Rocks, Fossils, and Time

Grade 4 Science Worksheet

Name _____ Date _____

Circle the answer.

1. A student says the bottom layer must be youngest because it is the deepest. What is wrong with this reasoning?
   layers stack up over time, so the deepest formed first
   the deepest layer is always the thinnest
   only the top layer can have fossils
   depth has nothing to do with rock

2. A river cuts a canyon through five rock layers. Which is youngest?
   the canyon the middle layer the bottom layer the top layer

3. Scientists find the same kind of fern fossil in rocks in Africa and South America. What could this suggest?
   the two places were once joined or had the same climate
   ferns grew only after the oceans formed
   ferns swam across the ocean
   the fossils were moved there by people

4. From top to bottom, a hill has: soil, rock with tree fossils, rock with clam fossils. What change in the landscape does this show?
   the trees and clams lived side by side
   the hill was always a forest
   land with trees later became a sea
   a sea area later became land with trees

5. Ripple marks are found in an old rock layer. Ripple marks form in sand under moving water. What do they show?
   a volcano once erupted there
   moving water once flowed over that sand
   ice once covered the sand
   the sand was always dry

Scan to get this marked free. No screen time for your child.
Print it · do it in pencil · scan it · PencilGo picks the next sheet.

Rocks, Fossils, and Time

Answer Key - Grade 4 Science Worksheet

Circle the answer.

1. A student says the bottom layer must be youngest because it is the deepest. What is wrong with this reasoning?

   layers stack up over time, so the deepest formed first

   the deepest layer is always the thinnest

   only the top layer can have fossils

   depth has nothing to do with rock

2. A river cuts a canyon through five rock layers. Which is youngest?

   the canyon the middle layer the bottom layer the top layer

3. Scientists find the same kind of fern fossil in rocks in Africa and South America. What could this suggest?

   the two places were once joined or had the same climate

   ferns grew only after the oceans formed

   ferns swam across the ocean

   the fossils were moved there by people

4. From top to bottom, a hill has: soil, rock with tree fossils, rock with clam fossils. What change in the landscape does this show?

   the trees and clams lived side by side

   the hill was always a forest

   land with trees later became a sea

   a sea area later became land with trees

5. Ripple marks are found in an old rock layer. Ripple marks form in sand under moving water. What do they show?

   a volcano once erupted there

   moving water once flowed over that sand

   ice once covered the sand

   the sand was always dry