

| Readorium Alignment to FOSS Kit-Levers and Pulleys | | |
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| Readorium Books By Standard | Magazine Articles (A) and Science Alive Videos (V) By Standard | Teacher Resource Center Classroom Strategy Lessons (CL) with Articles (A) by Standard |
| <p>NGSS: ETS1.A Engineering Design: Defining and Delimiting and Engineering Problem: Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how each one meets the specified criteria for success or how well each takes the constraints into account. (3-5-ETS1-1) (secondary to 4-PS3-4)</p> | | |
| <ul style="list-style-type: none"> • Computer Revolution • Deep Space • Earth's Systems • Exploring the Ocean's Depths • Improving Lives with Assistive Technology • Living in Space • Making Movie Magic • Olympic Champs: It's Not Just Luck – It's Physics! • On the Move with Transportation Technology • Powering Our Lives with Energy • Technology Changes Medicine | <ul style="list-style-type: none"> • The Science of Jelly Beans(A) • Amazing Teen Scientist (A) • The Science of Movie Stunts (A) • Cool Beams! (A) • Robotic Arms (V) • The SpelBots (V) | <ul style="list-style-type: none"> • Word Learning (CL-1, A-1 Introduction to Archeology) • Word Learning (CL-1, A-2 How Archeologists Work) • Word Learning (CL-1, A-3 The Archeology Lab) |
| <p>NGSS: 5-ETS1.B. Engineering Design: Developing Possible Solutions: Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. (3-5-ETS1-2)</p> <p>At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and shared ideas can lead to improved designs. (3-5-ETS1-2)</p> <p>Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved. (3-5-ETS1-3)</p> | | |
| <ul style="list-style-type: none"> • Improving Lives with Assistive Technology • Living in Space • Olympic Champs: It's Not Just Luck – It's Physics! • On the Move with Transportation Technology • Powering Our Lives with Energy • Science - What's it All About? • Solving Crime with Forensics • Technology Changes Medicine | <ul style="list-style-type: none"> • Amazing Teen Scientist (A) • A Computer's Best Friend (A) • Why Are Some Hands More "Handy" Than Others? (A) • Mysteries of the Common Cold (A) • Breathe Easier - Understanding Asthma (A) • All About Recycling(A) • Shrimp Farming: A Shocking Environment (A) | <ul style="list-style-type: none"> • Graphic Features (CL-2, A-1 War Machines-Siege Engines) |

NGSS: 5-ETS1.C. Engineering Design: Optimizing the Design Solution: Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (3-5-ETS1-3) (secondary to 4-PS4-3)

• Science - What's It All About?

- Biotechnology (A)
- Virtual Reality Scientists (V)
- Cancer: Cells Out of Control
- RoboBees (V)
- Twin Fascination(A)
- Robotic Arms (V)
- The SpelBots (V)