

Health, Happiness, and Safety



LESSON PLAN

Audience Any age group

Time needed 30-45 minutes

Objective Through this activity, participants will identify STEM careers as essential to our health, happiness, and safety.

Overview This activity has two parts, each with an accompanying worksheet. The first activity is designed for students to work together in small groups and concludes with a small or large group discussion. The second part of the activity recommends that each student has Internet access to explore more career options that contribute to our health, happiness, and safety.

Introduction

From the grandest skyscrapers to microscopic medical devices, it is impossible to imagine life without the influence of Science, Technology, Engineering, and Math. STEM Careers create knowledge, processes, and products that directly influence our health, happiness, and safety. *(Begin introductory group discussion, 5-10 minutes)*

Health

Consider medicines, machines, medical procedures, water filtration, etc. What other examples can you identify?

Happiness

These examples can certainly be different for everyone, but consider the technology that makes our lives easier and more enjoyable. Examples can be anything from a smart phone to a comfy mattress (as opposed to a pile of straw)! What other examples can you identify?

Safety

Consider the technology in the fibers that make bulletproof vests that protect our soldiers and police officers, all of the safety features in vehicles, vaccinations, etc. What other examples can you identify?

You may have realized that the examples are endless, and many examples contribute to our health, happiness, and safety. Now let's explore the careers that involve development of these products.

Health, Happiness, and Safety

LESSON PLAN



Activity Part 1

This worksheet lists 20 STEM careers and provides examples of the roles and responsibilities within the careers. Read through each in small groups of 3-4, and consider if and how the example listed contributes to our health, happiness, and/or safety. Discuss your ideas with your group. *Allow 15 minutes.*

Group Discussion: This can either be done among the small groups or the larger group. Use these questions to guide the discussion. *Allow 10 minutes.*

- Which of the jobs described contribute to our health and why?
- Which of the jobs described contribute to our happiness and why?
- Which of the jobs described contribute to our safety and why?
- Are there jobs listed that contribute to more than one area? Which ones and why?

Activity Part 2 (Can be assigned as homework)

Go to ScienceBuddies.org and select the green tab labeled Science Careers. Below the colored tabs you will see some grey tabs for careers in STEM. Explore the lists of occupations and examples of what one might do in these careers. Identify nine different careers (not already listed on the worksheet), three each for health, happiness, and safety.

Summary

Imagine life without the influence of scientists, technologists, engineers, or mathematicians working together to improve our health, happiness, and safety. In this activity, you have learned about 29 different occupations that make a difference and shape our future.

Our country depends on a workforce that is technologically literate and scientifically and mathematically prepared to meet growing workforce demands. Science, Technology, Engineering, and Mathematics (STEM) are the core disciplines that inform our future innovations, and they are the foundation of an excellent career choice for you!

The National Alliance for Partnerships in Equity is a consortium of national, state and local education and workforce development organizations committed to access, equity and diversity. NAPE fulfills its mission by providing professional development for teachers, administrators, and counselors; research on issues of equity in education; technical assistance to state and local education agencies; and advocacy on behalf of our members with public policy makers at the federal level.



Order counselor tools or download this lesson plan and other activities at napeqity.org/counselors



Funded by a grant from the National Science Foundation, GSE/EXT:STEM Equity Pipeline Project, Grant No. HRD-1203121

© 2013 NAPEEF
Developed by Meagan Pollock