



Science and Innovation

A Boeing/Teaching Channel Partnership

SPY GLIDERS

Teacher Handbook



TeachingChannel®

Spy Gliders

Day 10: Final Presentation

Grade Level	Middle School
Lesson Length	One 50-minute sessions



Lesson Overview

In this culminating lesson, student teams present a synopsis of the learning that has occurred throughout the module. Each presentation includes a description of the project in students' own words, an explanation of the science concepts applied, how each team improved on their design, and how the product they designed could be applied in real-life applications. The presentations should also include what students have learned about the field of engineering. The presentations involve both verbal and visual elements that are scored using a rubric.



Connecting to the Next Generation Science Standards

On Day 10, students demonstrate understanding of the performance expectations and three dimensions developed throughout the module. This lesson serves as a performance assessment in which all of the performance expectations and dimensions are addressed in the final presentation. Reference the performance expectations, disciplinary core ideas, science and engineering practices, and crosscutting concepts referenced in the front matter of this module.



Basic Teacher Preparation

During this culminating lesson, students present their findings and reflect on the **Spy Gliders** project. Review the **Presentation Rubric** in **Appendix C**.

Required Preparation	Links/Additional Information
<input type="checkbox"/> Download, print, and copy the Presentation Rubric	Refer to the Spy Gliders Teacher Handbook, Appendix C



Materials List

Item	Description/Additional Information	Quantity	Where to Locate/Buy
Presentation Rubric		1 per team	Spy Gliders Teacher Handbook, Appendix C

Day 10: Final Presentation



Introduction (5 minutes)

Tell students they present their work on Day 10. Encourage students to determine team work assignments to ensure that each presentation includes the following **Presentation Guidelines**.

Presentation Guidelines

- Description of the project in their own words
- Explanation of the science concepts applied (forces and motion)
- Description of how the team improved on their design and how the product they designed could be applied in real-life applications
- Summary of what students have learned about the field of engineering
- Final model of their design with descriptions of forces and motion

Review the **Presentation Rubric (Appendix C)** with students before they begin their work.



Design Work: Presentation Planning (20 minutes)

Allow student teams to prepare their presentations. Depending on time constraints, students can either give their presentations to other engineering teams or to the whole class. Score presentations using the provided **Presentation Rubric (Appendix C)**.



Helpful Tip

If needed, consider adding an additional day for students to prepare and give their presentations.



Whole Group Discussion: Final Presentations (20 minutes)

Have student teams present their findings.



Helpful Tip

Consider creating a simplified Presentation Rubric for student teams to score other teams as they present.



Lesson Close (5 minutes)

Have students record their thoughts on the following prompts in an exit ticket or class science journal:

- *Did you enjoy this module? Why or why not?*
- *What did you learn from it?*
- *What surprised you about the engineering design process?*
- *After this, what would you like to learn/study next?*



Assessment

The final presentation can be used as a summative assessment for the module. Consider using the [Presentation Rubric](#) in [Appendix C](#) to assess the final presentations.



Community Connections

Consider having students present and defend their designs as part of a “high stakes” showcase engineering design presentation to invited engineers, designers, and entrepreneurs.



Suggested Teacher Resources

Presentation Rubric	Spy Gliders Teacher Handbook, Appendix C
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