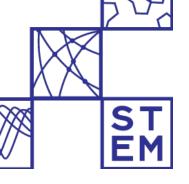


# **STEM Activities Choice Boards**





## **About this resource**

Choice boards are one way that we can differentiate the process for student learning, and the products students turn in. Each choice board includes multiple opportunities for students to use their creativity to explore STEM concepts.

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### **STEM Activities For Families Choice Board**

Write your own STEM comic book include drawings and a cover.	Write a song, poem, rap, or play about a STEM career that has impacted your life.	Write a story about a person in a STEM career. If you are feeling brave act it out and have a family member record it.	Choose one item in your house and conduct research on it. Who created it? When was the item made? What is the purpose? Then, create a poster of your findings.
Invent a board game using bottle caps or other small items as pieces.	Invent something to solve a problem in your home.	Measure objects around the room with a tape measure. Track your measurements using a table. Use your data to create a bar graph.	Invent your own musical instrument.
Track and Graph your high scores in a game.	Observe the moon each night and take pictures to make a time-lapse video.	Invent a toy using recycled materials.	Choose a room in your home and track all the shapes you find. Create a graph or table of your choice to display your findings.
Build a model city with items in your house.	Build an arcade game using recycled materials. For inspiration watch the following documentary cainesarcade.com from youtube.com	Create a treasure hunt with a map and clues and ask a family member to follow the clues and find the treasure.	Make a paper airplane using the paper of your choice. For inspiration visit foldnfly.com or paperairplaneshq.com

## **STEM Activities For Families Choice Board**

Interview another person about their experiences with STEM.	Read a biography of a scientist.	Make a blueprint of your home.	Measure, weigh, and graph your pets.
Invent a structure using a deck of playing cards or index cards.	Invent something to solve a real world problem.	Design and build a mini boat. Use your sink or bath tub to test your boat.	Design and build your own mini golf course using materials around the house.
Choose an object in your home. Identify the forms of energy that are needed to make the object work and identify the forms of energy the object produces. Ex: my tv needs electrical energy to work and it produces light and sound energy.	Using a tape measure display a set measurement and find out all the things that can be placed side by side to demonstrate that same distance.  Ex: 6 ft= 6 cereal boxes	Choose one item in your room and conduct research on it. Who created it? When was the item made? What is the purpose? Once you finish all your research create a poster of your findings.	Grab a phone or device with slo-mo. Find two objects to drop. Make a prediction of which object will fall faster. Conduct the experiment while someone else records.
Make a "How –to" video.	Measure and plot temperatures on a scatter plot, or stem and leaf plot.	Write instructions on how to brush your teeth and get someone to follow your exact instructions.	Write instructions on how to make a sandwich of your choice and get someone to follow your exact instructions.

### **STEM Careers Choice Board**

#### **FOLDABLE**

Create a foldable on different STEM careers. Include a description of each career and the impact this career has made in the real world. Include pictures, graphics, and key vocabulary words.

#### **GRAPHIC ORGANIZER**

Choose a graphic organizer and use it to display the different STEM careers. When would each STEM career be needed?

Make sure to include a description of each career and the impact each career has made in your life.

#### **TOP TEN LIST**

Create a top ten list of the ten most important STEM careers, in your own opinion. Explain each career and why each career is important to your life and the real world.

#### **COMIC BOOK**

Create a cover of a comic book based on a STEM career that has made a significant contribution to the field of engineering or mathematics.

Make sure to highlight their discoveries and how their work has impacted the real world.

#### **VIDEO PROJECT**

Design a video highlighting the STEM career of your choice. What training or education would you need to work in this career? Why is this career important to the real world?

#### **POSTER**

Create a poster on a STEM career that has made a significant contribution to science. Include several scientists and their discoveries and how their work has impacted your life. Include pictures and graphics.

#### **GAME**

Choose 7 science careers.

Create a game using that could be used to teach a younger student about each science career.

#### **GET CREATIVE**

Write a song, poem, rap, or play about a STEM career that has impacted your life. What discoveries and contributions have they made? If you choose, include several different STEM careers.

### **Science Careers Choice Board**

#### **FOLDABLE**

Create a foldable on different science careers. Include a description of each career and the impact this career has made in the real world. Include pictures, graphics, and key vocabulary words.

#### **GRAPHIC ORGANIZER**

Choose a graphic organizer and use it to display the different science careers. When would each science career be needed? Make sure to include a description of each career and the impact each career has made in your life.

#### **TOP TEN LIST**

Create a top ten list of the ten most important science careers, in your own opinion. Explain each career and why each career is important to your life and the real world.

