

# Specific Gravity

## What is specific gravity?

Specific gravity is the "heaviness" of a mineral. It is defined as a number that expresses the ratio between the weight of a mineral and the weight of an equal volume of water. Water has a specific gravity of "1."

## What is specific gravity dependent upon?

The specific gravity depends on:

- The kind of atoms that comprise the mineral.
- How the atoms are packed together.

You can easily distinguish minerals that have unusually high or unusually low specific gravities just by the way they "feel" when you hold a sample in your hand.

## How is specific gravity measured?

The steps in measuring the specific gravity are:

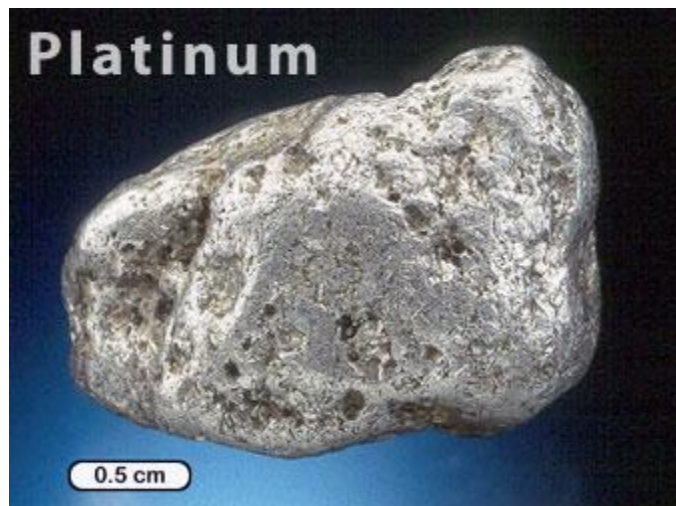
- Weigh the mineral in air ( $W_a$ ).
- Weigh the mineral in water ( $W_w$ ).
- Use the following equation:

$$W_a / ( W_a - W_w )$$

The resulting number is the specific gravity.

\*Note that the specific gravity is a ratio- there are no units.

**Platinum**



**Barite**

