

STEM Career Scavenger Hunt

LESSON PLAN



Part 2: STEM Career Scavenger Hunt

Using one or both of the websites provided, complete the worksheet by discovering 15 different STEM careers that are new and interesting. Students should work together in small groups, with each student searching independently if possible, so that they can explore more STEM careers and discuss why one career fits a certain worksheet space better than others. As students are working, continue to challenge them to discuss their rationales so that they can prepare for a presentation of their group's findings. *Allow 25 minutes.*

Invite the small groups to share their findings. You can hang six posters around the room with the headings of:

1. STEM Careers Are in Demand
2. STEM Careers Require Creativity
3. STEM Careers Require Collaboration
- 4.-6. STEM Careers Are Essential to Our Health... Happiness... Safety

You can have each small group write its career findings on the appropriate poster as it finishes. Review some of the findings, and invite a large group discussion on why a career is essential or creative or collaborative. *Allow 10 minutes for discussion.*

Summary

Careers in STEM make a world of difference and help shape our future. You have now learned how to use two career search tools to help you further explore what opportunities are available to you in STEM. You have learned about 15-20 new and interesting careers to consider for your future as well!

Ask students how they plan to use these search tools moving forward. Feel free to also ask about what they learned overall. *Allow 5 minutes for closing.*

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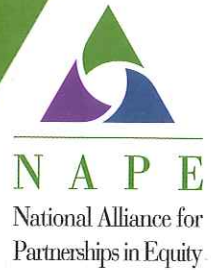
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Audience Middle and High School Students

Time needed 30-60 minutes (depending on discussion)

Objective Through this activity, participants will increase their awareness of opportunities and pathways to STEM careers. The activity also connects participants STEM ability and capability to career interests.

Overview The purpose of this activity is to introduce students to two similar online tools for exploring careers. In addition, the activity creates an awareness of various pathways to STEM careers and includes positive messaging that improves accessibility and attraction to these careers.

This activity includes three handouts: a web resource page, a STEM Career Search Matrix to become accustomed to the web resources and identify the various pathways and opportunities, and a STEM Career Scavenger Hunt Worksheet that focuses on positive messaging. Internet connectivity is required, preferably for each participating student.

There are two parts to this activity, each including discussion.

Introduction

Careers in Science, Technology, Engineering, and Math (STEM) are in demand, and the opportunities are extensive. There are multiple pathways and options for students. This Scavenger Hunt will allow you to explore and learn more about STEM careers.

Part 1: STEM Careers Matrix

Using one or both of the websites provided, complete the matrix by discovering STEM careers that are new and interesting to you. Students should work alone or in pairs. *Allow 10 minutes.*

Invite students to share what they learned from this exploration. You might have them discuss in small groups of 4-6 first before opening up to the larger group. Topics might include amount of education required, earnings, and unique careers. STEM careers are in demand, which means that there are jobs, for example, technician jobs in manufacturing, that require STEM skills and an associate's degree or certification and can be a great option for some students. Challenge the students' thinking by discussing how education enables more opportunities for advancement and potential earnings over time. *Allow 10 minutes for discussion.*

Explore STEM Careers!

Want to learn more about careers in Science, Technology, Engineering, and Math (STEM)? Browse through detailed information of hundreds of careers to discover what STEM professionals really do, what they earn, and what it takes to prepare for these careers.



Occupational Handbook

Mobile
Device
Friendly

www.bls.gov/ooh

Review these occupation groups for STEM careers:

- ENGINEERING AND ARCHITECTURE
- COMPUTER AND INFORMATION TECHNOLOGY
- HEALTHCARE
- LIFE, PHYSICAL, AND SOCIAL SCIENCE
- MATH
- PRODUCTION

Science Buddies

Includes
videos &
profiles

www.ScienceBuddies.org

Select the green tab labeled science careers. You will then see below the colored tabs, five grey tabs labeled:

- EARTH AND PHYSICAL SCIENCES
- LIFE SCIENCES
- ENGINEERING
- MATH AND COMPUTER SCIENCE
- HEALTH



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STEM Career Search Matrix

Instructions: Complete the following table by selecting Science, Technology, Engineering, and Math (STEM) careers or occupations from ScienceBuddies.org or BLS.gov/OOH that are new and interesting to you. Each row suggests a different education level: trade or certificate, associate's degree, bachelor's degree, or graduate degree (master's or doctoral). An example is provided.



	Which STEM occupation or career is new and interesting to me?	How much could I earn in this job and what is the outlook ?	How can I summarize the job that I might do in this occupation or career?	What would I need to do if I wanted to pursue this occupation or career? What would I study in college? How could I prepare now ?
EXAMPLE	Environmental Engineer	\$78,740 / year 22% growth	Environmental engineers use the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems. They are important for protecting our environment!	Must have a bachelor's degree in environmental engineering or related field, such as civil, chemical, or mechanical engineering. Employers value practical experience, so I should seek an internship . In high school, I should take related sciences. Environmental engineers should be creative , inquisitive, analytical , and detail oriented. They should work well as part of a team and communicate well . I can start developing those skills now.
TRADE OR CERTIFICATE				
ASSOCIATE'S				
BACHELOR'S				
GRADUATE <small>(master's or doctorate)</small>				



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Careers in Science, Technology, Engineering, and Math (STEM) make a world of difference and help shape our future!



Instructions: Complete the following worksheet by selecting 15 different STEM careers or occupations from ScienceBuddies.org or BLS.gov/OOH that are new and interesting to you.



Identify three STEM careers that are in demand.
Look for faster than average projected job growth or outlook.

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Identify three STEM careers that benefit from creativity.

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STEM careers are essential to our Health, Happiness, and Safety

Identify STEM careers with work that contributes to our Health, Happiness, and Safety. Challenge: Explore careers **outside** of the health professions.

HEALTH		HEALTH	
HAPPINESS		HAPPINESS	
SAFETY		SAFETY	

STEM careers require Collaboration

Identify three STEM careers in which you would collaborate with others to solve problems.



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