



Course Name	Library Class
Grade Level	High School
Author	Valerie Brown-Kuchera, Quinter Schools

Unit Title	Full STEAM Ahead
Lesson Title	Research a STEAM Career
Suggested Lesson Time	Two 40-minute class periods
Lesson Objectives	<p>12.1.5 Demonstrate new understanding gained through information from real-life situations (State Library Standard).</p> <ul style="list-style-type: none">• At the end of the sessions, students will demonstrate new understanding about a real-life STEAM career of their choice by writing sentences about job duties, required education, outlook, salaries, and skills as evidenced by completion of the STEAM Career Inquiry graphic organizer.• At the end of the sessions, students will demonstrate new understanding about a real-life STEAM career of their choice by accurately sorting careers into categories of Science, Technology, Engineering, Arts and Math. <p>12.1.6 Use speaking and writing skills to communicate new understandings effectively (State Library Standard).</p> <ul style="list-style-type: none">• At the end of the sessions, students will use speaking and writing skills to effectively create a product to show understanding of a STEAM career of their choice as evidenced by completion of the STEAM Career Inquiry graphic organizer.



Instructor Preparation
References
<ul style="list-style-type: none">• HirePaths career education resources at https://hirepaths.com/• Library and Information Literacy Standards of Kansas at https://www.ksde.org/Agency/Division-of-Learning-Services/Career-Standards-and-Assessment-Services/Content-Area-F-L/Library-and-Information-Literacy
Instructional Media
<ul style="list-style-type: none">• STEAM careers sorting activity sheet at https://www.canva.com/design/DAGL67LTW4Q/dPQyAsuyr6Yqy3vGhjTZoQ/edit?utm_content=DAGL67LTW4Q&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton• STEAM careers graphic organizer at https://www.canva.com/design/DAGJglyG3os/9rxP2i5KcsTRUgR3aayKSQ/edit?utm_content=DAGJglyG3os&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton
Equipment and Tools
<ul style="list-style-type: none">• Computer for displaying websites and instructions• Display screen for videos• Student laptops, Chromebooks or iPads
Materials
<ul style="list-style-type: none">• Copies of STEAM careers sorting activity sheet at https://www.canva.com/design/DAGL67LTW4Q/dPQyAsuyr6Yqy3vGhjTZoQ/edit?utm_content=DAGL67LTW4Q&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton• Copies of STEAM careers graphic organizer at https://www.canva.com/design/DAGJglyG3os/9rxP2i5KcsTRUgR3aayKSQ/edit?utm_content=DAGJglyG3os&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton



Student Preparation

Assignments

- *Read and explore HirePaths resources.*
- *Complete the STEAM Careers Sorting Sheet.*
- *Complete the STEAM Careers Graphic Organizer.*
- *Create a bibliographic entry for the HirePaths website.*

Introduction

How are you going to obtain the students' attention and redirect them toward the lesson topic?

Session One

- As students enter, have them grab a copy of the STEAM careers sorting activity sheet: https://www.canva.com/design/DAGL67LTW4Q/dPQyAsuyr6Yqy3vGhjTzoQ/edit?utm_content=DAGL67LTW4Q&utm_campaign=designshare&utm_medium=link2&utm_source=s harebutton
- Write the acronym STEAM on the board and discuss each term (Science, Technology, Engineering, Arts and Math). Students can jot the words on their sheets.
- Guide students to the HirePaths resources on the web. If desired, show the HirePaths website resources up on the screen.
- Using their own devices, students should explore the HirePaths resources. Have them sort at least 10 careers they find into the appropriate STEAM fields on the sheet.



Session Two

- Allow students to create a steampunk-themed avatar for their chosen career using generative AI on Canva. Define steampunk as a design style that combines Victorian and vintage elements with technological features inspired by science fiction.
- Examples are shown below for musician, astronaut, librarian and young zoo assistant. Students who want their avatars to resemble them will have to give very specific instructions, such as “Steampunk styled 50-year-old female librarian with brunette hair and blue eyes,” or “Steampunk styled 18-year-old muscular male astronaut with short blond hair.” Be aware that this activity, while engaging, can take a lot of time, so give a time limit.



Information Presentation	
<i>Information</i>	<i>Key Points</i>
<ul style="list-style-type: none"> ● <i>Materials to be presented</i> <p>Session One</p> <p>Pass out the copies of STEAM careers graphic organizer at https://www.canva.com/design/DAGJqlyG3os/9rxP2i5KcsTRUgR3aayKSQ/edit?utm_content=DAGJqlyG3os&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton</p> <p>Guide students to the HirePaths website by demonstrating how to click through the links using a display screen if desired.</p> <p>Allow time for students to move through the activity using their individual devices.</p> <p>Support students by circulating among them, providing feedback and assisting.</p> <p>Collect completed sorting sheets and graphic organizers.</p> <p>Session Two</p> <p>After the students create an avatar, have them review their previously completed graphic organizers.</p> <p>Allow the students time to create a short product to showcase their new knowledge for the class. This presentation can be a few slides, an infographic, a comic, or other representation of the HirePaths information.</p> <p>If time permits, students may show their classmates their product along with their creative steampunk avatar.</p>	<ul style="list-style-type: none"> ● <i>Demonstration points</i> <p>Session One</p> <p>Science careers include astronomers, biologists, chemists and geologists, among others.</p> <p>Technology careers include computer programmers, data analysts, web developers and others.</p> <p>Engineering careers include areas civil, industrial, electrical, architectural and others.</p> <p>Arts include graphic designers, musicians, actors, interior decorators and others.</p> <p>Math careers include accounting, statistical analysis, teaching and others.</p> <p>HirePaths resources can help students explore a variety of STEAM careers.</p> <p>Session Two</p> <p>Researching a particular STEAM career can help students understand key concepts such as soft skills and career clusters.</p> <p>Students can practice their writing and communication skills by exploring careers using the HirePaths resources and creating a product to showcase their knowledge.</p>



Summary

How are you going to summarize the lesson?

After students have completed all activities with support from the facilitator, students may use remaining time to explore other careers on the HirePaths website, compare their chosen careers to those of classmates, ask questions of the teacher, or continue discussion of the categories of STEAM. Creative avatars can be hung in the classroom for display. Graphic organizers may be used to create a class bulletin board of careers.

Student Activities

What are students going to practice while obtaining feedback and direction from the teacher?

- Students will practice sorting STEAM jobs based on identifying features.
- Students will practice using a career website to research a particular STEAM job.
- Students will practice following specific directions to conduct inquiry using the web.
- Students will practice finding information to answer queries on a graphic organizer.
- Students will practice creating a product to display knowledge about STEAM careers.

Student Assessment

How are you going to ensure students have the knowledge or skills taught in this lesson?

Formative assessment will occur during the lesson as the teacher responds to student questions and discussion. Observational assessment will be a part of this process.

Summative assessment will occur when teachers evaluate the written work demonstrating STEAM career research skills.



NAME :
DATE :

STEAM CAREER INQUIRY TOPIC :

Career Outlook	Required Education or Experience	
	Career Description	Duties and Tasks
Salary and Benefits	Interesting Facts	HirePaths Resources

NAME :
DATE :

HIREPATHS CAREERS WITHIN THE STEAM FIELDS

T	E	A
S	STEAM	M

DIRECTIONS: First, write what each letter in STEAM stands for. Then, using information at HirePaths.com, list at least two careers that fall into each category. Be specific!

