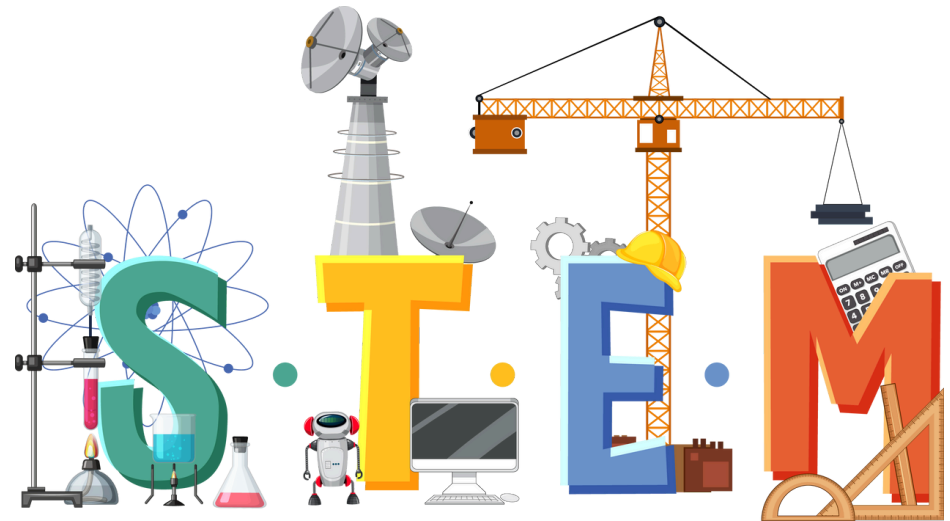
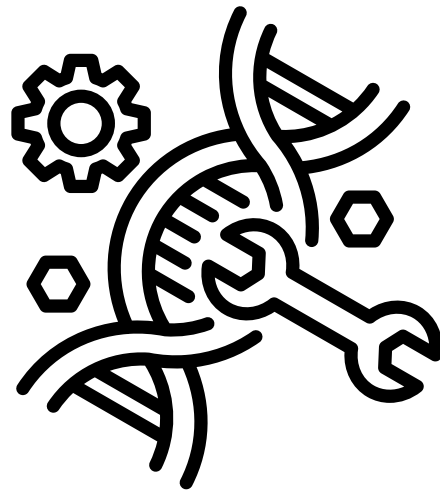


NGSS MS-ETS1

Curriculum Bundle

Engineering Design

- ✓ 1 Lesson, 12 Engineering Challenges + Journal
- ✓ 2 Activities, 2 Projects, 4 Video Worksheets
- ✓ Everything You Need to Teach NGSS MS-ETS1



Resources Included

- ✓ **1 Lesson, 12 Engineering Challenges + Journal**
- ✓ **2 Activities, 2 Projects, and 4 Video Worksheets**

- The Scientific Method – Lesson
- STEM Challenge Journal
- Pasta Bridge STEM Engineering Challenge
- Straw Tower STEM Engineering Challenge
- Balloon-Powered Rocket STEM Engineering Challenge
- Marshmallow Catapult STEM Engineering Challenge
- Scientific Method MandM Activity
- Paper Bridge STEM Engineering Challenge
- Egg Drop STEM Engineering Challenge
- Paddle Boat STEM Engineering Challenge
- Simple Telescope STEM Engineering Challenge
- The Electric Home - Electricity PBL Project
- Paper Towel Absorbency Test
- Paper Ball Run STEM Engineering Challenge
- Wind-Powered Car STEM Engineering Challenge
- Pasta Tower STEM Engineering Challenge
- Portable Water Purification STEM Engineering Challenge
- Portable Water Purification – Reading The Scientific Method PBL
- Crash Course KIDS Video Worksheet – ENGINEERING



**PASTA BRIDGE
ENGINEERING CHALLENGE**
MIDDLE SCHOOL



**SIMPLE TELESCOPE
ENGINEERING CHALLENGE**
MIDDLE SCHOOL



The Standard is Explained and the Resources it Incorporates are Outlined

MS ETS1 Engineering Design

MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

MS-ETS1-4. Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

Resources:

- The Scientific Method – Lesson
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The Scientific Method Lesson

✓ **Comprehensive Overview** – The lesson includes a step-by-step through the entire scientific process
✓ **Student-Friendly Format** – Clear step-by-step instruction and real-life examples.



PASTA BRIDGE ENGINEERING CHALLENGE

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The Electric Home

A Problem-Based Learning Project



Who is this Bundle for?

- **Teachers who teach middle school science and use the NGSS**
- **Teachers who want multiple resources at their fingertips including lessons and a variety of activities, in order to meet the standard**
- **Teachers who don't have time to develop their own resources or organize what to teach and when**