




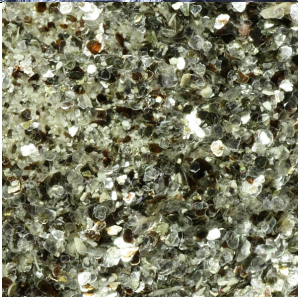
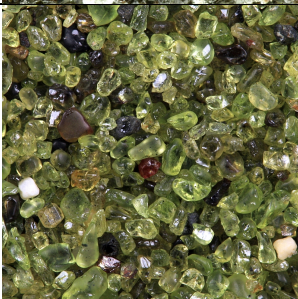





Table 5.7. Common components of abiogenic sand

Picture	Abiogenic Sand Origin and Description
	<p>Basalt. Black lava flows are basalt. As they erode, they may form dull black, gray, or brownish red grains of gravel and sand.</p> <p>http://www.sandatlas.org/2010/02/volcanic-sand/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Basaltic rock fragment sand at Kehena Beach, on Hawai'i Island, US. Width of view is 10 mm.</p>
	<p>Feldspar. Feldspar has clear, yellow, or pink square crystals with a smooth, glossy, or pearly luster.</p> <p>http://www.sandatlas.org/2012/12/sand/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Swedish sand sample composed of feldspar (yellow and pink grains) and quartz (clear grains). Width of view is 20 mm.</p>
	<p>Garnet. Garnets are silicon crystals, often amber or brown in color. Some are light pink, red, or orange.</p> <p>http://www.sandatlas.org/sand-collection-2/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Pink garnet sand from Emerald Creek, Idaho, US</p>
	<p>Granite. Granite grains are usually light-colored to pink, with a salt-and-pepper pattern of mineral crystals all about the same size.</p> <p>http://www.sandatlas.org/2010/02/continental-sand/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Continental sand from Botany Bay, Sydney, Australia</p>

	<p>Magnetic mineral grains. Magnetic mineral grains may be grains of iron ore, magnetite, or other metals. These grains are dense and tend to accumulate at the bottom of containers. Magnetite crystals resemble a double pyramid. Magnetic mineral grains in sand can be observed by passing a magnet over a sand sample.</p> <p>http://www.sandatlas.org/2011/11/magnetite/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Magnetite crystals, width of view is 25 mm</p>
	<p>Mica. Mica forms shiny, paper-thin, translucent flexible sheets. It is light-colored or white and may appear iridescent.</p> <p>http://www.sandatlas.org/sand-collection-2/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Mica sand in Finistere, France</p>
	<p>Olivine. Olivine is a shiny crystal that can be various shades of olive-green to almost brown. It may be transparent or translucent and often contains specks of other crystals. It is found in basalt.</p> <p>http://www.sandatlas.org/2010/02/heavy-mineral-sand/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Olivine sand at Papakōlea Beach on the Hawai'i Island, US</p>
	<p>Quartz. Quartz crystals are clear or transparent, resembling small pieces of broken glass. Quartz comes from granite and sandstone erosion. It is the most abundant mineral found in continental sand.</p> <p>http://www.sandatlas.org/2010/02/quartz-sand/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Quartz sand from Minnesota, US, the width of the view is 7 mm</p>

	<p>Volcanic glass. Volcanic glass forms when hot lava is rapidly cooled, forming black, shiny, irregular, sharp-edged particles. Continental volcanoes form obsidian.</p> <p>Image A by Joanna Philippoff http://www.sandatlas.org/2010/02/volcanic-sand/ Image B courtesy of Siim Sepp (www.sandatlas.org) Image caption: Obsidian sand at Punalu'u Beach on Hawai'i Island, US</p>
	<p>Manmade substances. "Beach glass" is formed when shards of manufactured glass are rounded and frosted by wave action. Other manmade substances, especially plastics, may also be found on the beach.</p> <p>http://www.sandatlas.org/2011/12/remnants-of-bottle-messages/ Image courtesy of Siim Sepp (www.sandatlas.org) Image caption: Glass beach on Kaua'i, Hawai'i, US. The width of the view is 20 mm.</p>