

Earth Shapers Sort

Sort changes that build land or wear it away.

WG.6.b "describing major physical and environmental features and how geography may change over time;"

NAME _____

DATE _____

BUILDS LAND

This change adds material or creates new land. It can make land bigger, higher, or wider.

Minerals left by a hot spring form a small terrace.

WEARS LAND

This change removes material from a place. It can make land lower, smaller, or differently shaped.

A stream carries pebbles away from a canyon wall.

1 SORT

8 items

Circle BUILDS or WEARS for each item, then choose two items and explain which words show that land is built or worn away.

- | | | |
|---|---------------|--------------|
| 1. Molten rock cools and creates new ground. | BUILDS | WEARS |
| 2. Ocean waves pull pieces of rock from a cliff. | BUILDS | WEARS |
| 3. Wind blows loose dust off a dry plain. | BUILDS | WEARS |
| 4. A river drops silt at its mouth, forming a delta. | BUILDS | WEARS |
| 5. A melting glacier leaves a ridge of rocks behind. | BUILDS | WEARS |
| 6. Sand settles along a coast and forms a sandbar. | BUILDS | WEARS |
| 7. Heavy rain washes dirt down a steep slope. | BUILDS | WEARS |
| 8. A river cuts deeper into its valley over many years. | BUILDS | WEARS |

2

PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM #

HOW I KNEW

ITEM #

HOW I KNEW

3

MAKE YOUR OWN

One of each

Write one new example of a change that BUILDS land and one new example of a change that WEARS land.

BUILDS

WEARS

CHALLENGE

Describe one place where a land building change and a land wearing change could both shape the geography over time. Then apply the idea to this regional case: Plosky Tolbachik is a volcano on Russia’s Kamchatka Peninsula. Its November 2012 eruption sent lava across nearby ground; NASA observed the hot flows in December. Lava becomes solid rock as it cools. Describe the physical feature and explain whether cooled lava adds material to the surface or wears it away. Use separate paper if needed.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	Molten rock cools and creates new ground.	BUILDS	Cooled molten rock creates new land.
2	Ocean waves pull pieces of rock from a cliff.	WEARS	The waves remove rock from the cliff.
3	Wind blows loose dust off a dry plain.	WEARS	Wind removes material from the plain.
4	A river drops silt at its mouth, forming a delta.	BUILDS	The dropped silt builds a delta.
5	A melting glacier leaves a ridge of rocks behind.	BUILDS	The glacier leaves material that builds a ridge.
6	Sand settles along a coast and forms a sandbar.	BUILDS	Settling sand adds material and forms land.
7	Heavy rain washes dirt down a steep slope.	WEARS	Rain removes dirt from the slope.
8	A river cuts deeper into its valley over many years.	WEARS	The river removes material and deepens the valley.

PART 2 • PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 • MAKE YOUR OWN (SAMPLE ANSWERS)

- **BUILDS:** A landslide deposits rocks at the bottom of a mountain and builds a pile of land.
- **WEARS:** Ice scrapes rock from a hillside and wears the hillside away.

Challenge: On a volcanic island, cooled rock can build new land. Rain can wash loose material down the island's slopes and wear them away. Regional response: Plosky Tolbachik is a volcano in Kamchatka, Russia. Lava from the eruption cools into rock, adding material to the surface: this builds land rather than removing it.

Accept equivalent descriptions when students correctly identify whether material is added or removed. In Part 2, students should cite evidence from each selected item and connect it to building or wearing land. Require the regional explanation as well as the original response. Regional source: NASA Photojournal, NASA's Terra Spacecraft Captures Russian Volcano Eruption (2012).