

Mineral Rummy Worksheet

Post-Activity Questions

1. A pearl is considered a gemstone and its composition includes calcium carbonate. Explain whether or not a pearl is a mineral.
2. Both hematite and magnetite are composed of the same two elements, iron and oxygen. Why are they considered different minerals?
3. Fill in the chart below by writing the chemical name of each mineral and the group to which it belongs.

Mineral Name	Chemical Formula	Chemical Name	Mineral Group
Azurite	$\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$		
Barite	BaSO_4		
Beryl	$\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$		
Cinnabar	HgS		
Iodargyrite	AgI		
Periclase	MgO		
Zircon	ZrSiO_4		

4. The chemical formula of malachite is $\text{Cu}_2(\text{CO}_3)(\text{OH})_2$. Given the respective charges of the carbonate and hydroxide anions in the *Background* section, determine the charge of the copper cation.
5. What might be the value of classifying minerals by their metal cations? What difficulties might one encounter using this classification system?