

Rock Star Test

The first slide will ask you for your school, team and team members. 1 person should submit answers for the team. Once the section gets to 0:00, the test moves on but DOES record the answers you have clicked.

Quiz

Section 1



Three friends went on vacation and brought home rocks to show their class. Juan went hiking on the side of an active volcano in Hawaii. Which rock did he likely bring back?

☐ A

☒ B

☐ C



Three friends went on vacation and brought home rocks to show their class. Sachi spent time camping and fishing in mountain streams. Which rock did she likely bring back?

☐ A

☐ B

☒ C



Three friends went on vacation and brought home rocks to show their class. AJ learned to surf at the beach. Which rock did he likely bring back?

☒ A

☐ B

☐ C

Quiz

Section 2



Rhyolite is a type of rock. When the melted rock cools at the earth's surface, it can form Rhyolite. What type of rock is Rhyolite?

- ☒ Igneous
- ☐ Metamorphic
- ☐ Sedimentary



Mica Schist is a rock that is made of mud and clay that has been subjected to high temperature and pressures. What type of rock is Mica Schist?

- ☐ Igneous
- ☒ Metamorphic
- ☐ Sedimentary

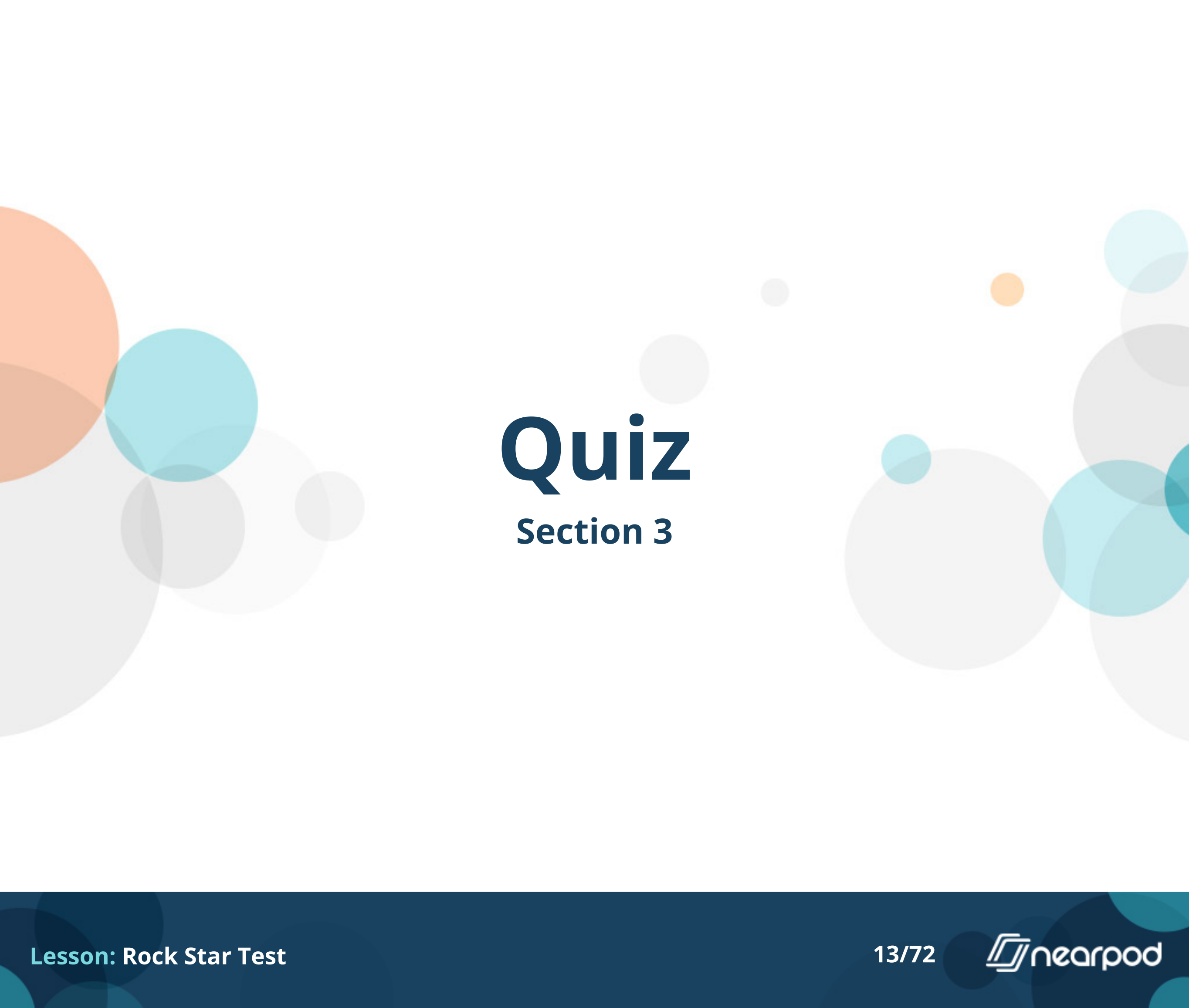


Breccia is a rock composed of large, angular fragments. The spaces between the fragments have been filled in with other minerals that cement the rock together. What type of rock is Breccia?

- ☐ Igneous
- ☐ Metamorphic
- ☒ Sedimentary

Which of the following is NOT a criteria for something to be classified as a mineral?

