

Name: \_\_\_\_\_  
My partner is : \_\_\_\_\_

## HOW IT WORKS... PROJECT

### **For this project you will need to:**

1. analyse how the properties of fluids are used in various technologies, and assess the impact of these technologies on society and the environment
2. investigate the properties of fluids.
3. demonstrate an understanding of the properties and uses of fluids.

With a partner, you will be asked to research one fluid that humans use in a specific context and background information on that fluid as part of a system. Think of the TV show *How it's Made* where they explain a particular object or system with a great amount of depth and detail.

### **Topics:**

You will choose one of the following:

1. assess the social, economic, and environmental impacts of selected technologies that are based on the properties of fluids (**hydroelectricity, dialysis in medicine, energy production etc.**)
2. assess the impact of fluid spills on society and the environment, including the cost of the cleanup and the effort involved (**oil spills, pollution of rivers with factory wastes etc.**)

### **The final product:**

**Oral Component:** You will present your work to the class in an informative manner (e.g., Google Slides).

**Written Component:** Your slideshow will be marked based on the criteria on the next page.

Due Date: \_\_\_\_\_

## Rubric

Names: \_\_\_\_\_

Subject: \_\_\_\_\_

Criteria /Level	1	2	3	4
<b>Knowledge and Understanding:</b> Use appropriate science and technology vocabulary in oral and written communication	-Terms are unclear -Terminology is used scarcely or is sometimes used incorrectly	-Terms are sometimes unclear - Terminology is used scarcely	-Terms are clear and used appropriately -Terminology is precise	-Terms are used appropriately and explained in details -Terminology is precise and used eloquently
<b>Thinking and Investigation:</b>  Analyse how the properties of fluids are used in various technologies, and assess the impact of these technologies on society and the environment	-Simple analysis that lack details or clarity -Explanations are vague	-Simple analysis but supported with some details and explanations	-Somewhat complex analysis supported with details and explanations	Complex analysis supported by relevant, detailed and accurate information -Demonstration of deep reflection
<b>Application:</b> Making connections between science, technology, society and the environment (STSE)	-Makes connections between STSE with limited effectiveness	-Makes connections between STSE with some effectiveness	-Makes connections between STSE through a complete and detailed project	-Thorough understanding of connections between STSE
<b>Communication:</b> Expresses ideas in an organized form with proper references	Expresses ideas and information with limited effectiveness	Expresses ideas and information with some effectiveness	Expresses ideas and information with considerable effectiveness	Expresses ideas and information with high degree of effectiveness

