

1. What is a simple definition of the Albedo Effect?

Reflective power

2. What is the relationship between the color of a surface and its ability to absorb solar energy?

Dark colors retain solar energy ; Light colors reflect solar energy

3. As ice melts, exposing darker surfaces of the earth, this decreases the planetary albedo, would this be a positive (amplification) or a negative (dampening) feedback ? Explain.

Negative (dampening) feedback. As our world increases average temperature and ice melts away, the planetary albedo decreases.

4. Match the correct Definitions in column A to the Terms Listed below in column B, by writing the corresponding Letter into the brackets of the First column:

Definition (Column A):

Term (Column B):

Reflective power: (C)

A Dampens effect

Absorption: (B)

B Retains energy

Positive Feedback: (D)

C Albedo

Negative Feedback: (A)

D Enhances effect

5. Why does melting sea ice not raise the level of ocean water? Why does land-based ice raise it?

Melting sea ice is already present within the body of water and already displaces water. Land-ice melts and makes its way into the ocean system adding to its existing mass.