**MS Big Questions - Lesson #2**

**Unit Name**: Big Questions - Middle School - Exploring This Year’s Topic

**Topic**: Classification and Different Points of View - Day 2 (5 day unit)

Resolved: Humans are fundamentally different from other animals.

**Essential Questions**:

1. Question 1 - Why do views change over time and how do these changes affect society?
2. Question 2 - How do purpose and audience shape the content in a persuasive text?
3. Question 3 - How does research enhance the ability to persuade?

**Objectives**:

1. Objective 1 - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
2. Objective 2 - Follow rules for collegial discussions, set specific goals and deadlines, and define individual role as needed.
3. Objective 3 - Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.

4. Objective 4 - Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.

**Instructional Materials Needed**:

 1. Group work folders from Day 1

 2. Box of miscellaneous items - teacher collected or brought in by students - one box for each table (20 different items suggested - examples: rubber band, paper clip, pack of gum, feather, piece of candy, leaf, etc. = a combination of organic and inorganic items)

 3. Set of small notecards (3x5 or 4x6) for each table with a paper clip or rubber band to keep the cards together

**References** *(if applicable)*:

 1. See bibliography at end of Topic Overview

 2. Link provided to multiple other sources

**Overview of Lesson** *(general outline of what will be covered)*:

One of the considerations in approaching this motion is to learn the distinction between differences in KIND and in DEGREE. In this lesson, students will experience a bit of the challenge of categorizing different items/objects as scientists do. Aristotle was one of the first to attempt a system of classification, essentially categorizing living things as either animals or plants, then adding subcategories. As the Topic Analysis indicates, that system existed for centuries before it was replaced with the current classification system (three domains and six kingdoms). After playing a game of classification (like Animal, Vegetable, or Mineral), and/or categorizing objects by common traits students should see some of the practical challenges that exist in distinguishing between items and how important point of view is when classifying.

**Detailed Step-by-Step Lesson** *(be sure to include time allocation information)*:

1. 5-10 minutes - In large group, teacher asks students to reflect on where they finished yesterday (Essential Question #1). If desired, students can play Animal, Vegetable, or Mineral in large group setting. (This is a variation of 20 Questions - a common game.)

2. 5 minutes - Students return to the same small groups and are given their group folders. Different roles are chosen or/assigned from Lesson #1.

3. 5-10 minutes - Teacher asks students about how scientific classification began, referring to the article if necessary and/or their experiences in science classes. Then teacher asks for someone to make the distinction between KIND and DEGREE.

4. Teacher gives each group a box of 20 small items (shoeboxes work well). It is important that the items are diverse.

5. 10-15 minutes - Using the small notecards to write the categories and then record the items placed in the categories. Groups start categorizing the items in different ways: in five groups, four groups, etc., as long as student interest is maintained. Each item has to be placed in a category each time and consensus needs to be reached as decisions are made. For example, one group might decide that “things made of metal” is a category. They would write that category on the notecard and then, once ALL items are placed in categories, record each item that was placed in that category. No recording should begin until every item is placed. Then a new round begins. Students should physically move the objects around each time.

6. As they are working, students should discuss if their items vary in KIND or in DEGREE.

7. 5 minutes - Students record their different categories and items on their notecards, using new notecards for each round of sorting.

8. 5-10 minutes - Students return items to their boxes and each group shares at least two categories they used to classify their items.

9. Students place their notecards in their folders and teacher collects boxes and folders.

10. 10 minutes - Teacher asks students for reflections on some of the challenges faced. Was it easier when there were more categories or fewer categories? Why? What impact does the selection of categories have on item placement? Was it possible for an item to ever be in more than one category at the same time?

**Informal Assessment Strategies**:

1. Teacher monitoring of group work to see if students are on task and fulfilling roles.

2. Collection of folders and review of notecards.

**Formal Assessment Strategies**:

1. Group folders and evaluations will be used at end of unit for formal assessment.

**Reflection/Review for Future**:

1. Teacher reviews folders for completion and determines if existing groups need any help with assigning roles or any redirection before Lesson #3.