

EXTENSION LESSON 9:

PREPARING FOR COMPETITION

(Recommended for students competing in invention fairs.)

Invention Process Step: Communicating

Grade Level: 3-5

Base Time: 40 minutes



ESSENTIAL QUESTION

How do I prepare for competition?

LESSON OVERVIEW

This lesson is an extension lesson to provide support for students who may present their invention project in competition. The activities included will prepare students for a competition to ensure that they have all of the required project elements: display board, live presentation, video presentation and that they feel comfortable presenting these elements in front of judges.

OBJECTIVE

Students will be able to:

- Properly prepare for an invention fair competition.
- Inform an audience about their invention and their design process in both a visual display and an oral presentation.
- Confidently deliver information to an audience of judges.

LESSON STANDARDS

Common Core ELA Standards:

- CCSS.ELA-LITERACY.W 3.4, 4.4, 5.4
- CCSS.ELA-LITERACY.W 3.5, 4.5, 5.5
- CCSS.ELA-LITERACY.W 3.7, 4.7, 5.7
- CCSS.ELA-LITERACY.W 3.10, 4.10, 5.10
- CCSS.ELA-LITERACY.SL 3.1, 4.1, 5.1
- CCSS.ELA-LITERACY.SL 3.4, 4.4, 5.4
- CCSS.ELA-LITERACY.SL 3.5, 4.5, 5.5
- CCSS.ELA-LITERACY.SL 3.6, 4.6, 5.6

MATERIALS

Resources for the Educator

- Photo Examples of Invention Convention Displays
- Invention Presentation Videos:
 - Team Bus Safety Stop, (*K-12 Inventure*, 3:15 minutes)
Link: <https://youtu.be/EpPKDxBEnw4>
 - The SipBit, (*Invention Convention 2019*, 3:03 minutes)
Link: <https://www.youtube.com/watch?v=V5Wp1qSfziY&feature=youtu.be>

Materials for the Student

- YIP Inventor's Journal

- [Worksheet: Display Board Template](#) (included in Inventor's Journal)
- Tri-fold Display Board
- Markers/Crayons/Pencils
- Paper (Construction, Cardstock, Plain, etc.)
- Tape and/or Glue
- Other materials to create a display board as needed (photos, graphs, theme decorations, etc.)

NOTES FOR THE EDUCATOR

Educator may lead the following lesson plan with flexibility to adapt as needed to fit technology and class format.

This lesson will allow the educator to prepare students planning to present their inventions in an invention fair for the competition. Educators may work with students as a group or individually as needed. It is important that families are informed about all requirements, deadlines and competition rules so that they can also provide support in this preparation process. Students may complete all preparation in class or at home or both.

Talk to students about invention convention competitions and what they can expect. Explain that preparation for the competition and practicing their presentations will be important to their success. In order to compete in state/regional and national competition, inventors must also have a display board, a live presentation pitch and a video recording of the presentation which may be done in class or at home.)

See Extension Lessons 7 and 8 for activities to guide students to complete a presentation and display board.

Today's activities include videos that demonstrate good examples of invention convention presentations. If you do not have access to a computer or device to share the videos, you can complete this session without them.

INSTRUCTION & ACTIVITIES

Educator Instruction:

Share examples of invention convention presentations and displays with students. (See the Photos of Invention Convention Displays in Educator Resources). Then share videos of real presentations presented in Invention Convention competitions.

NOTE: The following activity includes videos that demonstrate good examples of invention convention presentations. If you do not have access to a computer or device to share the videos, you can skip this part.

Students should watch one or two of the following videos.

Share Video:

- Team Bus Safety Stop, (K-12 Inventure, 3:15 minutes)
Link: <https://youtu.be/EpPKDxBEnw4>
- The SipBit, (Invention Convention 2019, 3:03 minutes)

Link: <https://www.youtube.com/watch?v=V5Wp1qSfziY&feature=youtu.be>

Lead a discussion about what makes these examples good, and what suggestions they might give on how to improve them. Ask students to reflect on these examples as they prepare their own presentation and display board for competition.

NOTE: If students have not already created a presentation and a display board, they should do that now, in class or at home. You may use Extension Lessons 7 and 8 for resources and activities to guide them.

NOTE: In order to compete in state/regional and national invention conventions students must have the following things for their project:

- *Invention Prototype (working or non-working)*
- *Inventor's Journal*
- *Tri-fold Display Board*
- *Live Presentation*
- *Video Presentation*

Refer to the following requirements for the Live Presentation, Video and Display Board to make sure students have included the essential elements:

Display Board Requirements:

Display boards may be no more than 48 inches wide by 36 inches tall (when laid flat) and should not exceed a footprint of 30 inches wide when displayed on a tabletop. Display boards must have the following information in one consolidated place on the poster:

Student(s) Name(s)

Name of Invention

Student(s) Grade(s)

Student(s) School

School City, State

Statement of the problem

Explanation of the invention as a solution to the problem

Details of model construction

Diagrams of design

Live Presentation Requirements:

All presentations should include the following information and should be no more than 6 minutes in length.

Student(s) Name(s)

Student(s) Grade(s)

Student(s) School

School City, State

Name of Invention

Statement of the problem

Explanation of the invention as a solution to the problem

Video Requirements:

All recorded videos of presentations should include the same information above and

*Be filmed **horizontally***
Be recorded continuous- no stopping and restarting during filming
May not be edited
Reading a full script is discouraged
Should show the prototype and display board in the video

Activity: Presentation Practice

Ask students/teams to work with a partner to practice their invention presentation. Have partners/teams to share feedback with their peers. Students should use the TAG model for giving feedback.

- **T= Tell one thing** you like about the presentation.
- **A= Ask one question** you have about the presentation or the invention.
- **G= Give one suggestion** of something they can improve for the next time they present.

Finally, if time allows, have students share their presentations with the entire class or in a larger group.

NOTE: You may choose to video the presentations so that students can watch themselves later. The videos are fun to watch but are also valuable teaching tools as students can see themselves presenting and may be able to identify areas for improvement for the future. Videos may also be used to fulfill the required video for submission for competition or you may ask students to re-record a “final” video for submission at a later time.

IDEAS FOR VIRTUAL INSTRUCTION

Share examples of past invention convention projects with students (display boards and presentations). Ask them to consider what makes these examples good, and what suggestions they might give on how to improve them. Have students reflect on these examples as they prepare their own presentation and display board for competition. Students may submit their work using the platform of choice.

Team Bus Safety Stop, (K-12 Inventure, 3:15 minutes)

Link: <https://youtu.be/EpPKDxBEnw4>

The SipBit, (Invention Convention 2019, 3:03 minutes)

Link: <https://www.youtube.com/watch?v=V5Wp1qSfziY&feature=youtu.be>

Activity: Presentation Practice

Ask students to practice their presentation at home with a family member or friend. Have the student collect feedback and make any needed changes. Students may submit their work using the platform of choice.

CHECK FOR UNDERSTANDING

Educator may wish to do the following to check for understanding:

In a whip-share or group share, ask students to share one word about how they are feeling about the invention competition. (It is important that students try to use only one word to reflect.)

TAKE HOME ASSIGNMENT

(OPTIONAL IF GIVING TAKE HOME WORK)

Continue to refine and practice the project and presentation.

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