Answer Keys

Interactive Rock Identification chart answer key

Use your Interactive Rock Identification to fill in the chart!

Interactive Rock Identification

Sample	Texture Crystalline Clastic Glassy Other (be specific)	Grain Size Coarse Medium Fine Mixture of grain sizes	Minerals Light Dark Light and Dark	Layers Yes / No if yes, Thick or Thin?	Scratches Glass Yes / No / did not test	Fizzes with HCl A lot A little No Fizz/ did not test	Igneous Metamorphic Sedimentary (pick one)	Name of Rock
1	Crystalline	Coarse	Light and Dark	No	Yes	Did not test	Igneous	Granite
2	Crystalline	Coarse	Dark	No	Yes	Did not test	Igneous	Gabbro
3	Crystalline	Fine	Light	No	Yes	Did not test	Igneous	Rhyolite
4	Crystalline	Fine	Dark	No	Yes	Did not test	Igneous	Basalt
5	Glassy	Fine has gas bubbles	Light	No	Did not test	Did not test	Igneous	Pumice
6	Glassy	No Crystal grains	Dark	No	Did not test	Did not test	Igneous	Obsidian
7	Clastic	Fine	variety of color (usually darker color)	Yes (thick)	Did not test	Did not test	Sedimentary	Shale
8	Clastic	Medium	variety of color	No (not this sample)	Did not test	Did not test	Sedimentary	Sandstone
9	Clastic	Mixture of grain sizes (rounded particles)	variety of color	No	Did not test	Did not test	Sedimentary	Conglomerate
10	Clastic	Mixture of grain sizes (angular particles)	variety of color	No	Did not test	Did not test	Sedimentary	Breccia
11	Clastic	Fine	variety of color (usually lighter color)	No	No	A Lot	Sedimentary	Limestone
12	Other (made from dissolved minerals)	Fine	variety of color (usually lighter color)	No	No	A Little	Sedimentary	Dolomite
13	Crystalline (microcrystalline)	Fine	variety of color (usually lighter color)	No	Yes	No	Sedimentary	Chert
14	Other (made from organic material)	Fine	Usually gray to black (rubs off on paper)	No	No	Will this rock burn? Yes	Sedimentary	Coal
15	Crystalline (microcrystalline)	Fine	variety of color (usually darker color)	Yes (thin)	Did not test	Did not test	Metamorphic	Slate
16	Crystalline	Coarse	Light and Dark	Yes (thin)	Yes	Did not test	Metamorphic	Gneiss
17	Crystalline	Medium to Coarse	Light	No	Yes	No	Metamorphic	Quartzite
18	Crystalline	Medium to Coarse	Light	No	No	A Little	Metamorphic	Marble
19	Crystalline	Fine to Medium grained (crumbles easily)	variety of color	Foliated Layers (brittle, wavy layers)	Did not test	Did not test	Metamorphic	Schist

Interactive Rock Identification Chart: QUESTIONS

ANSWER KEY

1. Most Igneous Rocks have a _____ texture.
   a) Crystalline
   b) Clastic
   c) Glassy
   d) Other (made from dissolved minerals or organic material)

2. Igneous rocks with a coarse grain size are
   a) Intrusive (cooled from magma)
   b) Extrusive (cooled from lava)

3. The main difference between Granite and Gabbro is
   a) Granite is coarse grained while Gabbro is fine grained
   b) Granite contains more quartz and other light colored minerals
   c) Granite will scratch glass while Gabbro will not scratch glass
   d) Granite has a crystalline texture while Gabbro is glassy

4. Which of these rocks contains the same minerals as Granite?
   a) Pumice and Basalt
   b) Basalt and Gabbro
   c) Gabbro and Obsidian
   d) Obsidian and Pumice

5. For which type of rock is color the least helpful in identifying?
   a) Igneous
   b) Sedimentary
   c) Metamorphic

6. Why didn't we test some samples (like sandstone and conglomerate) to see if they would scratch glass?
   a) They can be made up of particles of varying hardness
   b) They would just crumble
   c) Everyone knows they will scratch glass
   d) We ran out of "digital" glass plates

7. Limestone, Dolomite, and Marble all contain some
   a) Silicon Dioxide
   b) Carbonate minerals
   c) Crystals
   d) Fossils

8. A rock formed form quartz sandstone or chert that was changed by extreme heat and pressure is
   a) Limestone
   b) Slate
   c) Gneiss
   d) Quartzite

9. When "poorly sorted" sediments are deposited quickly (not far from their source) and cemented together, they form the rock
   a) Sandstone
   b) Shale
   c) Conglomerate
   d) Breccia

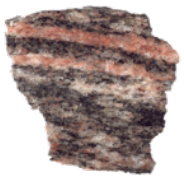
10. A rock with light and dark colored minerals that cooled quickly from lava containing a lot of trapped gasses is
   a) Basalt
   b) Obsidian
   c) Gabbro
   d) Pumice

11. When Granite is changed by extreme heat and pressure it becomes
   a) Gneiss
   b) Obsidian
   c) Marble
   d) Basalt

12. What is your favorite rock? answers vary Why? answers vary

Mystery Rock Lab w/clues

ANSWER KEY

Mystery Sample	Image	Rock Name	Mystery Sample	Image	Rock Name	Mystery Sample	Image	Rock Name
1		Marble	8		Limestone	15		Basalt
2		Obsidian	9		Schist	16		Coal
3		Slate	10		Rhyolite	17		Pumice
4		Quartzite	11		Dolomite	18		Breccia
5		Sandstone	12		Chert	19		Shale
6		Conglomerate	13		Gabbro			
7		Granite	14		Gneiss			

Mystery Rock Lab without clues

ANSWER KEY

Use this table to make an answer key for your own classroom samples

Mystery Sample	Rock Name	Notes		Mystery Sample	Rock Name	Notes
1				11		
2				12		
3				13		
4				14		
5				15		
6				16		
7				17		
8				18		
9				19		
10						