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# *Essential Question:*

*What is technology and how do I see engineering that uses technology in my community?*

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# *Lesson 2 Engineering in My Community Overview*

## *1. Class Basics*

*Notebook*

*Line of Learning*

*Standards*



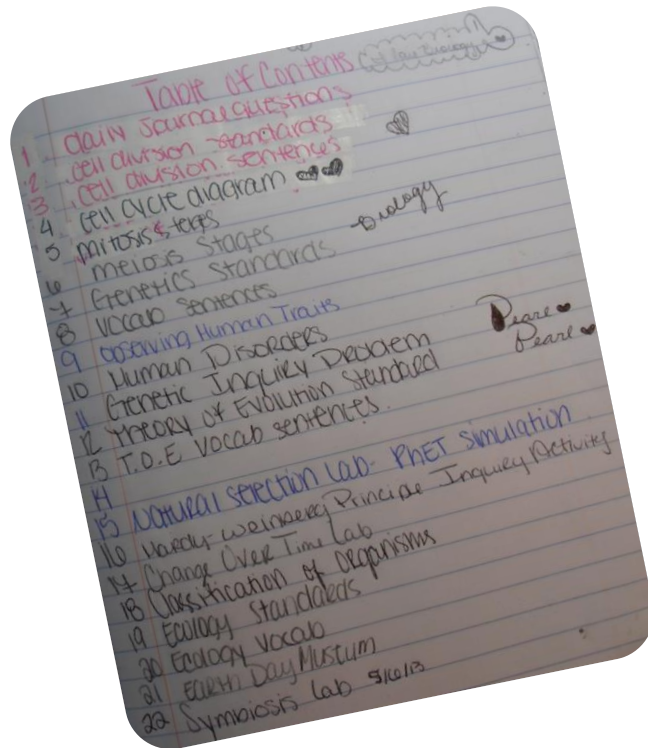
## *2. Video: What is Engineering*

## *3. Brainstorming Engineering Examples in the community*

## *4. Reflection*

# Prepare your notebook

- *Table of contents*

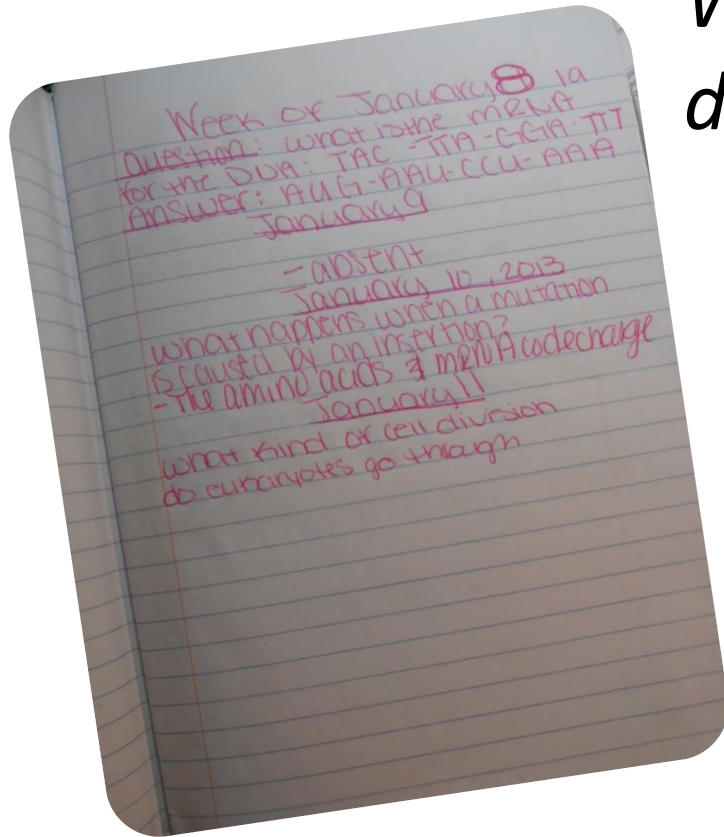


# Line of Learning

## Lesson 2 Question:

*What is technology and how do engineers help produce it?*

*Date*



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## Standards:

NGSS HS. Engineering Design HS-ETS 1-3  
ELA/Literacy – RST.11-12.7 RST.11-12.9

# *Standards Statement*

*Students will be exploring engineering in their community and how it makes their lives better. They will be able to synthesize information from different sources to be able to develop a coherent understanding of the connection between engineering and technology.*

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# *What is Technology do you see?*

## ***Discussion:***

- Is technology only electronics why or why not?
- Can you give an example of something that is technology but not electronic?
- Share out an example of electronic technology and one example of technology that is not electronic.
- Is there a difference between technology and engineering?



