# Designing My Display Board

Invention Step: Communicating
Grade Level: 6-8
Base Lesson Time: 40 minutes, plus board-building time

## Driving Question

Why is displaying information important, and how do inventors show off their work?

## Learning Objectives

Students Will Be Able To:

- Summarize invention logbook content, including prioritizing information on the display board.
- Design a display board with optimal color combinations, fonts and sizes.
- Transfer their new knowledge to real life, and describe why it is important.

## Why This Matters

Displaying information is an important step in communicating about inventions and products. The display board is a creative tool, but inventors must understand fonts, colors and sizing to have the maximum impact in their display. Space is limited, so students will need to learn to evaluate the most critical information to show off their work.

## Standards

Common Core ELA Standards:

- CCSS.ELA-LITERACY.SL.6.2; 7.2; 8.2
- CCSS.ELA-LITERACY.SL.6.5; 7.5; 8.5

## Materials

- Construction paper
- Markers or crayons
- Font and advertising examples
- Trifold display board for each project (if creating a display board)

## Prep Activity

Using the Designing My Display Board PowerPoint, students will explore common advertisements and how they communicate about a product.

## Core Activity

Using paper, markers and various fonts, students will explore what works and what doesn't — and why.

## Post Activity

Returning to the Designing My Display Board PowerPoint, students will evaluate images of inventor display boards. Students will use the Designing My Display Board worksheet to begin creating their own display board.

## Homeschoolers or Virtual Learners

All activities can be completed as designed, using the Designing My Display Board PowerPoint.

## Model i Connectors

If using The Henry Ford's Model i Innovation Learning Framework, the activities in this lesson connect to the following Habits and Actions: Stay Curious, Be Empathetic, Implement

# Model i Connectors

Throughout this lesson, there will be opportunities to practice and develop Model i's Habits of an Innovator and Actions of Innovation. Listed below are the Habits and Actions that students will develop and practice for this lesson.

## Developing Habits of an Innovator

**Stay Curious**
Learn something new. Ask questions.

**Be Empathetic**
Walk in other people's shoes to understand their needs.

## Practicing Actions of Innovation

**Implement**
Take prototype to market, seek new insight and re-enter the cycle.

# Prep Activity

Invention Step: Communicating
Grade Level: 6-8
Prep Activity Time: 15 minutes

## Learn from Common Advertisements

Explain to students that they will begin to think about their display board design. Discuss the importance of successfully communicating about their project or invention to others. If students will be participating in Invention Convention competitions, their boards must meet specific requirements. Those will be discussed later.

Using the Designing My Display Board PowerPoint, show students the advertisements. In a full class discussion, ask students the following:

- How is the product displayed?
- What is interesting about this advertisement? What makes you notice it?
- What is unappealing? Does it still make you notice it?
- If there are words: What do you notice about them?
- What do you like or not like about the colors?
- Do you want to buy this product?

Rather than use the PowerPoint, students could engage in a walkabout with advertisements placed around the room.

Explain to students that, in a similar way, their display board will need to make people notice their invention and stop to learn about it.

## Adjustments for Virtual Learning

- Teacher can share the PowerPoint via a virtual learning environment.
- Students can comment in the chat box or through a discussion board.

# Core Activity

Invention Step: Communicating Grade Level: 6-8
Core Activity Time: 15 minutes

## Color and Font Exploration

Using Slide 8 of the Designing My Display Board PowerPoint, begin to explore color. Hand out scrap black paper and white paper. Ask students to use purple marker or crayon on the black paper. Then have students use yellow marker or crayon on the white paper. Ask students what happened in both situations. Ask if inventors should use those color combinations. Have students use scrap paper to decide what colors work best together.

Have students look at each other's favorite color combinations and explain to each other why they like them. You can do this through a gallery walk, presentations or simply sharing ideas in groups.

Teach your students that fonts (for typed displays) and lettering (for handwritten displays) affect how well people can read their information. Ask students the pros and cons of both typed and handwritten display boards.

