

Metamorphic Rocks

Use Q-Learn notes and the notes you took from watching the video to fill in the blanks and answer the questions below.

Metamorphic rocks are formed from _____ that are changed due to _____, _____ them into _____, more compact rocks. The conditions often cause the _____ to form _____ layers.

Metamorphic rocks may be identified through the _____ of these layers, or _____ where metamorphic rocks break easily along parallel sheets. Examples of metamorphic rocks include _____ and _____.

Name of Rock	Parent Rock	Cause of metamorphism	Type of rock formed from
marble			
quartzite			
gneiss			
slate			

From your video notes

- metamorphic means
- deep under the Earth's surface rocks are put under extreme pressure when heavy rock
- the further a rock is pushed down
- rocks don't melt but the crystals in the rock
- under heat the pressure the crystal can change
- this transformation creates new
- rocks with a curled pattern are formed when the pressure is
- the formation of curled layering is called
- rock is made of
- mica is created from the reforming of
- rocks that tell a story are called

- an example of a rock that only forms above a certain temperature is
- marble is made from
- compared to its parent rock, marble is
- marble also has
- multi-coloured marble contains more than
- gneiss has metamorphosized from
- compared to its parent rock it has
- the crystals in gneiss are larger and multicoloured because they
- in slate the crystals have to form
- metamorphic rocks are usually than their parent rock
- this is because the crystals
- quartzite is stronger than

Identify the metamorphic rocks below.



Medium to with minerals. However, unlike slate and schist, gneiss does not break along .



Medium grained, . Forms from rocks such as sandstone or chert. Hard, . Mineral content - primarily of (90%), with the quartz crystals to the naked eye .



Fine-grained, . Forms from clay rich rocks such as mudstone or shale. Hard, displays , smooth to touch. Mineral content - no specific , extremely . Colour - variable, generally grey to black, but can form in a variety of colours dependent on parent rock .



Fine grained. Mainly composed of the serpentine mineral group. Can feel silky, **greasy** or **waxy**.

Serpentine is ; on the Mohs scale, it's usually between 2.5 and 5.



Medium grained, or "wavy" rock.

Consists of medium-size, , arranged in wavy layers. Forms by the of mudstone, shale, or some types of rock such as granite, but to a higher degree than slate. Mineral content - consists of significant amounts of minerals (biotite, chlorite, muscovite) which allows it to into thin pieces and gives it a appearance.

Sometimes contains gems such as garnets.

Colour - - often alternating lighter and darker bands, usually .