- ☐ Have a definite crystalline structure
- ☐ Be inorganic
- ☐ **Be a silicate**
- ☐ Be a liquid



Quiz

Section 3



What is the name of this specimen?

- ☐ Granite
- ☐ Limestone
- ☒ **Marble**
- ☐ Obsidian



What is the correct classification for this specimen?

- ☐ Extrusive - Igneous
- ☐ Intrusive - Igneous
- ☐ Foliated - Metamorphic
- ☒ Nonfoliated - Metamorphic



Characteristic	Observation
Color	Red to reddish brown
Hardness	5.5-6.5

This specimen was brought to the lab for identification. What is the luster of this specimen?

- ☒ Earthy/dull
- ☐ Glassy
- ☐ Metallic
- ☐ Pearly

Quiz

Section 4

Match the definition with the term: The way a mineral reflects light

- ☐ Hardness
- ☒ Luster
- ☐ Softness
- ☐ Streak

Match the definition with the term: The ability of a mineral to resist being scratched

- ☒ Hardness
- ☐ Luster
- ☐ Softness
- ☐ Streak

Match the definition with the term: The color of a mineral in its powdered form.

- ☐ Hardness
- ☐ Luster
- ☐ Softness
- ☐ Streak

The metamorphism of a sandstone rock will cause the rock:

- ☐ to be melted
- ☐ to contain more fossils
- ☐ to become more dense
- ☐ to occupy a greater volume

A foliated rock contains _____.

- ☐ cemented sediment
- ☐ hardened lava
- ☐ distinct layers or bands
- ☐ fossils of tiny organisms

Quiz

Section 5



What is the name of this sample?

- ☐ Copper
- ☒ Galena
- ☐ Pyrite
- ☐ Talc



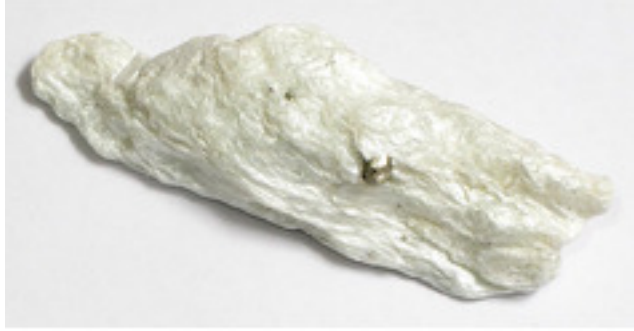
What is the name of this sample?

