

WebQuest

| TIME ALLOCATED (described in | 2 Teaching Periods |
|--------------------------------|---------------------------|
| teaching period of 40-minutes, | |
| i.e. 1 or 2 teaching periods): | |
| TITLE OF | Bring out your scientist! |
| THE WEBQUEST: | |

INTRODUCTION

Science affects almost every aspect of our lives, from the technology we use, to the medicine we need, to the food we eat! Within the EU, 51.3% of people employed in science and tech were women (2020). These statistics show that the STEAM sector is seeing more and more women joining the industry. However, women continue to face challenges when entering STEAM fields; for example, women struggle with a lower average starting salary than men. In TV + FILM men are 7 times more likely to represent a STEAM worker.

This inequality can only be combatted by encouraging girls and women into the STEAM sector. In the age of information, STEAM jobs offer many opportunities. Scientists work to make exciting discoveries and can even help to solve global problems. Pursuing a career in science can open you eyes to so many possibilities; such as;

- Jobs in the science sector
- The excitement of new discoveries
- Solving global challenges
- Travelling the world
- And so much more!

TASKS

Your local council has announced they will be running an *Open Day* for young people where they will learn about many different careers they could pursue once they finish school. You think that this will be a great time to educate young people to powerful women in the science industry. You decide to set up a stall on the open day displaying their work and findings. A picture is worth a thousand words, and you decide that a great way to attract potential science-enthusiasts by making posters about women in science. To showcase the achievements and efforts of women in science, you decide that researching women scientists from your own country would be a good idea as you could learn about any national programmes or services, they used to get to where they are now.

You believe that this is also an important opportunity to encourage female participation in the science sector and help women to contribute to the scientific fields that will define our future.



PROCESS AND RESOURCES

Step 1: Researching Science Women

To start your research, it is important to learn more about women scientists in your country. Their stories and the impact they have had on your country can be a great example to promote science to other women and raise awareness about the challenges women face in this field.

For information about **women scientists**, click on the following links:

- 10 terrific pioneering women of science history you should know <u>https://www.siliconrepublic.com/innovation/women-science-history-ireland</u>
- Women of science <u>https://www.irishtimes.com/culture/women-of-science-1.170957</u>
- Irish Female Scientists You Should Know <u>https://www.connollycove.com/irish-female-scientists-you-should-know/</u>
- Ten Historic Female Scientists You Should Know <u>https://www.smithsonianmag.com/science-nature/ten-historic-female-scientists-you-should-know-84028788/?page=7</u>
- 5 Empowering Life Lessons from Maria Curie <u>https://culture.pl/en/article/5-empowering-life-lessons-from-maria-sklodowska-curi</u> <u>e</u>

Step 2: Designing posters!

You have collected all the information you will need to design the posters for the event. Next, you will need to explore how to design the posters so that they attract the attendees of the Open Day. The posters could reflect the image of the scientist(s), a brief summary of their stories and / or their impact on your country. This will be a great way to compile lots of information about women scientists. These designs will be important to catch the eye of people walking past your stall. This way, they can discover the incredible stories and roles of women scientists that you have collected.

For information on **poster designs**, follow the links below:

• Poster Design Guide <u>https://venngage.com/blog/poster-design/</u>



- How To Design A Quality Poster | Poster Designing Tips <u>https://www.youtube.com/watch?v=ldBUUKRQR9M</u>
- Design Examples of Women Role Models in Science, Technology, and Math <u>https://www.amightygirl.com/blog?p=23086</u>
- 55+ Creative Poster Ideas, Templates & Design Tips <u>https://venngage.com/blog/creative-poster-ideas/</u>
- Design & Print captivating posters
 https://www.canva.com/tools/poster-maker-v1/?utm_source=google_sem&utm_m_edium=cpc&utm_campaign=REV_UK_EN_CanvaPro_Poster_EM&utm_term=REV_UK_EN_CanvaPro_Poster_Templates_EM&gclsrc=aw.ds&
- How to Design Eye-catching Posters? <u>https://www.appypie.com/how-to-make-poster</u>

Step 3: Time to Show them!

You have thought about how to make your posters visually appealing and what information you are going to display. Now it's time to think about how you will present your posters on your stand at the open day. You will need to consider how you will decorate and distribute your posters. This will not only make visitors aware of the women scientists in your country, but also feed their inspiration into this STEAM sector. From this, you can showcase your national women scientists through the beauty of your creations.

The presentation of your posters is essential, above all it is important to make sure that the area chosen for the posters is well lit.

