

# “Amazing Engineering Minds”

Dynamic Visual Presentations and Activities

**Grade Level/Subject: 6-8 All Courses (2-3 Block Periods)**

## Standards:

**LACC.6.RI.3.7:** Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

**LACC.8.W.1.3:** Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

**SC.6.N.1.5** Recognize that science involves creativity, not just in designing experiments but also in creating explanations that fit evidence.

**SC.7.N.1.5:** Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics.

**SC.7.N.1.7:** Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community.

**SC.7.N.2.1:** Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered.

**SC.7.N.3.1:** Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them.

**SC.8.N.3.2:** Explain why theories may be modified but are rarely discarded.

## Learning Objectives

Students will understand the impact of different scientists on the world and recognize why the buildings around Milwee are named after them. Students will be to complete a self-reflection on their role in science, technology, engineering, or mathematics and explain what impact they can have.

## Guiding Questions

Who are the buildings at Milwee named after? What impact did they have on the world?

Why do you think that these individuals were chosen for our building names?

Who is your favorite scientist? What makes them so awesome?

## Activity/Procedures

**Importance Notice:** All Resources are available online at [engineeringminds.weebly.com](http://engineeringminds.weebly.com).

### Part I – Amazing Engineering Minds Prezi

Open Internet Browser and go to [engineeringminds.weebly.com](http://engineeringminds.weebly.com). Located on the home page is the Amazing Engineering Minds Prezi. Click on the “play arrow” and begin the presentation.

\*\*\*Note: Youtube videos are embedded into the presentation and will needed to be started when appropriate.

### Part II – Amazing Engineering Minds Jeopardy or Bingo (CHOOSE ONE)

**Jeopardy:** Located on the Home page below the Prezi is a link to Amazing Engineering Minds Jeopardy and will take you to an online version of the game. Select the number of teams and begin the game. (Make sure you give points after every question so that they properly disappear from the question menu.)

**Bingo:** There is a brief Prezi to help students create their bingo boards. After bingo boards are created and filled out, teachers will randomly read the clues. Students will need to correctly identify the answer and cover that word on their game board. Linking 5 squares in a row results in a “Bingo!”

### **Part III – “I am a STEMer” Self Portrait**

Either digitally or on paper, students will draw and explain a self-portrait of himself or herself as a Scientist, Technologist, Engineer, or Mathematician. Students can use pencils, colored pencils, crayons, markers, etc, to complete their self-portrait. Students need to explain their role in one or more STEM fields and what future impact they could have to shape the world we live in. It is important to stimulate student creativity and curiosity in the fields of science, technology, mathematics, and engineers.

Ideas – Medicine, Video Game Design, NASA, Computer Science, Robotics, Civil Engineering, Mechanical Engineering, Computer Programming, Sports Statistician, Food Scientist, Archeology

#### **Extensions**

##### Amazing Engineering Minds – Jeopardy or Bingo

If students have already completed jeopardy, then have students play Amazing Engineering Minds Bingo. If students have already completed bingo, then have students play Amazing Engineering Minds Jeopardy.

##### Individual Scientist Prezis

Located on the website are individual pages for every building on campus. Select an individual and complete their personal Prezi, or have students individually explore the website and learn about the lives of the great minds located throughout Milwee. Links and additional resources are also available.

#### **Formative Assessment/Feedback to Students**

Jeopardy and Bingo Results. Teachers can use the students’ self-portraits to learn about them and make sure they take them with them.

#### **Closure**

Exit Poll: Have students select their favorite scientist and explain why that individual is their favorite and what impact they made on the world.

\*\*\*A class tally can be taken to determine the class’ favorite scientist!\*\*\*

Exit Question: Incorporate any or all of the Discussion Questions above.

#### **Special Materials Needed**

Computer with Internet connection and projector for Prezi  
Paper (for Bingo and Self Portrait)  
Pencil/Pen  
Colored Pencils, Markers, Crayons, etc.  
Bingo Chips (optional)

#### **Resources**

[engineeringminds.weebly.com](http://engineeringminds.weebly.com)

<http://www.creativeforecasting.net/PDFImage/BlankBingoCard.pdf>