

1) Which of the following minerals is a mica ? To what larger mineral group do micas belong?

muscovite tourmaline olivine lepidolite sphalerite

2) Which of these minerals has the highest specific gravity ? What makes this mineral so dense?

malachite tremolite galena rhodonite celestite

3) From the same list as #2, which of these minerals is a carbonate mineral ? What metal comes from that mineral ?

4) Which of the following minerals is usually found in metamorphic rocks

dolomite azurite gypsum staurolite ulexite

5) Which of the following minerals is NOT a silica group mineral ? What group does that mineral come from ?

Citrine Jasper Chalcedony Onyx Alabaster

6) Can you identify the minerals in the pictures below?



7) Which of the pictured minerals has a hardness of 8 ?

8) Can you name a mineral on the hardness scale softer than all of these ? Can you name two such minerals ?

1) See how many of the coarse grained intrusive igneous rocks you can name before looking them up. Think about the black one, the black and white one, and the pink and white one. And, of course, the the one with the really large crystals. _____, _____, _____, _____

2) Same with fine grained extrusive igneous rocks. There are 5 of these to know, not counting obsidian.

_____, _____, _____, _____, _____

3) Below is a list of sedimentary and igneous rocks on the left and metamorphic rocks on the right. Can you match them?

limestone	gneiss
shale	quartzite
granite	marble
sandstone	slate

4) Can you name the three coals on your rock list ? If not go look at your list. And then list them from softest to hardest. Which one provides more energy per volume of rock?

_____, _____, _____

Use this list of minerals to answer questions 5 - 10

Tremolite	Talc	Opal	Biotite
Olivine	Malachite	Kaolinite	Apatite
Celestite	Beryl	Silver	Citrine
Topaz	Galena	Graphite	Hematite

5) Which two of these minerals are native elements? Which is a carbonate? Which is a sulfate?

Native elements _____ and _____

Carbonate _____ sulfate _____

6) Five of these minerals occur as gemstones. Which 5?

_____, _____, _____, _____, _____

7) Which mineral has a bright red streak ? Do you know why ?

_____ WHY _____

8) Can you identify the silicate minerals in this list ? Hint: there are 8 of them.

_____, _____, _____, _____

_____, _____, _____, _____

9) How many of these minerals are on the hardness scale? Work to learn that list. _____

10) We recover lead from one of these minerals and copper from another? Pb _____ Cu _____