Using Slide 9 of the Designing My Display Board PowerPoint, begin to explore fonts. Hang the font examples around the room or place them at tables. Ask students to go around the room and decide which fonts work for titles (big words) and for descriptions (longer blocks of text). Students can discuss with each other, as they go around and look at the fonts, what works or does not work. Discuss as a class what made a font harder to read and what made fonts easier to read.

## Adjustments for Virtual Learning

- These activities can also be done on computers, using word-processing or slide-sharing programs to explore color combinations and fonts.
- Discussions can take place in breakout rooms or via the chat function.
- Teacher can display various fonts, either in a PowerPoint or by holding them up to the video screen.

# Post Activity

Invention Step: Communicating Grade
Level: 6-8
Post Activity Time: 10 minutes, plus board-building time

## Designing My Display Board

Returning to the Designing My Display Board PowerPoint, show students the example images of inventor display boards. Discuss what works well and what doesn't work so well.

Give each student a copy of the Designing My Display Board worksheet. Students should use this to begin designing their board.

## Note to Teacher

If students are preparing to compete in Invention Convention, share with students a copy of Designing My Display Board Procedures. This should guide their requirements, but they should also consider the creative elements discussed during this lesson.

Name_____

# Designing My Display Board

Directions: You or your team should brainstorm the best possible design — and then create it. Once you or your team have come up with some ideas, you will make an initial design drawing below.

Colors I/we like for my display board:

Why these colors will work:

Font ideas and lettering I/we like for the display board:

Title:

Subheadings:

Body:

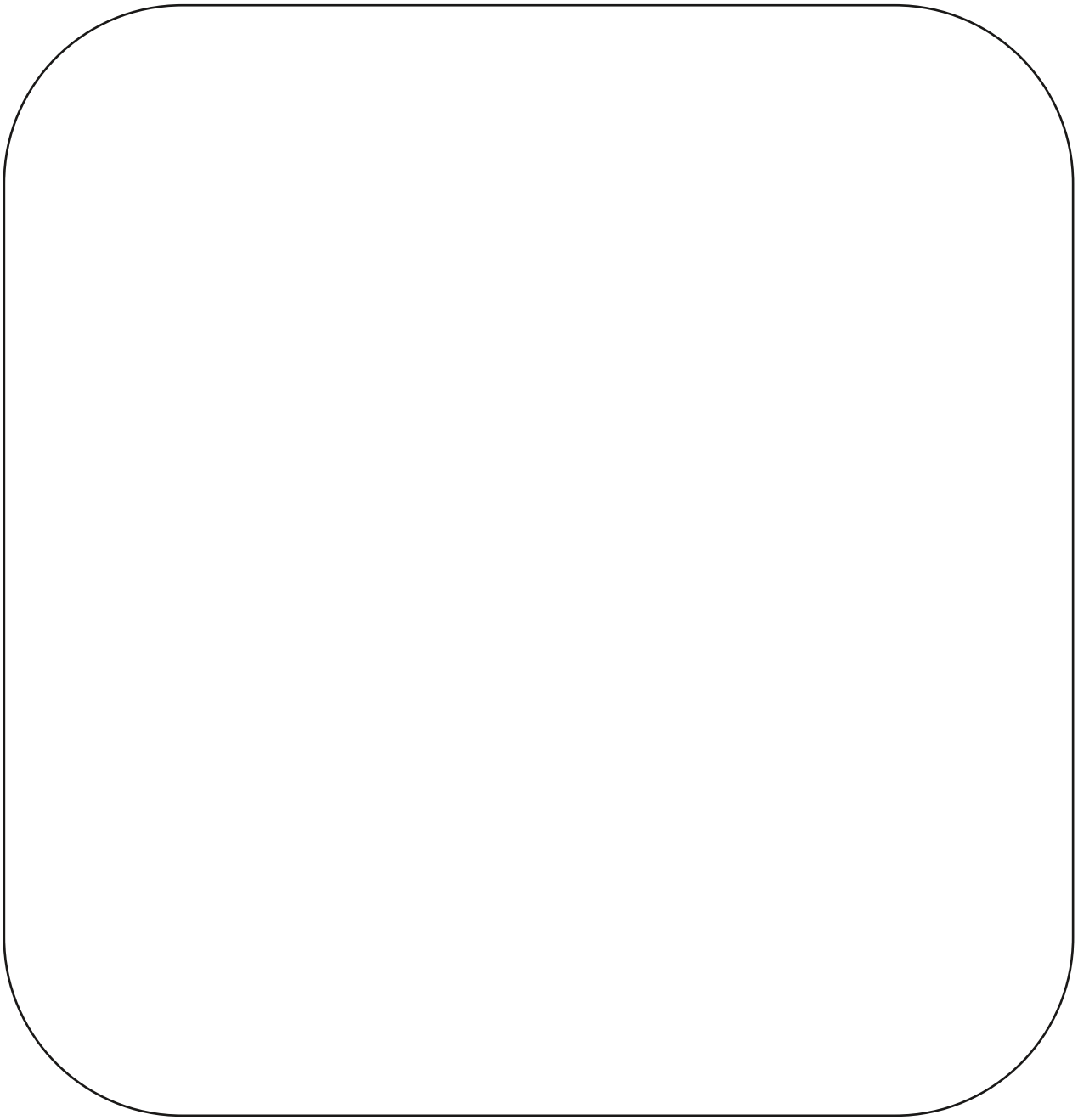
What looks good on display board examples? What stands out?