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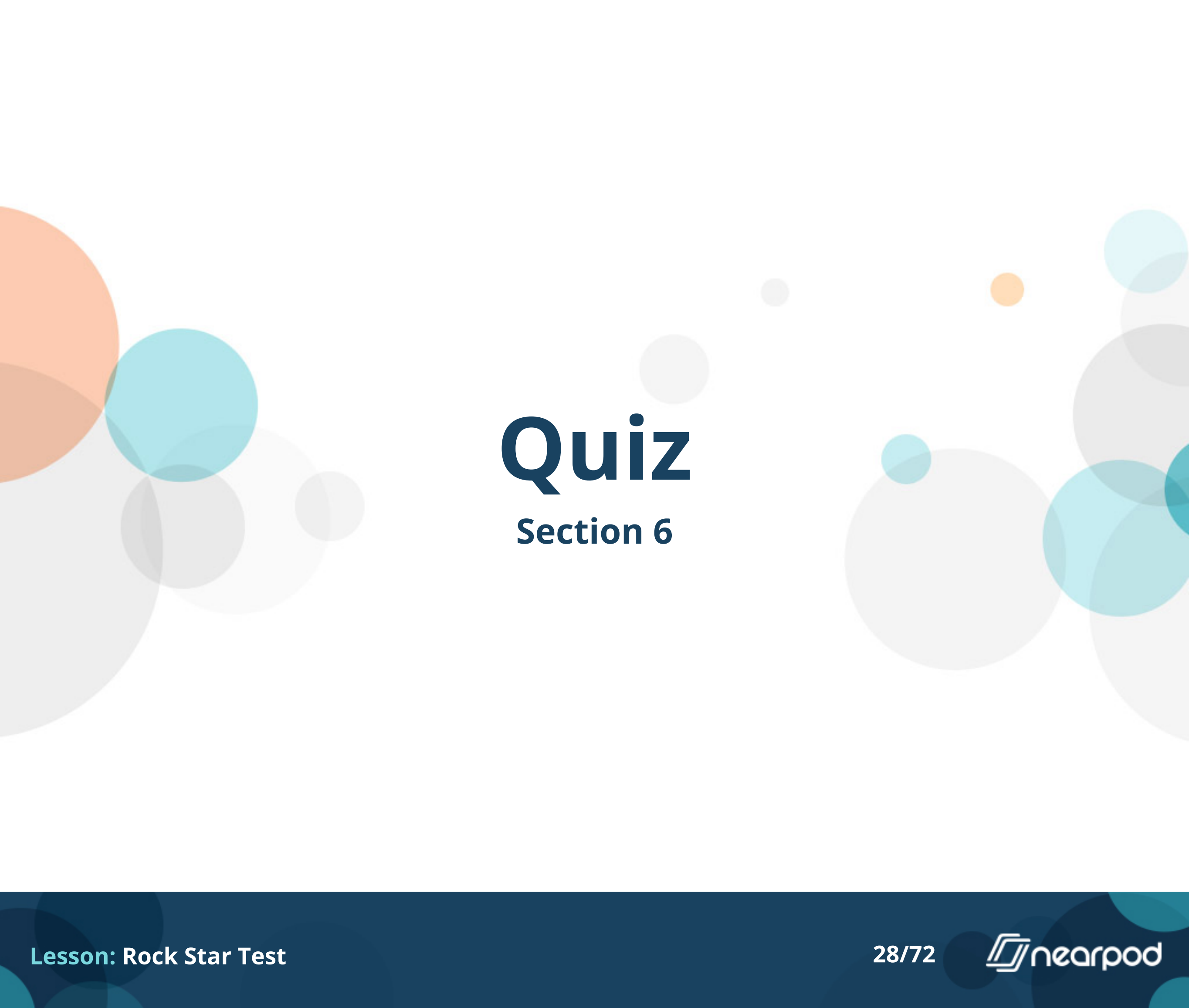
What is the name of this sample?

- ☐ Copper
- ☐ Galena
- ☒ Pyrite
- ☐ Talc



This mineral can be scratch by a fingernail. What is the name of this sample?

