Mineral Habits, Part 1

Habits are the distinctive form that mineral crystals may take in different geologic settings, for instance when growing in a free space or in a particular environment. Habit can be a strong clue to a mineral's identity. Here are 13 of the 23 most common examples of some of the most useful mineral habits. Note that "habit" also has a meaning for rocks.



Acicular Habit

Acicular means needlelike. This mineral is actinolite.

Amygdaloidal Habit

Amygdaloidal means almondshaped, but it refers to the former gas bubbles in lava called <u>amygdules</u>, cavities that have become filled with various minerals.

Banded Habit

"Banded" is a broadly layered texture. This rhodochrosite specimen might be called stalactitic, lamellar, geode, or concentric if it were curved differently.



Bladed Habit

Bladed crystals are longer and thinner than tabular crystals but stubbier than acicular crystals. <u>Kyanite</u> is a common example. In rock shops, look for stibuite

Blocky Habit

A blocky habit is squarer than equant and shorter than prismatic. This mineral is <u>pyrite</u> on quartz.

Botryoidal Habit

In scientific Latin, botryoidal means "like grapes." Carbonate, sulfate and iron oxide minerals tend to have this habit. This specimen is <u>barite</u>.



Cruciform Habit

The cruciform (cross-shaped) habit is the result of twinning. <u>Staurolite</u>, shown here, is well known for favoring this habit.

Dendritic Habit

Dendritic means "like branches." It can refer to <u>flat crystals</u>, like those of manganese oxides, or three-dimensional forms like this specimen of native copper.

Drusy Habit

Druses are a type of <u>opening</u> <u>inside rocks</u> that are lined with projecting crystals. <u>Amethyst</u>, cut from geodes, is commonly sold in rock shops for its pretty drusy habit.

Encrusting Habit

Calcite, the main component of limestone, commonly dissolves to be deposited elsewhere as a crust. Chips in this specimen show how it coats the underlying rock.



Equant Habit

Crystals of nearly equal dimensions, like these <u>pyrite</u> crystals, are equant. Those on the left might be called blocky. Those on the right are pyritohedrons.

Fibrous Habit

<u>Rutile</u> is typically prismatic, but it can form whiskers as in this rutilated quartz. Curved or bent fibrous minerals are called capillary or filiform instead.

Geode

<u>Geodes</u> are rocks with open cores, or druses, lined with different minerals. Most geodes contain quartz or, as in this case, calcite with a drusy habit.

Source: http://geology.about.com/od/minerals/ss/mineral-habits.htm#showall



By Andrew Alden Geology Expert Gallery of Mineral Habits. Photo Credit: Photo (c) Andrew Alden, licensed to About.com (<u>fair use policy</u>)