



## **Careers: Architect**

**Grade: 9-12**

### **Description:**

Can you imagine being in charge of building the Ancient Egyptian pyramids, or designing the tallest building in the world? If you choose a career as an architect, you just may be responsible for building sky scrapers, museums, homes or stadiums! Architecture offers a world of possibilities for using the skills and concepts learned in school to create functional works of art. Architects draw upon many different skills and fields of knowledge such as math, engineering, history, social studies, geography, art, and even writing to design and build structures.

### **Preparation for the Excursion**

To ensure the most meaningful learning experience for your students, it is recommended that students engage in activities prior to the excursion. The video resources provide students with a context for the virtual excursion. The additional resources and activities offer opportunities for curricular connections and integration within your larger unit of study. The excursion is intended to complement a comprehensive unit.

**Video Link:** (Use the following link to view the *Day in the life of an Architect* video)  
[http://easylink.playstream.com/21\\_CenturyLearning/occupations/architect\\_46.rm](http://easylink.playstream.com/21_CenturyLearning/occupations/architect_46.rm)

### **Challenge Questions:**

To begin the Passports and assess students' prior knowledge ask students to respond to these questions:

- What does an architect do?
- What is the difference between the words architect and architecture?
- How has technology transformed the world of architecture?
- What are the names of famous structures and buildings that are known for their architecture? Where are they located?
- What architectural style is used in your community?
- What skills do you think would be important to succeed in this career?
- How has technology changed the world of architecture?
- What do you think would be the some of the challenges that an architect would face?
- How would our communities be different if we didn't have architects?
- What school subjects would help you to pursue a career as an architect?
- What are the differences between architecture in ancient times and architecture today?

### **Responses/Prompts:**

The questions are intended to spark thinking about a possible career as an architect and the importance of architecture in our culture.

**Lesson at a glance:**

Students will look at their own communities and identify different architectural designs. Students will discuss the knowledge base an architect must have to be successful in their careers. Students will identify the pros and cons of an architectural career. Students will use their own architectural creativity and design their own buildings. Students will research present day architecture to those in Ancient times.

**Lesson Outcomes:**

The students will:

- Learn about the importance of architecture in our communities.
- Explore different architectural designs and their significance.
- Reflect on what characteristics an architect must possess to succeed.

**Activity:***Activity #1: Form and Function*

Students can research famous buildings or buildings in their neighborhoods and cities. Students will explore the same architectural designs that are used in these buildings, in others around the world. Does the architectural style displayed serve a function or purpose, or is it primarily for aesthetics? Challenge students to research buildings and their architectural designs, and based on the designs used, formulate which designs are used for form and function and why?

*Activity #2: Technology and Architecture*

How has technology changed the world of architecture? Challenge students to research and explore ancient day architecture and the follow the developments with the invention of different technologies. What are the biggest changes in architecture that technology has made? What are the most widely used technologies in architecture? Students can compare and contrast present day architecture with the use of technology to that of the architecture of the past without the technological advancements.

*Activity #3: Building a Building*

Skyscrapers are the tallest buildings in the world. They take a lot of time and money to build. Students can research how long it might take to build a skyscraper from start to finish. What kinds of building materials, technology, and people power will the project take (examples: iron, steel, glass, concrete, architects, contractors, engineers, building workers, welding, elevators, cranes, beams, etc.)? Students can then discuss the steps or phases involved in the project—for example, the architectural design, deciding on materials, selecting a site, laying the foundation, transporting the materials to the building site, constructing the frame, and completing the interior. Present day skyscrapers should be used as examples for comparing and contrasting.