- ☐ Copper
- ☐ Galena
- ☐ Pyrite
- ☒ Talc



Quiz

Section 6



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What process turns the rock into the sand shown?

- ☐ Heat and pressure
- ☐ Melting
- ☒ **Weathering & Erosion**
- ☐ Compacting & Cementing



What process turns rock into magma?

- ☐ Heat and pressure
- ☒ **Melting**
- ☐ Weathering & Erosion
- ☐ Compacting & Cementing

Identify the series of geologic processes that can transform magma into granite, granite into sand, and sand into sandstone.

- ☒ **Cooling; weathering & erosion; compacting & cementing**
- ☐ Melting, heat & pressure; cooling
- ☐ Weathering & erosion; compacting & cementing; cooling
- ☐ Weathering & erosion; compacting & cementing; heat & pressure

Quiz

Quiz 7



This mineral has a hardness of 2.5 and dissolves in water. What is it?

- ☐ Calcite
- ☐ Gypsum
- ☒ Halite
- ☐ Quartz



What is the common name of this mineral (if you went to the grocery store to buy this mineral, what would you be buying)?

- ☐ Baby powder
- ☐ Lead
- ☒ Salt
- ☐ Sugar



What is the luster of this mineral?

- ☒ Glassy
- ☐ Metallic
- ☐ Earthy
- ☐ Vitreous



This mineral has a hardness of 7. Will it leave scratch a piece of glass?

☒ Yes

☐ No

Would you classify this mineral as:

- ☒ Transparent
- ☐ Opaque
- ☐ Translucent
- ☐ Conchoidal

Quiz

Section 8



Where did this sample form?

- ☐ In a swamp
- ☐ In a desert
- ☐ In a cave
- ☒ In an ocean



This rock is classified as:

- ☐ Igneous
- ☐ Detrital
- ☒ Organic
- ☐ Chemical



What is the name of this rock?

- ☐ Granite
- ☒ Limestone
- ☐ Pumice
- ☐ Slate

Quiz

Section 9



What is the name of this sample?

- ☐ Basalt
- ☐ Pumice
- ☒ Obsidian
- ☐ Scoria



Where would you most likely find this sample?

- ☒ **Near the edge of a volcano**
- ☐ Buried under an ancient swamp
- ☐ At the bottom of the ocean near a mid-ocean ridge
- ☐ In the bottom of a canyon



This rock is floating in water. What is its name?

- ☐ Basalt
- ☒ Pumice
- ☐ Obsidian
- ☐ Scoria

Quiz

Section 10



Identify what forces most likely caused the changes to the land shown in this photo.

- ☒ erosion and deposition
- ☐ erosion and gravity
- ☐ melting and cooling
- ☐ gravity and condensation



Identify what forces most likely caused the changes to the land shown in this photo.

- ☐ erosion and deposition
- ☒ erosion and gravity
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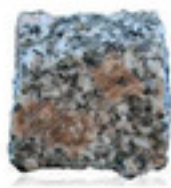


Identify what forces most likely caused the changes to the land shown in this photo.

- ☐ erosion and deposition
- ☐ erosion and gravity
- ☒ melting and cooling
- ☐ gravity and condensation

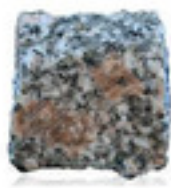
Quiz

Section 11



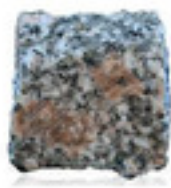
The Mount Airy Quarry in Surry County is the world's largest open-faced quarry for this rock. What is its name?

- ☐ Gneiss
- ☒ Granite
- ☐ Marble
- ☐ Sandstone



Is this rock coarse-grained or fine-grained?

