

Simple Sand Key

Color, shape, and size are easy ways to identify the different components of sand. Sand may have bits of shells, rocks, and/or fossils. To help see the colors and shape of your sand, use the black construction paper under the sample. You can also shine a flashlight on the sand.

Use the following key to identify some common components of sand.

Size:

Sand is defined as particles that range in size from 2.0 mm to 0.125 mm. The easiest method to select this range is with a sand sieve. Pour your sand through the sieve to eliminate any large particles.

Color:

Minerals

shiny white: quartz

orangey: feldspar

shiny black: mica, hornblend or magnetite; if the grains are pulled by a magnet then the mineral is magnetite

dull black: basalt from lava flows

green: olivine

variable dark colors: iron-containing minerals like pyroxenes and amphiboles

Biological

many colors: shells from clams and snails. Usually large pieces (1 mm or more)

dull white: corals, foraminifers (small drifting ocean animals)

Shape:

sharp edges: shells or “hard” rocks

smooth edges: well-worn “soft” rocks