CW 1.1 Stations Lab Results

Earth Science Block 2 Black

Cohort 1 Station 3 How does water affect iron-bearing rocks?

At this lab station you will investigate how water affects iron-bearing rocks. To model iron-bearing rocks you will use pieces of iron wool. Iron wool contains iron just like iron-bearing rocks.

h) Record your observations of the iron wool after it has been left in the water for 1 or more days.
Looks more separated and water color has changed do to rust and it would change the water color to reddish-orange

k) How do you believe water may affect rocks with iron?
It would separate the iron in the rock and cause it to deform, crack, rust and change the color of the rock

Cohort 1 Station 4 How does water affect carbonate rocks?

At this lab station you will investigate how water affects carbonate rocks. To model this you will use antacid tablets (Alka-Seltzer is one brand of antacid tablets) that contain carbonates.

d) Record your observations of comparing the used and unused tablets.
The tablet we used it started to foam and bubble before it dissolved into the water.

Cohort 2 Station 4 How does water affect carbonate rocks?

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d) Record your observations of comparing the used and unused tablets.
So i had to put the tablet in the water and then it started to fizz up and then started to melt and than after watching it for three mins it was still bubbling now its white on the on the walls and floor with still lots of bubbles . than when i did it with vinegar it bubbled and was all white and than it started to clear up it looked just like the water one.

e) How do you believe water may affect rocks with carbonate?
I would make it smaller and then start to disappear

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h) Record your observations of the iron wool after it has been left in the water for 1 or more days.
so the difference between each wool is that the wet on was more packed together when the dry wool was loose

k) How do you believe water may affect rocks with iron?
I believe that it would rust

Cohort 2 Station 5 How does water affect limestone rocks? How does acid rain affect limestone rocks?

At this lab station you will investigate how water and acid rain effects limestone. To model limestone you will use chalk, which is a type of limestone. To model acid rain, you will use vinegar.

b) In your lab notebook, record your observations of the chalk. How does it feel? What does its surface look like?
It's smooth, and there are no bubbles.

g) Record your observations in your lab notebook. After waiting about 3-5 minutes, you can try to take the chalk pieces out of the beakers if you want to make additional observations. Otherwise, record your final observations in your lab notebook.
The one with acid rain has more bubbles and they are smaller, the one with acid had small pieces. The one with water has less bubbles and they are bigger and are on the chalk

h) In your lab notebook, write down your thoughts about how water and acid rain might affect limestone rocks.
Some of the details over time would get less smooth.

Cohort 1 Station 6 How does abrasion affect different types of rocks?

At this lab station you will explore how rocks are altered by vigorous movement such as ocean waves, falling down a rocky mountain slope in a rock or snow avalanche, or tumbling down a turbulent river. To model rocks of different hardnesses you will use gravel (a harder rock) and sugar cubes (a softer rock). Shaking them will mimic the vigorous motion that occurs in ocean waves, rock avalanches, or riverbeds.

a) Pick out 5-7 sugar cubes and record your observations of the sugar cubes in your lab notebook.
They were more cubed looking like at first.

b) Pick out a handful of gravel and record your observations of the gravel in your notebook.
Its like normal gravel it has a glossy looking coat on the rocks.

d) After five minutes open the jar and look carefully at the sugar cubes and gravel. Record your observations in your lab notebook.
The cubes were more rounded and they got smaller and more see through then they did before i shook the jar

e) In your lab notebook, write down your thoughts on how abrasion (whether tumbling down a mountain, being tossed around in waves, or washed down a riverbed) might affect different types of rocks.
It will affect the rocks and chip off small/big chunks off rocks it could break them in half or even just crush them.

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a) Pick out 5-7 sugar cubes and record your observations of the sugar cubes in your lab notebook.
White whole cubes of sugar

b) Pick out a handful of gravel and record your observations of the gravel in your notebook.
The gravel is brown with many different shapes and an assortment of marbles

d) After five minutes open the jar and look carefully at the sugar cubes and gravel. Record your observations in your lab notebook.
The sugar cubes look rounded at the edges and the gravel

e) In your lab notebook, write down your thoughts on how abrasion (whether tumbling down a mountain, being tossed around in waves, or washed down a riverbed) might affect different types of rocks.
It will smooth their appearance and rub off the bumps on the outside

Cohort 1 Station 7 How does wind affect rocks?

At this lab station you will investigate how wind affects rocks. To model the sand and dirt particles caught in the wind and blown over rocks, you will use sandpaper.

c) After five minutes of rubbing the rock samples, take another look at them. Record your new observations.
After rubbing it for 5 minutes the rock got smoother

d) In your lab notebook, write down your thoughts about how wind affects rocks?
Wind will smooth out a rock

Cohort 2 Station 7 How does wind affect rocks?

At this lab station you will investigate how wind affects rocks. To model the sand and dirt particles caught in the wind and blown over rocks, you will use sandpaper.

a) Choose two different rock samples and write down careful observations of them in your lab notebook.
One rock looks like it has tons of layers, and the other rock looks like it has a lot of black spots.

c) After five minutes of rubbing the rock samples, take another look at them. Record your new observations.
One rock looks like it has tons of layers, and the other rock looks like it has a lot of black spots.

d) In your lab notebook, write down your thoughts about how wind affects rocks?
One rock looks like it has tons of layers, and the other rock looks like it has a lot of black spots.

Cohort 1 Station 5 How does water affect limestone rocks? How does acid rain affect limestone rocks?

At this lab station you will investigate how water and acid rain effects limestone. To model limestone you will use chalk, which is a type of limestone. To model acid rain, you will use vinegar.

b) In your lab notebook, record your observations of the chalk. How does it feel? What does its surface look like?
In vinegar, the chalk looks like its dissolving more quickly than the one in water, which is barely dissolving at all. There are bubbles all around the chalk in vinegar, when there only a bit of small bubbles around the one in water.

g) Record your observations in your lab notebook. After waiting about 3-5 minutes, you can try to take the chalk pieces out of the beakers if you want to make additional observations. Otherwise, record your final observations in your lab notebook.
The edges on the chalk in vinegar is very smoothed over, and small bumps and pores are on the surface

h) In your lab notebook, write down your thoughts about how water and acid rain might affect limestone rocks.
Acid rain will break down limestone more than regular rain on limestone