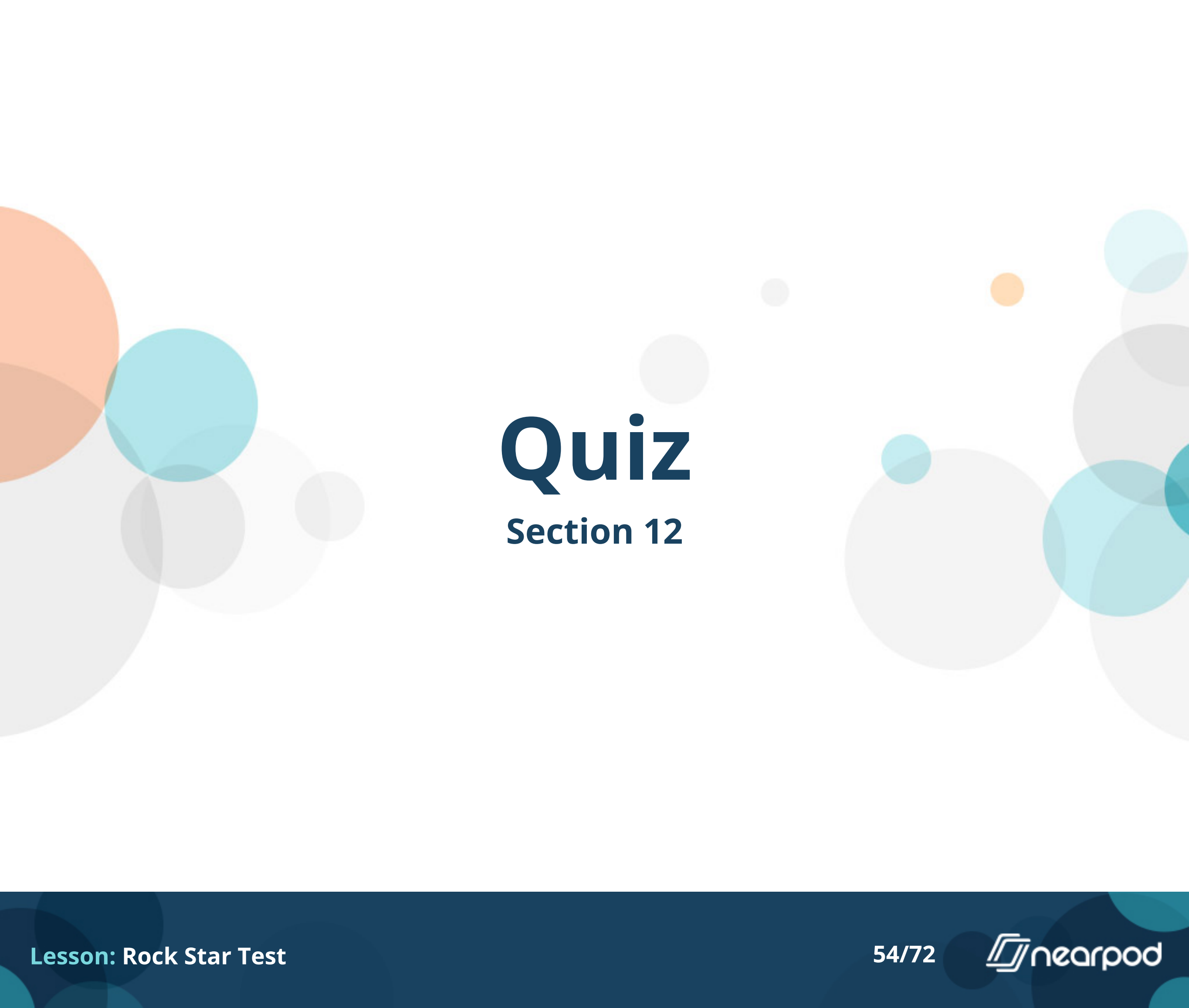
- ☒ Coarse grained
- ☐ Fine grained



This is an igneous rock. Did it cool quickly or slowly?

☐ Quickly

☒ Slowly



Quiz

Section 12

What are the two kinds of metamorphism?

- ☐ Regional & Contact
- ☐ Tectonic & Hot Spot
- ☐ Global & Isometric
- ☐ Conventional & Rotational



Is this sample foliated?

