

Name: _____ Date: _____ Class: ____

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

- 1. Check with your instructor on how to submit your answers.
- 2. How much has Earth's mean surface temperature warmed over the last 130 years?
- 3. 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?
- 4. Why is Earth's energy budget important for climate?
- 5. If less sunlight is absorbed than infrared energy is emitted to space, what will the effect be on Earth's temperature?
- 6. If more sunlight is absorbed than infrared energy is emitted to space, what will the effect be on Earth's temperature?
- 7. According to the CERES data, which regions lose the most energy to space?
- 8. Where is the least infrared energy lost to space?
- 9. According to the CERES data, which areas have the least reflected sunlight?
- 10. Where are the areas with the **most** reflected sunlight?
- 11. What are two possible effects that clouds have on the energy budget?
- 12. Why does NASA study clouds and their role in Earth's energy budget?