For some ideas on how to design your stall at the open day, follow the links below:

- HOW TO MAKE A GALLERY WALL (SELECTING, ARRANGING + LAYOUT IDEAS!) <u>https://studiodiy.com/how-to-make-a-gallery-wall-a-guide-to-selecting-arranging-ha</u> <u>nging-art/</u>
- How to Arrange Wall Art: 12 Tips to Know <u>https://www.thespruce.com/artwork-dos-and-donts-1976011</u>
- 8 exhibition stand ideas to attract people to your booth <u>https://octink.com/8-exhibition-stand-ideas/</u>
- 1000 ORIGINAL EXHIBITION STAND IDEAS <u>https://www.quadrant2design.com/exhibition-stand-ideas/</u>



- How to create a gallery wall in 8 simple steps <u>https://www.housebeautiful.com/uk/decorate/walls/how-to/a961/how-to-create-a-gallery-wall/</u>
- Gallery wall ideas 19 ways to display artwork in living rooms, hallways and more https://www.idealhome.co.uk/all-rooms-ideas/gallery-wall-ideas-252601

For information about how to present your posters at the open day, click on the following links:

- 6 Tips for Artists on How to Talk about Their Art <u>https://www.artsy.net/article/artsy-editorial-6-tips-artists-talk-art</u>
- Artist Talks: 8 Effective Tips to Prepare Yourself
 <u>http://www.theartistnextlevel.com/artist-talks-8-effective-tips-prepare/</u>
- Good Presentation VS Bad Presentation <u>https://www.youtube.com/watch?v=V8eLdbKXGzk</u>

Step 4: Ask for feedback

You are prepared and confident that your preparation will attract others while also raising awareness of women in science. Your contribution has helped to change gender stereotypes by setting examples and highlighting the achievements of women in your country, and in the world of science throughout history.

You are on the verge of completing your goals, but there is only one step left for your open day stall to be successfully completed. So, it's time to ask for feedback from the visitors of the open day. You will need to create a feedback form, either on paper or online. Feedback from attendees will be important to offer their evaluations, advice or even suggestions for improvement. This is important to receive, as you will gain the opportunity to improve your work to have a larger impact!

For guidance on how to create feedback evaluation questionnaires, click on the links below:

- Why Is Feedback So Important? <u>https://www.actitime.com/project-management/importance-of-feedback</u>
- Writing Good Survey Questions Statistics Help <u>https://www.youtube.com/watch?v=n34OnLnKzlg</u>
- How to use Google Forms to create a survey



https://www.youtube.com/watch?v=fXQDFhKFuTU

 21 Components of Effective Feedback <u>https://www.talkdesk.com/resources/infographics/21-components-of-effective-feedback/</u>

EVALUATION

| Topic Knowledge | Skills | Attitudes |
|--|---|---|
| Factual knowledge of available career pathways into the Science sector. Factual knowledge of national and European career options in the Science sector. Factual knowledge of national and EU programmes for women in science. Theoretical knowledge of personal attributes required for career success in this sector. | Discuss career options in the science sector. Self-evaluate personal suitability to careers in this sector. Self-assess skill deficits for a successful career in science. Develop an education and career plan for success in the Science Sector. Research successful female role models in the Science sector. Solve challenges to build resilience when planning a career in the Science sector | Willingness to assess one's own motivation to pursue a career in the Science sector. Awareness of the important role that women play in the Science sector. Openness to exploring career options in the Science sector. Willingness to share what has been learned with other female professionals in a network. Openness to engaging in female networks in the Science sector. |

Let's talk about what you have learned:

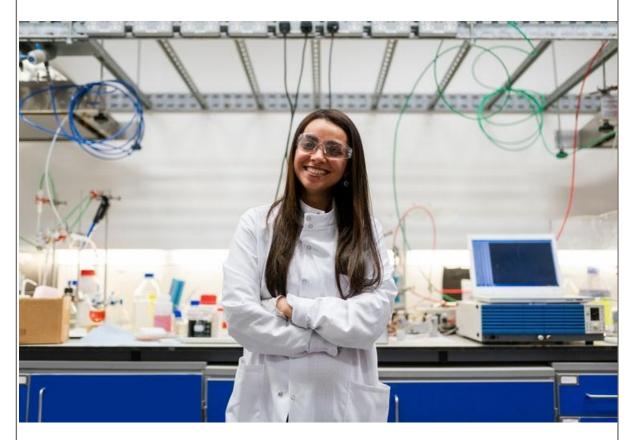
- Did you find this activity to be a fun and entertaining way to raise awareness about the impact of women in science?
- Mention 3 new things you have learned about women scientists in your country.



- Why do you think the participation of women scientists in society is important?
- Name 1 woman scientist whose story most appealed to you.
- Do you think that this activity has been useful to help you plan future events or open days? Why? Why not?

CONCLUSION

Congratulations! Not only have you helped more people learn about the impact of women scientists in your country and society, but you have also learned all about the importance of women in science! Your contribution can help to facilitate other women to achieve their STEAM dreams and goals!



"You cannot hope to build a better world without improving the individuals." — Marie Curie