☒ Yes

☐ No



What is the name of this rock?

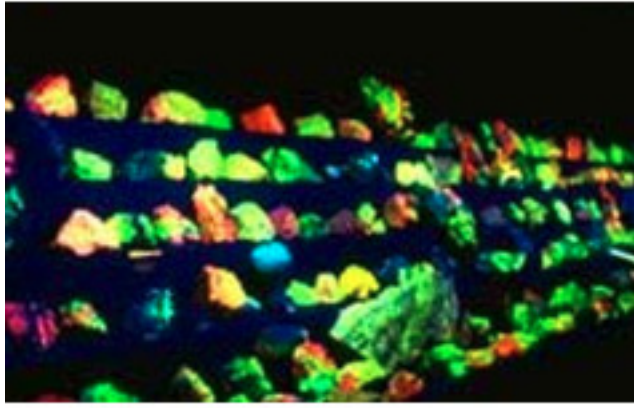
- ☐ Basalt
- ☐ Coal
- ☒ Gneiss
- ☐ Granite

Quiz

Section 13

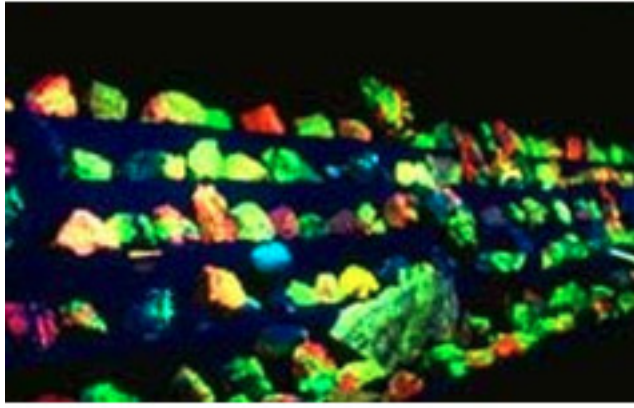
The tendency of some minerals to break along smooth planes is called:

- ☒ Cleavage
- ☐ Crystallization
- ☐ Fracture
- ☐ Shatter



A black light is shining on these rocks. What property are these samples exhibiting?

- ☐ Phosphorescence
- ☐ Effervescence
- ☒ Fluorescence
- ☐ Luminescence



Which of these minerals exhibits this special property?

- ☐ Calcite
- ☒ Fluorite
- ☐ Hematite
- ☐ Gypsum

Quiz

Section 14



This is one of the most abundant minerals on Earth. It has a hardness of 6 and a white streak. What is its name?

- ☒ Feldspar
- ☐ Hematite
- ☐ Olivine
- ☐ Quartz



This mineral is also very abundant. While it looks black & shiny here, it has a reddish streak and a hardness under 5. What is its name?

- ☐ Feldspar
- ☒ Hematite
- ☐ Olivine
- ☐ Quartz



This mineral is an important ore for what metal?

- ☐ copper
- ☐ gold
- ☒ iron
- ☐ silver

Quiz

Section 15

Imagine that you are a rock. • You get buried under sediment on the ocean floor. • You get forced underneath (subduction) the North American continent, towards the center of the Earth. • You slowly melt from the heat of the Earth's mantle. • You get forced up and harden in the cold water. What rock are you now?

- ☒ Igneous
- ☐ Metamorphic
- ☐ Sedimentary

Millions of years later, you find yourself near a forest stream. • The roots of trees grow into your cracks, breaking you out of your rock bed. You to fall into a nearby stream. • The stream breaks you down into smaller pieces, which get washed downstream. • The stream dries up and your pieces become cemented to other bits of rock around you. What rock are you now?

- ☐ Igneous
- ☐ Metamorphic
- ☒ Sedimentary

It is now 5,000 years later. You lie deep below the surface of the earth, where there is extreme heat and pressure. • A fault nearby fills with magma, increasing the temperature around you. • The heat causes your minerals to change. What rock are you now?

- ☐ Igneous
- ☒ Metamorphic
- ☐ Sedimentary