Name- _____ Date- _____ Period- ____

Global Energy Budget – Student Capture Sheet

Objective: *Identify where the energy for the Earth system comes from, and where it goes on Earth*

Important vocabulary words for today are **radiation, reflection** and **absorption.** Brainstorm a list of any words or phrases you can think of related to those terms. _____

Exploring the Global Energy Budget

Big Question: How does Earth "spend" its energy allowance from the sun?

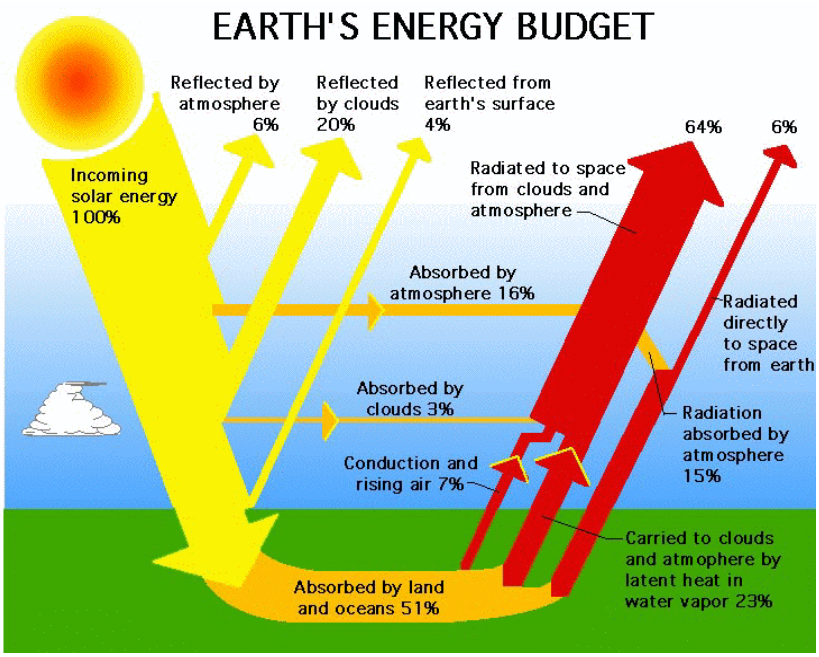
Listen to the presentations from the other expert groups and note the key information about each lab in the boxes below.

Summary of Albedo Lab:	Summary of Land vs. Water Lab:

Summary of Clouds Lab:

Energy budget - _____

Key points from the video: _____



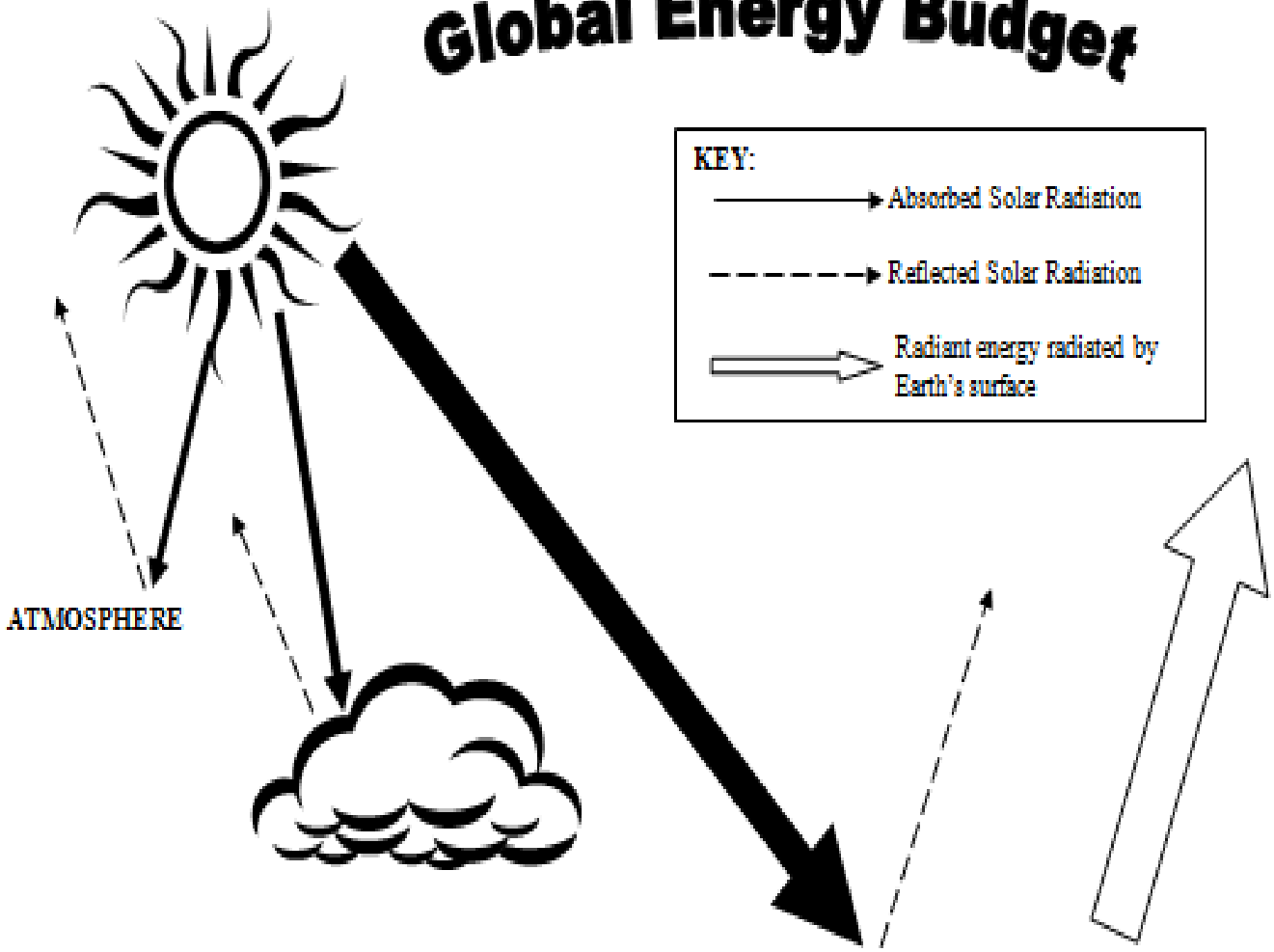
Summarizer:
Describe the Global Energy Budget and how it works. _____

What would happen if the surface of Earth changed to be more or less reflective? _____

What would happen if there were more or less clouds all the time? _____

How are the oceans and other water on Earth important to the Global Energy Budget? _____

Global Energy Budget



EARTH'S SURFACE

Directions: Label each arrow with the number that shows the approximate percentage of energy

1. 20% of sunlight is *reflected* by clouds and 3% is **absorbed**
2. 16 % is **absorbed** by gases and dust in the air and 6% is *reflected*
3. 4% is *reflected* by the surface back into the atmosphere.
4. 51% of energy is **absorbed** by land and water (Earth's surface).
5. Absorbed heat is radiated back into the atmosphere. A large percentage of that heat is latent heat in water vapor.