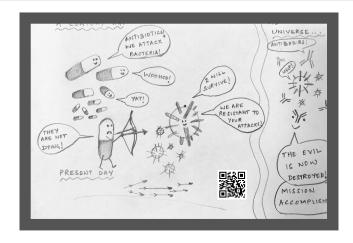


Women in Science curriculum & instruction





UNIT OVERVIEW & LEARNING OUTCOMES

Students create AR classroom posters containing embedded videos collected by students from women scientist. This unit is designed to provide students with greater awareness to the areas of research and science that women are actively pursuing. It also seeks to address what obstacles women in science are dealing with today.

STANDARDS ADDRESSED

- Quality Education (UNSDG # 4)
- Gender Equality (UNSDG #5)
- Reduce InEqualities (UNSDG # 10)

*Collaborate and view other Women in Science projects by visiting <u>meiniedu.com</u>

WEEK 1 LESSON PLAN

LOCATE	ΜΟΝ	TUE	WED	THU	FRI

HAVE STUDENTS PICK AN AREA OF SCIENCE

Students search for an area of science that they find interesting. Then they can try and locate women professionals currently working in that area of science either online or in person. This can be done by researching out through friends or relatives or universities, that offer science programs in that discipline or they can do a wider online search.

FIND 2-3 WOMEN WORKING IN THAT FIELD

Students locate the name and work email addresses of 2-3 women actively working or conducting research in the area of science they have chosen for the project.

SEND OR EMAIL LETTERS (SEE EXHIBITS A & B)

Students draft and email contacting the female scientist of their first choice. Included in this curriculum is a letter for project participation and a video consent form that student can use. Or, student can draft their own letters to email. Once completed student send their first emails. If the do not get a responce or the scientist is not interseted they can then email their second choice, etc.

WEEK 2 LESSON PLAN

WATCH	ΜΟΝ	TUE	WED	THU	FRI
DOODLES					

Students watch their received videos

Have students watch the video's sent by their women scientist. As they watch they can write down keywords or interesting facts. They should do this step a couple of times until they feel they have a clear understanding of what it is they women scientist do.

Students draw 2-3 doodles from the video

Using information collected from their notes the students doodle a sketch of what it is that women are researching. The doodles can include both images and text. Students should come up with 2-3 different versions of their doodles.

Select best doodle, clean it up and re-draw

From the 2-3 completed doodles students select the one they feel best visualizes the the type of work and informational content their women scientist are doing.

WEEK 3 LESSON PLAN

	ΜΟΝ	TUE	WED	THU	FRI
MAKE					

Make AR markers for videos and add to image

Have the students create a QR reader using an online QR code generator.

Doodles and QR codes

Place the QR code somewhere where it is easy to scan on the doodle drawing.

Create a poster by arranging the doodles

Arrange doodles with QR codes into a poster and hang it up in the classroom or place it somewhere that other students (and visitors) can experience the interactive poster. Students can take turns using their IPADS or smartphones to scan the QR codes and learn more about Women in Science.

LESSON PLAN INTEGRATION

- Business skills: students can draft professional emails and photo/video release forms.
- Internet search skills.
- Scientific vocabulary

WATCH VIDEOS AND MAKE DOODLES

- Draw digital doodles.
- Editing doodles using creative software.
- Have students take notes while watching the video and then research terms and devices to see what they look like.

MAKE POSTER FROM DOODLES

- Add images to <u>Thinglink</u> and create a 360 environment.
- Have students take turns scanning the poster to watch all the videos.
- Make a chart showing the different scientific categories included in the poster.

ONLINE SEARCH NOTES

Female Scientist 1:	<u>Female Scientist 2:</u>	
Name:	Name:	
Field of science:	Field of science:	
Place of work:	Place of work:	
Work email:	Work email:	
Website address:	Website address:	
<u>Female Scientist 3:</u>		
Name:		
Field of science:		
Place of work:		
Work email:		
Website:		
NOTES:		

EXHIBIT A- TEXT FOR EMAIL

Dear (scientist'S name here),

I was wondering if you would be interested to participate in a small project that we are working on in my _____ class called "Women in STEM". It involves making a poster focussing on the UN sustainability goal 5- Gender equality and women empowerment using augmented reality for school children.

Part of the project involves recording a 1 minute video of women in STEM who talk about their work including motivation and passion for science. How they are working towards a better future. The video will then be augmented to the doodle drawn by myself in a effort to visualize your research work. It wont take more than 10 minutes of your time. If you are interested please replay via email and include a singed copy of the video release form. I appreicate your consideration in being part of our learning adventure.

Sincerely, (Your first name here and grade level) (Your school name)

EXHIBIT B- VIDEO RELEASE FORM

I,_____, hereby grant permission to _____, the rights of my image, in video or still, and of the likeness and sound of my voice as recorded on audio or video tape without payment or any other consideration. I understand that my image may be copied, exhibited, published or distributed and waive the right to inspect or approve the finished product wherein my likeness appears. Additionally, I waive any right to royalties or other compensation arising or related to the use of my image or recording. I also understand that this material may be used in diverse educational settings within an unrestricted geographic area.

Photographic, audio or video recordings may be used for ANY USE which may include but is not limited to: Presentations;Courses; Online/Internet; Videos; Media; News; (Press); By signing this release, I understand this permission signifies that photographic or video recordings of me may be electronically displayed via the Internet or in the public educational setting. I will be consulted about the use of the photographs or video recording for any purpose other than those listed above. There is no time limit on the validity of this release nor is there any geographic limitation on where these materials may be distributed. This release applies to photographic, audio or video recordings collected as part of the sessions listed on this document only.By signing this release, I acknowledge that I have completely read and fully understand the above release and agree to be bound thereby. I hereby release any and all claims against any person or organization utilizing this material for educational purposes.

Full Name	
Signature	Date
Email Address	

DOODLE SHEET