







# Quest for Discovery Series





### Flint Regional Science & Engineering Fair Inspiration, Invention, Innovation



## Topic 1: What is Invention and Innovation?



### What is an Inspiration?

**Inspire:** 

**Inspiration:** 



### What is an Inspiration?

#### **Inspire:**

• To fill (someone) with the urge or ability to do (or feel) something, especially to do something creative.

**Inspiration:** 



### What is an Inspiration?

#### **Inspire:**

• To fill (someone) with the urge or ability to do (or feel) something, especially to do something creative.

#### **Inspiration:**

 The process of being mentally stimulated to do (or feel) something, especially to do something creative.



### What is an Invention?

**Invent:** 

**Invention:** 



### What is an Invention?

#### **Invent:**

• Create or design something that has not existed before.

#### **Invention:**



### What is an Invention?

#### **Invent:**

• Create or design something that has not existed before.

#### **Invention:**

• The action of inventing something, typically a process or device.



### What is an Innovation?

#### **Innovate:**

#### **Innovation:**



### What is an Innovation?

#### **Innovate:**

• To make changes in something established, especially by introducing new methods, ideas, or products.

#### **Innovation:**



### What is an Innovation?

#### **Innovate:**

• To make changes in something established, especially by introducing new methods, ideas, or products.

#### **Innovation:**

• The action or process of innovating.



**NOTE:** Innovation usually has a business focus – innovating new products or processes to increase profitability.

### Invention and Innovation

Similarities

Differences

### Invention and Innovation

#### Similarities

- Both required an inspiration
- Both create something new

#### Differences

- Invention tends to mean creating something that has never existed before.
- Innovation tends to mean to improve upon something that already exists..
- Innovation usually has a business aspect to it – making something new with the intent to sell it.

### INVENTION NATION VIDEO Inflatable Solar Lantern for Disaster Relief



### Innovation Nation Video - Discussion

#### Inflatable Solar Lantern for Disaster Relief

- What need did it solve?
- What inspired the invention?
- How was (can) life be changed by it?
- Using this as the inspiration, what other uses could it have?
- What changes could be made to make it useful in other situations?

### INVENTION NATION VIDEO

#### **Earbuds that Enhance Speech in Loud Environments**



### Innovation Nation Video - Discussion

#### **Earbuds that Enhance Speech in Loud Environments:**

- What need did it solve?
- What inspired the invention?
- How was (can) life changed by it?
- Using this as the inspiration, what other uses could it have?
- What changes could be made to make it useful in other situations?

# Inventions and Innovations Around You – Class Discussion

- State ONE invention or innovation that is near you.
- What need did it solve?
- How is your life affected by it?
- What solutions came before it?

### To Do:

• View at least 4 *The Henry Ford's Invention Nation* – videos and completing the Inventions & Innovations Assignment worksheet.