

Planetary Energy Balance Exploration Sheet

Answer the questions below as you read about planetary energy balances. Remember to answer in complete sentences.

1. Name the different types of radiation that make up the electromagnetic spectrum.
2. What types of radiation enter the Earth's atmosphere?
3. Describe two ways that a chair is similar to the wavelengths of electromagnetic radiation.
4. What are the dark colors of the Earth that absorb the incoming radiation?
5. What surfaces of the Earth reflect radiation?
6. Using the picture of the percentages of radiation absorbed or reflected, explain why the planet is becoming warmer.
7. The sun's energy reaches Earth in the form of _____.
8. Provide two examples of how the temperature we experience on Earth is directly related to how much sunlight is received.

9. Why is the sunlight at the Poles less intense? (Provide two reasons)

10. Why is the sunlight at the equator more intense? (Provide two reasons)

11. What is an equinox?

12. What causes the seasons? Explain.