

LESSON SEQUENCING



LESSON SEQUENCING

Achieve Lessons have been organized to provide one-year of extension lesson plans (September through mid April) taught three to four days a week. Class sessions are anticipated as 30 - 45 minutes in length.

Following the provided sequence is encouraged. Most lessons can be rearranged as needed. However, the first two lessons (Introduction Lesson, and Research 101) are strongly recommended to be done initially and will be foundational for future lessons.

Shorter lessons (Brain Game 1, Brain Game 2, SODIS & Thatcher Effect) are best to accommodate for substitute teachers.



LESSON SEQUENCING

1
Year One

Lesson	Synopsis	Duration	Materials	Timing
Introduction	Students interact in ice breaker games and problem solving.	1 - 2 sessions	Worksheets	Sept.
Research 101	Students learn the value of research and multiple methods to conduct research. This is a fundamental lesson that will be used in future lessons.	6 - 8 sessions	Computer, library books, and worksheets	Sept.
Brain Game 1	Using trial and error, students try to beat their own best results in a game of strategy.	1 class session	Worksheet, and smarties or small candies	Sept.
De-Extinction	Students learn about how scientists are using de-extinction and will come up with their own plan to de-extinct or de-endanger an animal.	4 - 8 sessions	Computer and worksheets	Sept. - Oct.
Choose Your Own Adventure	Engineering and mapping a choose your own adventure story is surprisingly very similar. Students will engineer their own story map, to write and illustrate a complex book.	7 - 10 sessions	Computer, worksheets and blank hardcover book	Oct. - Nov.
Elections	Students will learn about local and national elections and consider how and why they might change the system.	1 - 2 sessions	Worksheets	Nov.
Thatcher Effect	Optical illusions teach us how amazing our eyes and brain work together. Students will be amazed by the thatcher effect and make their own.	1 - 3 sessions	Computer, worksheet, scissors, glue stick and markers	Nov.
Brain Game 2	Students will learn about activities that stimulate both sides of their brain to help improve their thinking.	1 - 2 sessions	Worksheet	Nov.
Currency & Counterfeiting	Learn how money is made and the extensive measures that are taken to protect the U. S. currency from being imitated. Students will create their own safety features and design their own paper currency.	6 - 8 sessions	Computer, worksheet, linen paper	Dec.
National Parks Road Trip	Students will learn about the U.S. Interstate system. In this multi-step project, they will also research about a national park, plan a road trip and estimate costs. Finally, students will design a postcard and address it to their family.	10 - 14 sessions	Computer, library, worksheet, blank postcard	Jan. - Feb.
SODIS	Solar disinfection for drinking water (SODIS) is used in third world countries. Students will learn about this process and design a water treatment facility.	3 - 5 sessions	Computer and worksheet	Feb.
Glowing Flowers	This lesson integrates science, engineering, and critical thinking for students to explore genetic modifications, plant adaptations, and create their own innovations.	6 - 9 sessions	Computer and worksheet	Feb. - Mar.
Mouse Trap Cars	Kinetic energy, potential energy and friction all join together in building a car to race only using the spring from a mouse trap.	10 - 14 sessions	Computer, worksheet, and car materials	Mar - April

Copyright & Agreement of Use

All materials provided in this book are protected under U.S. Copyright Law.

Unauthorized reproduction, distribution, or sharing of these materials in any form is strictly prohibited. This includes, but is not limited to:

- Copying or distributing materials via email, cloud storage services (e.g., Google Drive, Dropbox), or file-sharing platforms.
- Uploading content to internal or external websites, including educational platforms and social media networks.
- Recording live sessions or lectures and sharing them without explicit permission.
- Creating derivative works or adaptations based on the original content without authorization.
- Using copyrighted images, text, or other materials in presentations, assignments, or online postings without proper licensing.

Engaging in any of these activities may constitute copyright infringement and can lead to serious legal consequences, including civil penalties as well as potential criminal charges. Respect for intellectual property rights is essential to uphold academic integrity and comply with federal law.