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# What is “Appropriate Technology”



## Components of Appropriate Technology:

- ✓ Owned by the people
- ✓ Understood by the people
- ✓ Fixed by the people
- ✓ Ultimately creates jobs in the community so that people are economically independent.

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*Click on the picture to launch the youtube video*



# *What is not “Appropriate Technology” in your community?*

**Example:** For students who live in the desert or warm climates, a snow mobile would not be appropriate unless they use the technology in another way.

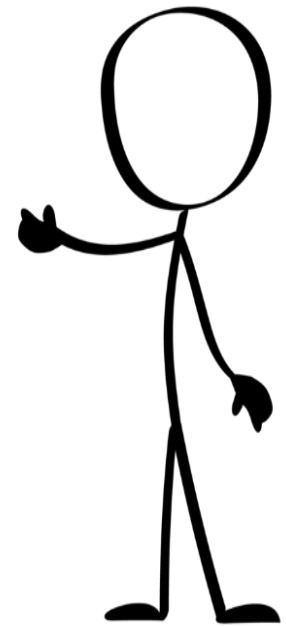


## *Discussion:*

# How does engineering fit with the technology?

- ✓ *Give examples of technology and how it would be designed. Is this engineering?*
- ✓ *Write the steps that would have to happen for that type of technology to be created.*

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# Examples of Engineering in your Community

- ✓ Find an example of technology that involves engineering that is in your community that makes life easier.
- ✓ Use your student sheet to record your findings

Discuss this example:



Examples of engineering design in the community.

Picture of the Item or actual item.

Inventor (if known) \_\_\_\_\_

What need did he/she see? \_\_\_\_\_

Description of the item. \_\_\_\_\_

How does this item serve the community? \_\_\_\_\_

What profession created this item? Give reasoning. \_\_\_\_\_

Is this technology essential for quality of life? \_\_\_\_\_

What are the steps that might be taken to create this item? \_\_\_\_\_

2


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# Engineering in your Community Research

- ✓ Research an engineering design that you have found in your community.
- ✓ Use your student sheet to record your information, using additional pages in your notebooks as necessary.

Examples of engineering design in the community.

Picture of the Item or actual item.



Inventor (if known) \_\_\_\_\_

What need did he/she see? \_\_\_\_\_

\_\_\_\_\_

Description of the item. \_\_\_\_\_

How does this item serve the community? \_\_\_\_\_

\_\_\_\_\_

What profession created this item? Give reasoning. \_\_\_\_\_

\_\_\_\_\_

Is this technology essential for quality of life? \_\_\_\_\_

\_\_\_\_\_

What are the steps that might be taken to create this item? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2

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# Questions??



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# Reflection

*Have you?*

- ✓ Examine appropriate technology related to engineering design?
- ✓ Integrate and evaluate multiple sources of information?
- ✓ Create a statement about your personal reflections on a type of technology and the engineering that went into its design?




# Lesson Artifacts

Student sheet Lesson 2  
Entry in notebook



- Notebook Check



<p><b>2 Engineering in my Community</b></p>	<p>Name _____ Date _____ Period _____</p>
<p>Essential Question: What is technology and how do I see engineering that uses technology in my community? Unpacking the Standards:</p>	<p>Examples of engineering design in the community.</p>
<div style="border: 2px solid green; border-radius: 15px; height: 150px; width: 100%;"></div>	<div style="border: 2px solid green; border-radius: 15px; width: 100%; height: 80px; display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 10px;"> <p>Here is a picture of the Item or actual item.</p> </div> </div>
<p>What is Technology? _____ _____</p>	<p>Inventor (if known) _____</p>
<p>Review: What is Appropriate Technology? _____ _____</p>	<p>What need did he/she see? _____ _____</p>
<p>What is an example of appropriate technology in your community and why? _____ _____</p>	<p>Description of the item. _____</p>
<p>How is appropriate technology applied to you? _____ _____</p>	<p>How does this item serve the community? _____ _____</p>
<p>Example of technology _____ What are the steps to get that technology in your hands? _____ _____</p>	<p>What profession created this item? Give your reasoning. _____ _____</p>
<p>_____</p>	<p>Is this technology essential for quality of life? _____ _____</p>
<p>1</p>	<p>What are the steps that might be taken to create this item? _____ _____ _____</p>
<p>EPICS/HIGH</p>	<p>2</p>
	<p>EPICS/HIGH</p>



# Exit Slip



Name \_\_\_\_\_ EPICS<sup>®</sup>/HIGH  
Three examples I have seen of Engineering in the community.

3 ★  
★  
★

Two ways it serves the community:

2 ★  
★

One question I still have is:

1 ★

My efforts in class were:

Fabulous 😊

OK

Could Be Better ☹️

- *Answer the Questions on the sheet*
- *If you have further questions write them on the back*

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*Lesson 2 Engineering in the Community*

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