



Name: _____ Date: _____ Class: _____

Title: Clouds & Earth's Climate - Dr. Patrick Taylor video - Questions
Student Sheet

1. How much has Earth's mean surface temperature warmed over the last 130 years?

2. How does the CERES (Clouds and the Earth's Radiant Energy System) project produce global climate data records of Earth's energy budget and clouds?

3. Why is Earth's energy budget important for climate?

4. If less sunlight is absorbed than infrared energy is emitted to space, what will the effect be on Earth's temperature?

5. If more sunlight is absorbed than infrared energy is emitted to space, what will the effect be on Earth's temperature?

6. According to the CERES data, which regions lose the **most** energy to space?

7. Where is the **least** infrared energy lost to space?

8. According to the CERES data, which areas have the **least** reflected sunlight?

9. Where are the areas with the **most** reflected sunlight?

10. What are two possible effects that clouds have on the energy budget?

11. Why does NASA study clouds and their role in Earth's energy budget?
