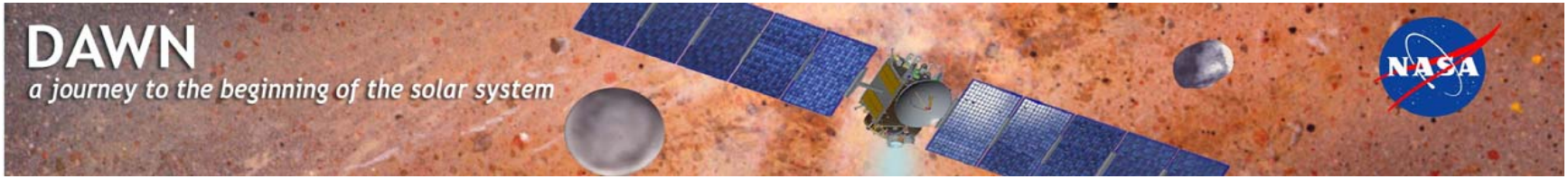

Career Connections

Comparison Matrix

STUDENT HANDOUT – Scientists and Engineers: Perceptions vs. Reality

Directions: In column #1 of the comparison matrix[1] below, jot down notes for characteristics of scientists and engineers based on your own preconceptions. Then, respond to the first set of reflection questions on page 2. After you've had a chance to learn more about some of the scientists and engineers working with NASA's Dawn mission, return to this matrix to complete columns #2 and #3. In the final column, note any similarities and differences between your preconceptions and what you've learned through this activity. Then, respond to the second set of reflection questions on page 2.

Characteristics	**Items to be compared**			
	#1 – Preconceptions of Scientists and/or Engineers	**#2 – After Reviewing the *Occupational Outlook Handbook***	**#3 – Dawn Mission Scientist or Engineer**	
Appearance				**Similarities** **Differences**
Actions				**Similarities** **Differences**
Interests				**Similarities** **Differences**
Other *(Add a characteristic of your choice)*				**Similarities** **Differences**

[1] Marzano, R., Pickering, D., & Pollock, J. (2001). *Classroom Instruction that Works: Research-based strategies for increasing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Reflection Questions

Examine Your Preconceptions

1. What are some of your preconceptions of scientists and engineers? That is, what are some of the opinions you may have formed about scientists or engineers?

2. What might these opinions be based on?

3. Which preformed ideas may be correct?

4. Which are incorrect or misconceptions?

Scientists and Engineers in Reality

5. Now that you've learned more about some of the Dawn mission scientists and engineers, what information fits with your preconceptions?

6. What information differed from your preconceptions?

7. What have you learned about careers in science and engineering as a result of this activity?