

Incorporating Career Exploration in Science Class



Grade(s): 7-9

Subject: Science

Time: 50-60 min class

Curriculum Outcomes:

- GCO: Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology

Skills:

- Identify careers that require science and math courses.
- Explore various STEM careers and learn the advantages of various STEM careers.

Rationale/Purpose:

This lesson aims to teach students that many careers require a good background of science and math knowledge and subjects, that there are a variety of Science, Technology, Engineering, and Math (STEM) careers out there and that they can be creative and collaborative.

Lesson Summary Chart:

Time	Instructional strategies	What the teacher will do	What students will do	Ready-to-use support materials
20 min	Assess student prior knowledge	Hand-out Career Knowledge Worksheet, go over instructions Go through careers with the class, ask them to raise their hands for yes or no	Fill-in Career Knowledge Worksheet Give answers to teacher	Career Knowledge Worksheet (Attached)
10 min	Class Discussion	Go over answers to worksheet with the class Discuss how many they got right/wrong and reasons why they may have gotten some wrong	Volunteer answers to worksheet with the class Discuss	Career Knowledge Worksheet Answers (Attached)

This lesson plan serves as a guide for teachers. It was created by WISEatlantic.

www.WISEatlantic.ca



15 min	Watch videos	Bring students to WISEatlantic.ca and show them some videos of careers to explore a variety of STEM careers	Watch videos, take notes.	www.WISEatlantic.ca/videos.asp
10 min	Class Discussion	<p>Ask students to think of a career that is not featured in a video</p> <p>Compile list on the board. Ask students which ones they think are the best</p> <p>Send list of student suggested careers to WISEatlantic!</p>	Suggest careers that are not featured in a video	

Materials:

- Computer, internet
- LCD projector

Important Questions:

- Why do so many careers require science and math courses?
- Is taking science and math subjects in high school important to my future?
- Is taking the most advance math and science you can a good decision?

Follow-up activities:

- Have students pick a career they are interested in and have them research the high school requirements needed to obtain that career or to enter a university/college program that offers training for that career. Have them share their findings with the class in a short presentation or video. Take a poll to see how many require math and science.

Additional Resources:

The following websites are great resources for exploring careers in STEM:

- www.WISEatlantic.ca/resources.asp
- www.Computersciencedegrees.org
- www.careeroptionsmagazine.com
- www.typesofengineeringdegrees.org
- www.careersintrades.ca
- <http://www.science.ca/>



Career Knowledge Worksheet

Name: _____ Date: _____

Instructions:

Below is a list of careers. Please indicate whether or not you believe the training for the following careers require having taken math and/or science in high school.

Career	Yes	No
Geologist		
Forensic Anthropologist		
Pharmacist		
Dental Hygienist		
Chemical Engineer		
Food Scientist		
Journalist		
Psychologist		
Computer hardware designer		
Meteorologist		
Physiotherapist		
Mechanical engineer		
Teacher		
Embryologist		
Medical technologist		
Veterinarian		
Social worker		
Ophthalmologist		
Registered Nurse		
Computer Animator		
Power Engineering		

Career Knowledge Worksheet - Answers

Name: _____ Date: _____

Instructions:

Below is a list of careers. Please indicate whether or not you believe the training for the following careers require having taken math and/or science in high school.

Career	Yes	No
Geologist	yes	
Forensic Anthropologist	yes	
Pharmacist	yes	
Dental Hygienist	yes	
Chemical Engineer	yes	
Food Scientist	yes	
Journalist		No
Psychologist		No*
Computer hardware designer	yes	
Meteorologist	yes	
Physiotherapist	yes	
Mechanical engineer	yes	
Teacher		No**
Embryologist	yes	
Medical technologist	yes	
Veterinarian	yes	
Social worker		No
Ophthalmologist	yes	
Registered Nurse	yes	
Computer Animator	yes	No
Power Engineering	yes	

*Unless you want to be a science or math teacher!

**Unless you go the BSc of Psychology route, and you do have to take a statistics class to get your degree.