

Stop 01

IESO 2011 - Practical test Geosphere - Mineralogy

Name and surname of the Participant: _____

Nationality: _____

Duration time 10 min.

Identification of mineral species

Given five different mineral samples, the candidate is requested to identify each mineral species with the aid of basic chemical/physical tests or macroscopic observations. Each mineral species holds at least one unique feature or character which discriminate it from the others (for example, it is the only one reacting with acids, it is the hardest one, it is the most symmetric one, it is the only one exhibiting metallic luster ...). The tests recommended for the identification are: (i)

reactivity to hydrochloric acid attack; (ii) determination of the relative Mohs hardness; (iii) crystal habit indicative of the crystal symmetry; (iv) metallic luster.

The candidate should associate the code number (from 1 to 5) of the mineral sample to the mineral name. (2 points for each right answer)

calcite

quartz

fluorite

hematite

sulphur