## **IGNEOUS ROCKS**

	Most crystals too small to see (because formed through eruption on Earth's surface and thus cooled quickly)	<b>Crystals ALL big enough to</b> <b>see and interlocking</b> (because formed by cooling slowly underground in a magma chamber)
Mafic (dark colored and dense) *note: due to high Fe content, often appears with some iron oxidation on the surface	<b>BASALT</b> (formed through eruption of magmas, usually in oceanic volcanic settings)	
<b>Felsic</b> (light colored and less dense)		<b>GRANITE</b> (formed through slow cooling of magma chambers, usually under continental volcanoes)

## **METAMORPHIC ROCKS**

## SERPENTINITE

Smooth, shiny, dark mottled green, no visible crystals (looks like it slipped up a crack in the Earth – like a watermelon seed)

(Formed through hot waters heating and changing the chemistry of mantle rock under a seafloor spreading center. Later, due to its low density, it migrates up cracks, especially in subduction zones, and accretes to the continent.)

## **SEDIMENTARY ROCKS**

<b>Chemical</b> (smooth texture – almost glassy)	Made of SiO <sub>2</sub>
	CHERT

<b>Clastic Rock</b> <b>Fragments</b> (made of visible pieces of	Gravel, Sand, and Mud-sized Grains	Angular grains <b>BRECCIA</b> Rounded grains <b>CONGLOMERATE</b>
rock or mineral fragments – if	Sand-sized Grains	SANDSTONE
mud-sized, can be white, and could be rough if so compacted)	Mud-sized Grains	<b>MUDSTONE</b> <i>Kaolinite is the white variety (gets sticky when wet)</i>