What I/we want to be sure is put on the display board:

Name _____

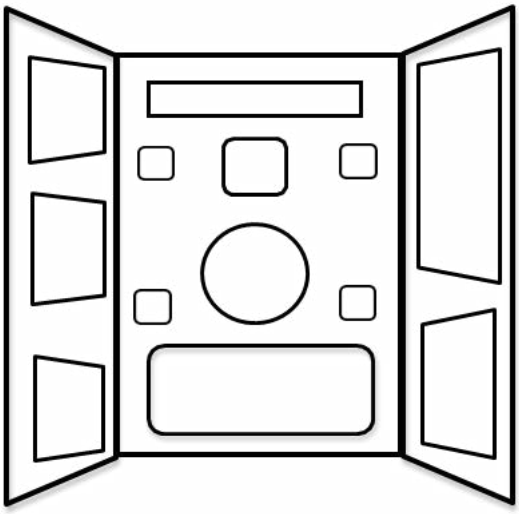
# Designing My Display Board

Draw your design below.



Name_____

# Designing My Display Board — Procedures



Your display board is an opportunity for you to highlight the most important aspects of your invention process, show off your creativity and market your product. Above is an example of what a display board might look like, but you can make it look however you want. This is your invention and your display, so use your creativity to tell the story of your invention the way you want.

Be sure you use:

- Fonts that are readable (in style, size and color)
- Colors that look good together
- Shapes that are the right size for the board
- Correct grammar and spelling
- Proper punctuation

Maximum size: With the wings folded in, the Display Board can only take 24 inches of table space. However, you are allowed to open up the wings during your Judging Circle presentation.

Name _____

# Designing My Display Board — Procedures

Your Display Board must contain the following information in one consolidated place on the poster:

- Student(s) Name(s)
- Project Name
- Student(s) Grade(s)
- Student(s) School
- School City, State
- Preferred Industry-Focused Award Category (e.g., Telecommunications) • Patent Status (Three Options: None, Under Counsel or Patent Pending)

Students should note “Patent Pending” on their posters for Patent Status only if a provisional or nonprovisional patent application has been officially filed with the USPTO. If you are currently represented by an attorney or patent agent (pro bono or otherwise), mark “Under Counsel.” It is possible to be both “Under Counsel” and “Patent Pending” or just “Under Counsel” or just “Patent Pending” (If you did the filing yourself).

These are the display board requirements for the Invention Convention U.S. Nationals competition. Be sure to check with your teacher about the display board requirements for your state’s competition.

You may also want to add:

- Images showing you building or testing the invention.
- Information on how the invention was made.
- How the invention is used.
- The biography of the inventor.
- Text that supports and explains any pictures, drawings, charts, etc.
- Any scientific principles used in your invention (e.g., buoyancy, heat transfer).
- Any engineering disciplines used in your invention (e.g., electronics, optics).
- Testimonials from users and/or research results.
- Any other information about the invention that will help explain it, what it does or why it is good.