



Science Toolkit: Grade 6 Objective 2.A.2.c

Student Handout: Science: Grade 6 Objective 2.A.2.c

Standard 2.0 Earth/Space Science

Topic A. Materials and Processes That Shape A Planet

Indicator 2. Cite evidence to demonstrate and explain that physical weathering and chemical weathering cause changes to Earth materials.

Objective c. Compare physical and chemical weathering and provide examples if changes caused in Earth materials or features by each of these processes.

Selected Response (SR) Item

Question

Use the information below to answer the following:

There are many snow-capped mountains around the world.



The elevation of this mountain is nearly 3,048 meters. The summer climate in the area is generally cool and rainy. Summer temperatures reach 21°C. During many months of the year, the day and night temperatures vary significantly. The weather changes quickly. Approximately 300 centimeters of snow usually covers the ground from November until May.

Water is easily trapped in cracks and layers of mountain rock. Alternating high and low temperatures affect the water, which freezes and thaws many times.

Which process causes changes to the rocks due to repeated freezing and thawing of trapped water?

- A. chemical weathering
- B. physical weathering
- C. wind deposition
- D. wind erosion

Correct Answer

B. physical weathering

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