

## Lesson Plan

### Exploring Engineering Careers

**Book:** *Great Careers in Engineering*

**Series:** Great Careers

**Level:** Navigator

#### Objective

To help students investigate the tasks and training involved in the various types of engineering.

#### Supplies

- *Great Careers in Engineering* book
- Computer or smartboard
- Exploring Engineering Careers links page (attached)
- Career Explorer worksheet (attached)
- Internet access for students

#### Before the Activity

Read *Great Careers in Engineering*, or assign it to students to read on their own. Print a copy of the Career Explorer worksheet for each student. Use the computer or smartboard to display the Exploring Engineering Careers links page to the class. This page includes links to PBS Career Connections videos about the various types of engineering.

#### Activity

There are many different types of engineering. Each type focuses on different tasks. It may also require different training or skills. *Great Careers in Engineering* gives a basic explanation of some of these different jobs. In this activity, students will take a closer look at one specific type of engineering.

Pass out the Career Explorer worksheets. Invite students to choose one job from the displayed list that seems the most interesting to them based on what they learned from the book. Students should watch the PBS Career Connections video about this job. They should use the information from this video to answer the questions on the Career Explorer worksheet.

#### Evaluation

Collect the worksheets at the end of class. Give students 1 point each for questions two through seven, or up to 6 points total.

**Standards**

This lesson may be used to address the Common Core State Standards' reading standards for informational text, grade 6 (RI 6.1, 6.2, 6.7).

# Exploring Engineering Careers

## **Aerospace Engineer:**

<https://www.pbslearningmedia.org/resource/7886386f-4d38-4967-ade2-62964e0d80d4/career-connections-aerospace-engineer/>

## **Biomedical Engineer:**

<https://www.pbslearningmedia.org/resource/1819bc6b-c34f-40d2-bae8-8f0c83e2d948/career-connections-biomedical-engineer/>

## **Chemical Engineer:**

<https://www.pbslearningmedia.org/resource/2c8ca3fb-9ae1-49ad-9d5c-407333bb77bd/career-connections-chemical-engineer/>

## **Civil Engineer:**

<https://www.pbslearningmedia.org/resource/8a02fd25-571f-49da-b3c3-b4151a5f2815/career-connections-civil-engineer/>

## **Manufacturing Engineer:**

<https://www.pbslearningmedia.org/resource/81bfd308-a162-48c0-a6ee-6252440976c9/career-connections-advanced-manufacturing-engineer/>

## **Mechanical Engineer:**

<https://www.pbslearningmedia.org/resource/49e94851-3f9d-4619-acb8-db84e00d4151/career-connections-mechanical-engineer/>

## **Structural Engineer:**

<https://www.pbslearningmedia.org/resource/401294a6-07f4-4f0c-b738-bc4d1c0deb1e/career-connections-structural-engineer/>

# Career Explorer

1. Which type of engineering did you choose?
2. What kinds of products or processes do people with this job work on?
3. What steps or tasks does this job involve?
4. What equipment or technology is used for this job?
5. What kind of education and training do people in this field usually get?
6. What other skills or experience are helpful for doing this job?
7. Do you think you would like to have this job? Why or why not?