# Hunger Games Lesson #2

# Objective

Students will understand how the formal study of science is important to the health, safety, and advancement of people, society, and the world. They will demonstrate this through discussion in Socratic seminars and written reflection in lab notebooks.

### **Materials and Technology**

- Case-Study #1 packets, one per lab station (Actually Case Study #2 (Science) from unit planrearranged to this position for better flow)
- Interactive Science Notebooks (students)
- Copies of read aloud text

# Lab/Investigation Procedures

- I. Students move to lab stations.
- 2. Students self select reading from packet at station and read for 5 minutes
- 3. Students summarize article in 1 minute with 1 sentence or bulleted points of main ideas
- 4. Students have 6 minutes to share with their group the main points of their article, they have at least one minute to talk each and ask questions of each other.
- 5. Students rotate and repeat procedure at each station.

#### **Safety Procedures**

- I. Arrange room for efficient and effective traffic flow.
- 2. Remove any hazardous materials from lab benches that could distract/ harm students.
- **3.** Have band aides in case of paper-cuts.

#### Adaptations and Modifications

Depending on demographics of students these activities can be modified to be individual or of varying group sizes.

Reading packets are modified for different reading levels by varying in amount and complexity of text.

If working with students who need more reading support, provide a signal method during readaloud activity for when students need clarification on a point or word.

## 5-E Cycle Agenda

Prior to this class students will have read up to chapter 3 of Hunger Games

#### I. Engage (Framing the lesson and the read aloud text)

- Warm up activity: For Every Action, There is an Equal and Opposite Reaction
  - Students enter the classroom and are asked to collect their science notebook and take a seat.
  - Discussion question written on board: What is a muttation? What are examples of muttations that Katniss gives us in <u>The Hunger Games?</u>
    - Students post answers using sticky notes on the board.
    - Teacher dialogs with students about answers
- Think/Pair/Share on...
  - If you could create a muttation, what would you create?
  - How would your muttation be used?
  - How could your muttation be used against you?

One minute Think, One minute per person Share (continuous talking)

#### 2. Explore (This time we are exploring together through a read aloud)

- Preface the text with: While you think about you muttation and all of it's amazing attributes, I would like you to also think about how it is possible to create your muttation. Scientists can create crosses in organisms using methods like genetic engineering. Who has heard of genetic engineering? Sometimes, we hear it regarding science fiction stories, but today I am going to share with you actual cases of genetic engineering used to bring about changes in organisms.
- Read aloud Nat Geo article, using slides by powerpoint to show pictures of the animals mentioned.

http://phenomena.nationalgeographic.com/2013/09/25/genetically-engineering-the-wild/

#### 3. Explain

- Mini Lecture on medical advances and genetics to frame expansion activity.
- Students take interactive notes during this time in their notebooks.
- Teacher explains to students lab/investigation procedures and evaluation methods. This will help to inform the students for how they are to be assessed for this lesson.

#### 4. Expand (Investigation Activity)

• Students are invited to go to their lab stations (groups preassigned)

- Students find case study packets containing articles about different science advances. Articles vary in length and complexity and explain the good and evil of science advances. Each lab station has a different topic including: medicine, genetics, or war time advances.
- Students asked to select an article from their packet to read. Students spend 5 minutes reading their article, 1 minute writing a sentence summary of the article in their lab notebooks, and 6 minutes sharing/summarizing their article with their station partners (1 minute each continuous talking). Students rotate to next station after time is finished.

#### 5. Evaluate

• "Fishbowl style" Socratic Seminar

Student will sit for 7 minute (per lab group) in the discussion setting in the middle of the class. They will be posed with a debatable question relating to the station the group collectively finds most interesting. Their discussion will be evaluated for how well the group brings in evidence from the readings and prior knowledge to support their claims.

When students finish with seminar they are asked to write a 1/2 page reflection in their notebook answering the debated question from the discussion.

Assessment

#### Formative

Throughout the lesson, as students participate in the think/pair/share and the observation/inference activity, teacher takes notes on conversation clarifying miss-conceptions and confusion.

During the seminar, the teacher evaluates students ability to use evidence to support their claims using rubric.

#### **Extensions**

Next lesson would move to Case Study 2: Early 1800's Industrial Revolution America.