MIT CARE PACKAGE WEEK 2: Let's invent!

#### Grades 6-8

## Day 5 Showcasing Your Invention!

#### 50~60 minutes (hands-on activity)

#### **Activity Overview**

In this activity, students will make final tweaks to their invention prototypes, if needed. They will practice visual and verbal communication skills by completing the comic book of their invention journey, setting up a virtual showcase of their invention project, and engaging in online discussions about their project on the MIT Full STEAM Ahead website.

## **Activity Summary**

#### **Activity 1: Final Touches on the Invention Prototype** (10 minutes)

1. Finish the final touches or minor changes to the first invention prototype, if needed.

#### **Activity 2: Recording Users' Feedback and Future Revision Plan** (30 minutes)

2. Create comic strips to show feedback received from the users and planned changes for the second invention prototype.

#### **Activity 3: Invention Statement and Online Showcase** (20 minutes)

- 3. Create an invention statement for the invention project.
- 4. Register with the MIT Full STEAM Ahead website; organize materials and set up the online showcase of the invention project.
- 5. Review others' submitted online showcases and contribute to the online discussion.

## **Objectives**

#### The students will:

- Practice the hands-on skill of building an invention prototype with common materials
- ✓ Learn about the minds-on skills of organizing and presenting invention work
- ✔ Practice online visual and verbal communication skills

## **Activity Guide**

### Materials, Resources, and Prep

- Invention box with common materials and basic tools
- Printed worksheets
- Colored pencils or pens
- Computer with Internet access

#### **Activity 1: Final Touches on the Invention Prototype** (10 minutes)

- Yesterday you received some feedback from users. Some of the feedback may require a
  quick fix of the prototype. Or you may have some ideas about how to modify certain
  parts of the prototype. This is the time for you to add final touches to your prototype.
- Use this time for the final tweaks. DO NOT plan to make major changes because you
  only have ten minutes. You can think about and work on the major changes after today's
  activity.
- Ask for help from other people at home (parents, siblings, etc.), if needed.
- Remember that invention projects aim to help people!

# **Activity 2: Recording Users' Feedback and Future Invention Plans** (30 minutes)

- The main goal of today's activity is to set up a showcase of all the wonderful work you
  have done! To document all the invention processes you've gone through, add two more
  chapters to your comic book or digital story. Chapter 4 will focus on summarizing and
  recording the feedback you've received and how you feel about that feedback.
- Chapter 5 is your idea of how to further your invention. This could be your future invention plans, how you plan to revise your invention prototype, and/or how you'll extend your learning with the <u>United States Patent and Trademark Office</u>.
- Do you know what patents are and who issues patents? Inventors can protect their useful and unique ideas by applying for and receiving a patent from the U.S. Patent and Trademark Office. This federal office has issued more than 10 million patents! Not all good ideas are patented. Many are, though—especially if the inventor intends to make a financial profit from their useful and unique idea. Trademarks can also be protected. Trademarks are recognizable by the small symbols ™ and ®. Names of products are often trademarked to prevent other people from using the name. To learn more, go to: https://www.uspto.gov/kids/.
- Work on your comic book using the worksheets for Chapters 4 and 5.
- Once you finish the two chapters, find the previous comic strips or digital stories you've created. Assemble them to make a comic book about your invention story.
- Do you not have a good idea of how to put them together? Check out this example of creating flute.

## **Activity 3: Invention Statement and Online Showcase** (20 minutes)

- Think about the name of your invention product and complete <u>this invention statement</u> <u>worksheet.</u> This invention statement includes a brief introduction of your invention, and who and how it will help.
- You can take a picture or pictures from multiple angles of your invention.
- Take a picture of each page of the drawings in the comic book.
- Your next task is to set up an online showcase of your invention work. All you need to do
  is to organize your work (drawings, pictures of the invention, invention statement, digital
  stories) in one file and present it to tell the story of your invention.
  - Not sure how to put everything in one file? You can put it all in a Google Doc or Word document. If you created digital stories using Scratch, make sure you register with Scratch, publish your work, and include a link in the file. More information about publishing in Scratch can be found <a href="here">here</a>.
  - Still having trouble? Ask for an adult's help!
- Once you organize your work, the next step is to register at the <u>MIT Full STEAM Ahead</u> website. Please note that you must be 13 years or older to post on the website. If you are 12 or younger, ask your caring adult to register and post for you.
- Once you have a registered account, post your invention work in the forum called "Share your invention here!" You should include two or three sentences about your invention and attach your work as one file to your post.
- Big Congratulations on your achievement! Now you can review other people's invention projects, create posts to give feedback to their work, and think about your next invention project!!