

## Rocks & Minerals Division C 2012 Clarifications

- 1) Division C may be asked to calculate specific gravity.
- 2) No minerals will be added to the list that is already posted.

### 3) Identifying Minerals:

They will need to know the following and how to do a test if it is needed to be done to find an answer to a question.

#### Physical Properties of Minerals –

Luster	Crystal Form	Phosphorescence.
Color	Magnetism	Optical (Double
Hardness	Taste	Refraction)
Cleavage Identification	Odor	Electrical properties
Fracture	Feel	(conductivity)
Streak	Magnetic properties	
Tenacity	Fluorescence	

Chemical Reactions (i.e Calcite) - though we will NOT USE chemicals.  
Specific Gravity testing and calculations for C division,

Minerals can be divided in many ways into 'groups:'

Metamorphic  
Sedimentary  
Igneous.

Or they can be divided by crystal structure among many more ways. We will interpret the "groups" in 4d to mean the classification of minerals by "fixed principles" which are the chemical criterion. Those groups are:

Native Elements	Hydroxides	Sulfates
Sulfides	Nitrates	Phosphates
Halides	Carbonates	Silicates
Oxides	Borates	Organic

Page 52 of Simon and Schuster Rock and Mineral Manual.

Division C will need to know the groups above AND the chemical formulas for those minerals marked on the list on the Regional website.

For example, Quartz:

Division C – Quartz is a silicate AND its chemical formula is SiO<sub>2</sub>