Planet Earth: Topic 3 - Erosion

Practice Quiz

1. Tony found that when he poured water into a crack in a rock sample and froze it, then allowed it to thaw, the crack was actually wider. The type of weathering he investigated was classified as ...

- ○ **chemical**
- ○ **biological**
- ○ **mechanical**
- ○ **physical**

2. Landslides and rock slides can have devastating effects on the landscape. The Frank Slike is one such example. To study these, scientists are using new technology and sound waves. One of the major forces besides an earthquake responsible for these types of sudden changes is ...

- ○ **wind**
- ○ **frost**
- ○ **gravity**
- ○ **water**

3. André tested the effects of water on the natural rock samples found in his schoolyard. He tested the rock samples with pure water (pH 6.8), rain water (pH 4.5) and tap water (pH 6.7). The type of weathering he investigated was classified as ...

- ○ **chemical**
- ○ **biological**
- ○ **mechanical**

- **physical**

4. On a field trip to the foothills, the class was amazed, when their teacher pointed out a tree growing in a rock. The roots of the tree had worked their way into the cracks and split the rock in many places. The type of weathering they observed was classified as ...

- **chemical**
- **biological**
- **mechanical**
- **physical**

5. The field trip included a stop at the 'Big Rock' in Okotoks. This rock was left behind by a receding glacier. It is called ...

- **an erratic**
- **a moraine**
- **a striation**
- **an abrasion**

6. Allison and Rachel were investigating the effects of abrasion. To slow down the process they ...

- **used a stronger fan**
- **used a sandy surface**
- **planted grass**
- **used more water**

Check your Answers

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Answers

1. Tony found that when he poured water into a crack in a rock sample and froze it, then allowed it to thaw, the crack was actually wider. The type of weathering he investigated was classified as ...

x **chemical**

x **biological**

☑ **mechanical**

(Text p. 373) Frost wedging is a type of mechanical weathering.

x **physical**

2. Landslides and rock slides can have devastating effects on the landscape. The Frank Slike is one such example. To study these, scientists are using new technology and sound waves. One of the major forces besides an earthquake responsible for these types of sudden changes is ...

x **wind**

x **frost**

☑ **gravity**

(Text p. 375) Figure 5.31

x **water**

3. André tested the effects of water on the natural rock samples found in his schoolyard. He tested the rock samples with pure water (pH 6.8), rain water (pH 4.5) and tap water (pH 6.7). The type of weathering he investigated was classified as ...

☑ **chemical**

(Text p. 374) An example of chemical weathering is acid rain. In this experiment all the samples tested were slightly acidic (*acidic substances are below 7 on the pH scale*)

x **biological**

x **mechanical**

x **physical**

4. On a field trip to the foothills, the class was amazed, when their teacher pointed out a tree growing in a rock. The roots of the tree had worked their way into the cracks and split the rock in many places. The type of weathering they observed was classified as ...

x **chemical**

☑ **biological**

(Text p. 374) The tree is a living organism which can cause the breakdown of rock.

x **mechanical**

x **physical**

5. The field trip included a stop at the 'Big Rock' in Okotoks. This rock was left behind by a receding glacier. It is called ...

☑ **an erratic**
(Text p. 376-377) Figure 5.29

x **a moraine**
x **a striation**
x **an abrasion**

6. Allison and Rachel were investigating the effects of abrasion. To slow down the process they ...

x **used a stronger fan**
x **used a sandy surface**
☑ **planted grass**
(Text p. 377) Abrasion is caused by windblown particles that strike rock and wear it down. Planting grass will reduce the erosion of the soil by reducing the particles being blown away.
x **used more water**