Name & Surname: _____ Class: _____ Date: _____

Weathering and Erosion

Break it, move it, measure it!

About 30 minutes Level ★★★☆☆

Task A

/7

Read the tray test and answer with short measurements.

A 10-year-old student tests rain on soil. She fills two flat trays with the same soil. She leaves one tray **bare** and covers the other with grass. She pours the same cup of water on each and measures the soil washed away in **inches**.

a. List **TWO** things she kept the same in her test. **(2)**

b. Describe **ONE** observation that shows erosion by water. **(2)**

c. **Explain** why the grass tray lost less soil. **(3)**

(Total: 7 marks)

Key words

weathering: breaking rock apart where it is

sediment: small bits of broken rock and soil

vegetation: plants that can break and hold soil

erosion: moving broken rock and soil away

abrasion: wearing away by rubbing

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Try It Yourself

Draw and write about a weathering and erosion test.

Task B

Show your own test with labels and numbers.

Draw two hills of soil, one bare and one with plants. Show rain falling and write how far the soil moves.

Draw here

Write here

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Ask and Decide

Help others and spot facts and opinions.

Task C

/3

Help three students with clear answers.



Student A

Did the wind **move** it, or is that weathering?

How can **ice** break a hard rock?



Student B



Student C

How do plant **roots** weather rock?

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Weathering and Erosion

Task D

/5

Tick fact or opinion, then explain how you know.

Statement	Fact	Opinion
Freezing **water** can crack open rocks.		
Wind can move silt and **sand** to new places.		
It is more **fun** to watch erosion than weathering.		
Grass is the **best** plant to stop all erosion.		

How can you tell that one of them is an opinion?

.....

.....

How did I do?

Circle a face for each line.

I can tell weathering from erosion.

I can use observations to show erosion by water, wind, ice, or plants.

I can measure and compare how much soil moves.

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Answer sheet: Weathering and Erosion

Task A

a) Same amount of soil and same amount of water. (2)
b) More soil washed off the bare tray than the grass tray. (2)
c) Roots and leaves hold soil in place and slow water. (3)

Task B

Answers will vary.

Task C

1. Student A: That is erosion, because wind moved the pieces to a new place.
2. Student B: Water gets in a crack and freezes. Ice takes up more space and pushes the crack open.
3. Student C: Roots grow into cracks and push them wider until the rock splits.

Task D

1. Fact
2. Fact
3. Opinion
4. Opinion

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