**Unit: Aerosols and Climate Change** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Task: Patterns Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Data obtained by satellites over time can help scientists build computerized models to help them identify trends and patterns in the shifts of aerosol emissions. It can also help identify visually through the representation of data on global maps what geographic areas are generating aerosols and what global communities are being affected by aerosol particles.

To gain a more informed understanding about what the data is showing us at a global scale please read the section *Patterns* in the NASA article provided below.

**NASA Article: Aerosols: Tiny Particles, Big Impact** – Section: Patterns

Link: <http://earthobservatory.nasa.gov/Features/Aerosols/>

Click on the section titled *Patterns* on the right hand side.

Guiding Questions:

1. Which type of aerosols are more prevalent over the globes oceans? Which are over land?

2. According to the data map and article which global geographic areas contain more anthropogenic aerosols?

3. In the U.S. which geographical areas produce the most aerosols? What causes it?

4. In what part of the world are aerosols more abundant? What are the causes?

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5. What does the data show us about changes in the overall pattern of aerosol emissions?