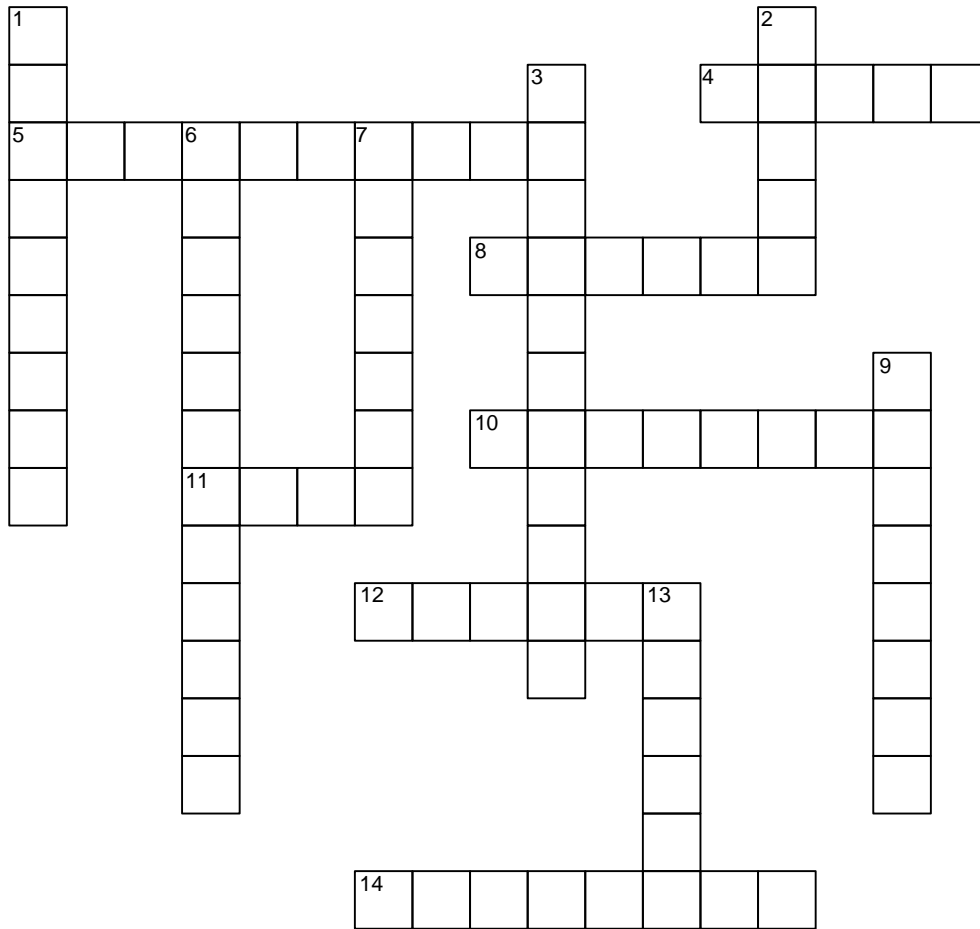




Metamorphic Rocks



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ACROSS

- 4 a metamorphic rock used for tiles and roofs
- 5 an organic metamorphic rock
- 8 limestone is the parent rock of this
- 10 an agent of metamorphism resulting from the weight of rocks above
- 11 an agent of metamorphism related to temperature
- 12 a foliated dense rock that has light and dark colored banding
- 14 metamorphic rocks having a banded or striped appearance

DOWN

- 1 comes from metamorphosed quartz sandstone
- 2 _____tectonics is the movement of parts of the earth's crust
- 3 change form
- 6 _____solution is gases and water vapor escaping from magma
- 7 _____metamorphism is a localized low grade metamorphism
- 9 _____metamorphism is associated with mountain building.
- 13 the name comes from a Greek word meaning "to split"

HOMEMADE HEAVY LIQUID TEST FOR AMBER



[A saturated solution of salt water with amber and plastic immersed]

Specific gravity, also known as relative density, differs widely among gemstones, and is one of their most important physical characteristics from the viewpoint of gem identification.

Specific gravity (SG) is the ratio of the weight of one unit volume of the gem to the weight of the same unit of water. For example, to say sapphire (corundum) has $SG = 4.0$, means precisely that a cubic inch of sapphire weighs four times as much as a cubic inch of water.

In natural gems, SG values range from just over 1 (1.08 for amber) to just short of 7 (6.95 for cassiterite).

One fun, and safe, heavy liquid test that can be done at home uses a saturated saltwater solution. (Make this by dissolving as much salt in room temperature distilled water as it will hold).

The SG of this mini "Salt Lake" is about 1.13. Most types of natural amber will float in it ($SG = 1.08$) while nearly all the plastic materials used to make imitations of amber will sink, as their SGs are higher than 1.13.

Imitation amber is rampant in the gem marketplace (even in some of the better stores), so this is a handy trick to know.

Source: <http://www.bwsmigel.info/Lesson3/DEPhysical.Properties.html>