemporary innovations to save energy, supporting climate action. There is a suite of resources supported by a PowerPoint and teacher notes for both age groups. >>

## The Great Science Poetry Share

From Creative Manchester, in partnership with Great Science Share for Schools, comes an opportunity to share science creatively. Be inspired and release your inner poet!

Sharing science is an opportunity to exploit a wide range of mediums. Crossing the curriculum into literacy is a great way to inspire young people to think differently about their scientific questions. Make the most of learners' creative writing to communicate their thinking and ideas about Science Around Us. Age-appropriate video prompts are on the GSSfS website.

The Wonder Box (5-7 poetry prompt) asks you to think about what make learners wonder. What makes them think 'wow'?

Microscope, Telescope (7-11 poetry prompt) challenges learners to imagine that they are an explorer - discovering something in the world around them for the very first time. Learners are asked to think about the words they choose and how language is like a microscope or telescope that zooms in to help us look closely and observe our world in higher focus.

Golden Record Poem (11-14 poetry prompt) builds on the 'Golden Record' which scientists in the 1970s sent into outer space. The Golden Record had all kinds of things from Earth recorded on it - pictures of people, recordings of music, the sound of rain and birds and animals. This Golden Record poem prompt inspires learners to write a poem that could be sent into space on their own 'Golden Record' to give a glimpse of life back on Earth.



There is the option for schools, regardless of location, to submit their poetry to Creative Manchester's Micropoetry Competition running until June 2023. Learners have the chance to submit their poetry via an uploader on the GSSfS website or they could enter the Creative Manchester competition.

### If you want to know more about the campaign

- You can visit the [campaign website](#) – or follow us on Twitter [@GreatSciShare](#) to learn more.
- **Sign up for free** – follow the link to our website to be part of the GSSfS Community and receive regular updates, information and resources.

