Systems Evolution

Unit Question: How are systems integrated into our world?

This task will allow students to explore how systems have changed over time as a result of societies wants and needs and the advance of technology.

**Part I: Choose a system that has undergone significant changes throughout time.**

1. Create a visual timeline showing the major changes that have occurred for the system over time (group).
2. Explain the reasons for each of these changes and the impact that these changes have had on society.
3. Include a bibliography.
4. You will be presenting your ideas to the class.

**Part II: Consider the systems presented to you, and decide which system has the most significant impact on society.**

1. How would you determine whether something has had a significant impact? What criteria would you use?
2. Write a written analysis that uses the criteria determined in #1 to describe which of the systems presented has had the most significant impact on society (individual).

Due Dates:

Visual Timeline (part I) is due on Wednesday, February 15, 2012

Written analysis (part II) is due on Friday, February 24, 2012.

Criterion A: One World

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| Achievement Level | Descriptor |
| 0 | You do not reach a standard described by any of the descriptors given below. |
| 1-2 | You **state** how a physical system has evolved over time. |
| 3-4 | You **state** how a physical system has evolved over time.  You **state** the implications and significance to society of the use and application of a physical system with **two** of the following factors: moral, ethical, social, economic, political, cultural and environmental. |
| 5-6 | You **describe** how science is applied and how it may be used to address a specific problem or issue in a local or global context.  You **give examples and describe** the implications and significance to society of the use and application of a physical system with **at least two** of the following factors: moral, ethical, social, economic, political, cultural and environmental. |

Criterion B: Communication in Science

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| Achievement Level | Descriptor |
| 0 | You do not reach a standard described by any of the descriptors given below. |
| 1-2 | You use a **limited range** of scientific language **correctly**.  You orally communicate scientific information with **limited effectiveness**.  You communicate written scientific information with **limited effectiveness**.  When appropriate to the task, you **make little attempt** to document sources of information. |
| 3-4 | You use **some** scientific language correctly.  You orally communicate scientific information with **some effectiveness**.  You communicate written scientific information with **some effectiveness**.  You **partially document** sources of information. |
| 5-6 | You use **sufficient** scientific language correctly.  You orally communicate scientific information **effectively**.  You communicate written scientific information **effectively**.  You **fully document** sources of information. |