#### **COMIC BOOK**

Create a cover of a comic book based on a science career that has made a significant contribution to the field of science. Make sure to design the cover to highlight their discoveries and how their work has impacted the real world.

#### **VIDEO PROJECT**

Design a video highlighting the science career of your choice. What training or education would you need to work in this career? Why is this career important to the real world?

#### **POSTER**

Create a poster on a science career that has made a significant contribution to science. Include several scientists and their discoveries and how their work has impacted your life. Include pictures and graphics.

#### **GAME**

Choose 7 science careers.

Create a game using that could be used to teach a younger student about each science career.

#### **GET CREATIVE**

Write a song, poem, rap, or play about a science career that has impacted your life. What discoveries and contributions have they made? If you choose, include several different science careers.

## **Technology Careers Choice Board**

FOLDABLE
Create a foldable on different
technology careers. Include a
description of each career and
the impact this career has mad
in the real world. Include

#### **GRAPHIC ORGANIZER**

Choose a graphic organizer and use it to display the different technology careers. When would each science career be needed? Make sure to include a description of each career and the impact each career has made in your life.

#### **TOP TEN LIST**

Create a top ten list of the ten most important technology careers, in your own opinion. Explain each career and why each career is important to your life and the real world.

#### **COMIC BOOK**

Create a cover of a comic book based on a technology career that has made a significant contribution to the field of science. Make sure to design the cover to highlight their discoveries and how their work has impacted the real world.

#### VIDEO PROJECT

pictures, graphics, and key

vocabulary words.

Design a video highlighting the technology career of your choice. What training or education would you need to work in this career? Why is this career important to the real world?

#### **POSTER**

Create a poster on a technology career that has made a significant contribution to your life. Include pictures and graphics.

#### **GAME**

Choose 7 technology based items that are significant in your life. Create a game using that could be used to teach a younger student about each science career.

#### **GET CREATIVE**

Create a song, poem, rap, or play about a technology career that has impacted your life.
What discoveries and contributions have they made? If you choose, include several different technology careers.

## **Engineering Careers Choice Board**

#### **FOLDABLE**

Create a foldable on different engineering careers. Include a description of each career and the impact this career has made in the real world. Include pictures, graphics, and key vocabulary words.

#### **GRAPHIC ORGANIZER**

Choose a graphic organizer and use it to display the different engineering careers. When would each science career be needed? Make sure to include a description of each career and the impact each career has made in your life.

#### **TOP TEN LIST**

Create a top ten list of the ten most important engineering careers, in your own opinion. Explain each career and why each career is important to your life and the real world.

#### **COMIC BOOK**

Create a cover of a comic book based on a engineering career that has made a significant contribution to the field of engineering. Make sure to design the cover to highlight their discoveries and how their work has impacted the real world.

#### **VIDEO PROJECT**

Design a video highlighting the engineering career of your choice. What training or education would you need to work in this career? Why is this career important to the real world?

#### **POSTER**

Create a poster on a engineering career that has made a significant contribution to your life. Include pictures and graphics.

#### **GAME**

Choose 7 types of engineering careers. Create a game using that could be used to teach a younger student about each type of engineer.

#### **GET CREATIVE**

Create a song, poem, rap, or play about a engineering career that has impacted your life.
What discoveries and contributions have they made? If you choose, include several different types of engineers.

### **Math Careers Choice Board**

#### **FOLDABLE**

Create a foldable on different math careers. Include a description of each career and the impact this career has made in the real world. Include pictures, graphics, and key vocabulary words.

#### **GRAPHIC ORGANIZER**

Choose a graphic organizer and use it to display the different math careers. When would each science career be needed? Make sure to include a description of each career and the impact each career has made in your life.

#### **TOP TEN LIST**

Create a top ten list of the ten most important math careers, in your own opinion. Explain each career and why each career is important to your life and the real world.

#### **COMIC BOOK**

Create a cover of a comic book based on a math career that has made a significant contribution to the field of mathematics or engineering. Make sure to design the cover to highlight their discoveries and how their work has impacted the real world.

#### **VIDEO PROJECT**

Design a video highlighting the mathematics career of your choice. What training or education would you need to work in this career? Why is this career important to the real world?

#### **POSTER**

Create a poster on a mathematics career that has made significant contributions to science. Include several mathematicians, their discoveries, and how their work has impacted your life. Include pictures and graphics.

#### **GAME**

Choose 7 math careers. Create a game using that could be used to teach a younger student about each math career.

#### **GET CREATIVE**

Create a song, poem, rap, or play about a math career that has impacted your life. What discoveries and contributions have they made? If you choose, include several different math careers.