

Girls and STEM

About this activity

'Girls and STEM' is an activity that focuses on that help learners boost their reading, listening and speaking skills while learning about women in STEM.

Stage 1: Preparation	Print off and cut up copies of the four texts about different women in STEM. Get images of the four women for the warm up
Stage 2: Warm-up	Show four images of famous female scientists and four names and ask learners to match the pictures with the names. Ask: what do you know about them? What are their jobs?
Stage 3: Pre-reading	Ask learners to think of as many jobs as they can and write them on the board. Then ask them to categorise the jobs into female or male careers. When they finish, ask learners if there actually are female or male jobs.
Stage 4: Reading	<p>Tell learners that they are going to learn about some women who do different jobs. Divide the learners into 4 different teams and give a text to each team.</p> <p>1. Dr Christine Watson, Cambridge Cancer Centre, University of Cambridge</p> <div data-bbox="499 1460 1342 1664" style="background-color: #e0e0e0; padding: 10px;"><p>'Why follow a career in science? For me it has been an exciting voyage of discovery and a lot of fun. Every day is different and I meet interesting people all the time. It's a challenging job that makes you independent. It is inspiring to work with bright and enthusiastic young people, to teach them and to direct their careers. Being a scientist does not mean that you have to give up a personal life – I have been married for 35 years and have two children.'My goal is to find a therapy for breast cancer and this makes the hard work worthwhile.'</p></div>

2. Dr Kate Jones, senior research fellow, Zoological Society of London

'A typical day might involve tromping about rainforests listening to bats, or setting up conservation projects with local people in the depths of Russia, giving a talk somewhere or listening to whether sea monsters really do exist, or planning a new research project, or maybe creating a new smartphone app.'

'Being a scientist helps me understand the amazing diversity and evolution of life and gives me freedom to answer questions that most interest me. This amazing job has taken me all over the world meeting people and wildlife I only imagined. Why on earth would you want to do anything else?'

3. Dr Sue Black, senior research associate, Software Systems Engineering Group, University College London

'Now is such an exciting time to be alive, especially if you are female. The world is changing all around us and science is driving that, particularly technology.' 'My grandmother's generation had to leave work when they got married to spend their time running the home. My mother's generation had the pill and burned their bras but didn't live in an equal world. Today there are so many opportunities for women and nowhere as exciting as in technology. Computers and software are revolutionising our lives, we can meet and get to know people virtually across the world and collaborate with them to make the world a better place.' 'Give yourself the tools you need to be a decision-maker in the social revolution by studying and working in technology.'

4. Dr Tamsin Mather, Department of Earth Sciences, University of Oxford

'I always enjoyed science at school but I had fairly narrow ideas about what careers it might open up for me. I've ended up with a career in volcanology, which certainly wasn't what my 18-year-old self would have predicted.'

'Part of the appeal has always been the opportunity of finding things out for myself. During one field campaign to Masaya volcano in Nicaragua as a PhD student I remember plotting up the data from the day and realising that we were the first people to discover that hot volcanic vents convert atmospheric nitrogen so that it becomes available to plants. It was a thrilling moment with possible implications for the origins of life.'

The learners read the text and take key notes. When they have finished, take the texts back and tell the learners to exchange their notes and check their answers with peers. Finally, ask them to share their notes with learners from the other teams so they can learn about all four women. Perform whole class feedback.

* <https://www.theguardian.com/careers/women-science-careers>

**Stage 6: Follow-
Up**

Extension: Give learners homework in which they work in teams and research African female scientists. Ask them to prepare a presentation on how those people can influence girls positively.

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