

Supporting life: earth's surface and landforms



**ASSIGN
BUSTER**

The Lesson Activities will help you meet these educational goals: Science Inquiry—You will conduct online research related to a series of photographs, develop hypotheses, and communicate your findings in written form. STEM—You will analyze real-world data to gain insight into careers in Earth Science and Geology. 21st Century Skills—You will employ online tools for research and analysis, use critical thinking and problem-solving skills, communicate effectively, and assess and validate information.

Directions

Write a response for each of the following activities. When you have finished, submit your work to your teacher. Check the rubric at the end of this document to make sure your work is meeting the expected criteria.

Constructive and Destructive Processes

The earth is constantly changing. Constructive and destructive processes are at work all over the planet all the time. Sometimes these changes happen slowly over thousands of years and are barely noticed. At other times, changes are apparent immediately. The photographs below, taken at various locations, are evidence of these changes. Your task is to identify and describe the constructive and destructive processes that have occurred or are occurring in each photograph.

a. Taku Glacier, Alaska

Type your response here:

Destructive glacial erosion and ice wedging

b. Checkerboard Mesa, Zion National Park, Utah

Type your response here:

I don't see where it would be either

c. lava dome, Mount St. Helens, Washington

Type your response here:

Both because the lava builds up land but it also erodes away gravel

d. stream at the Karnala Bird Sanctuary, India

Type your response here:

Destructive because it causes stream erosion

e. Atlantic Ocean, England

Type your response here:

Destructive because it washes away rocks and minerals

f. Arches National Park, Utah

Type your response here:

I don't see where it would be either

g. Telescope Peak, Death Valley National Park, California

Type your response here:

Constructive because tectonic plates came together and moved upward

h. basaltic lava columns, Zion National Park, Utah

Type your response here:

Constructive because they were caused by cooled magma

i. Nogahabara Sand Dunes, Koyukuk National Wildlife Refuge, Alaska

Type your response here:

Constructive because sand built up to make the sand dunes

j. flooding, Iowa

Type your response here:

Destructive because it washes away soil, house foundations, also contaminates drinking water

Rubric

This rubric will be used by your teacher to grade your assignment.

Points possible: 20 maximum

Constructive and Destructives Processes

Identified the constructive process in each photograph (½ point) described or gave examples of the constructive process in each photograph (½ point)
identified the destructive process in each photograph (½ point) described or gave examples of the destructive process in each photograph (½ point)