

**Humans' Dependence on Earth's Mineral Resources**  
**Unit 1**  
**People, Products, and Minerals**  
**Part I: Minerals and Products**

Here is a list of the minerals, and their chemical formulas, that we have in class today. Use this, and other properties of the minerals (such as hardness, color, etc.), to match them to the products listed on the back of this sheet (one mineral per product).

<b>Mineral Name</b>	<b>Chemical Formula</b>
Apatite	$\text{Ca}_5(\text{PO}_4)_3(\text{F},\text{Cl},\text{OH})$
Bauxite	$\text{Al}(\text{OH})_3 - \text{AlO} \cdot \text{OH}$
Barite	$\text{BaSO}_4$
Calcite	$\text{CaCO}_3$
Chalcopyrite	$\text{CuFeS}_2$
Galena	$\text{PbS}$
Graphite	$\text{C}$
Gypsum	$\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$
Halite	$\text{NaCl}$
Hematite (red)	$\text{Fe}_2\text{O}_3$
Hematite (specularite)	$\text{Fe}_2\text{O}_3$
Kaolinite	$\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$
Muscovite	$\text{KAl}_2(\text{AlSi}_3)\text{O}_{10}(\text{OH},\text{F})_2$
Quartz	$\text{SiO}_2$
Talc	$\text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$

**Which mineral is in each product?** (Choose 1 mineral per product)

<b>Product #</b>	<b>Products</b>	<b>Associated Mineral Name</b>
	Toothpaste, Cheerios & Antacid	
	Glass & Sandpaper	
	Table Salt & Road Salt	
	Jewelry	
	Baby Powder & Makeup	
	Pencils	
	Drywall & Plaster	
	Sparkly Eye Shadow	
	Blush	
	Car Battery	
	Porcelain	
	Copper Wire, Pennies & Matches	
	Aluminum Foil	
	Fertilizer	
	Mud Flap of Truck	