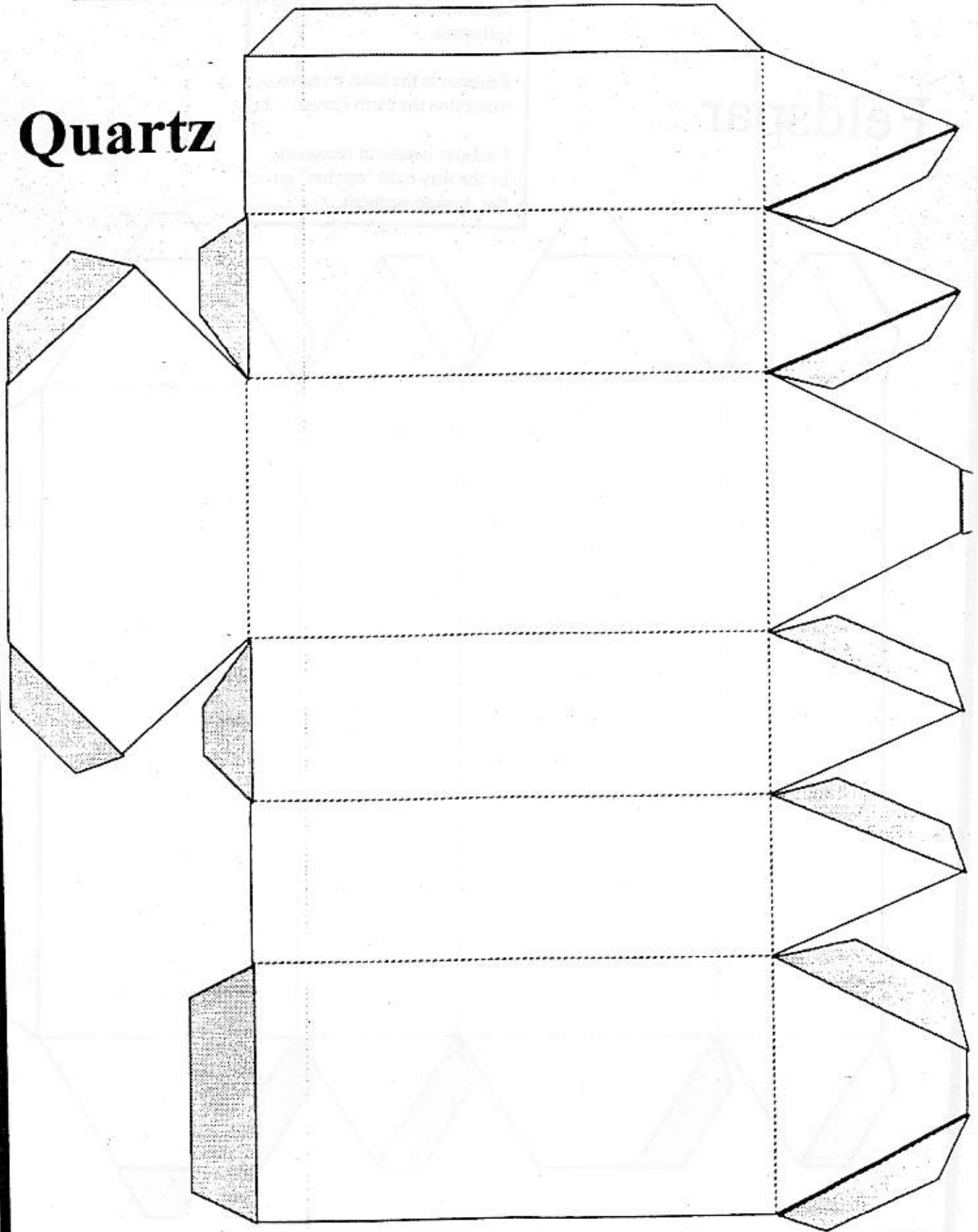


Much of the sand that fills the Tucson basin is quartz. Quartz is very hard. It makes clean, angular sand grains that can store water between the particles. Pure quartz is clear or milky white. Artificial quartz is used to make crystals for CB radios and lenses for telescopes. Quartz forms hexagonal, columnar crystals.

Quartz

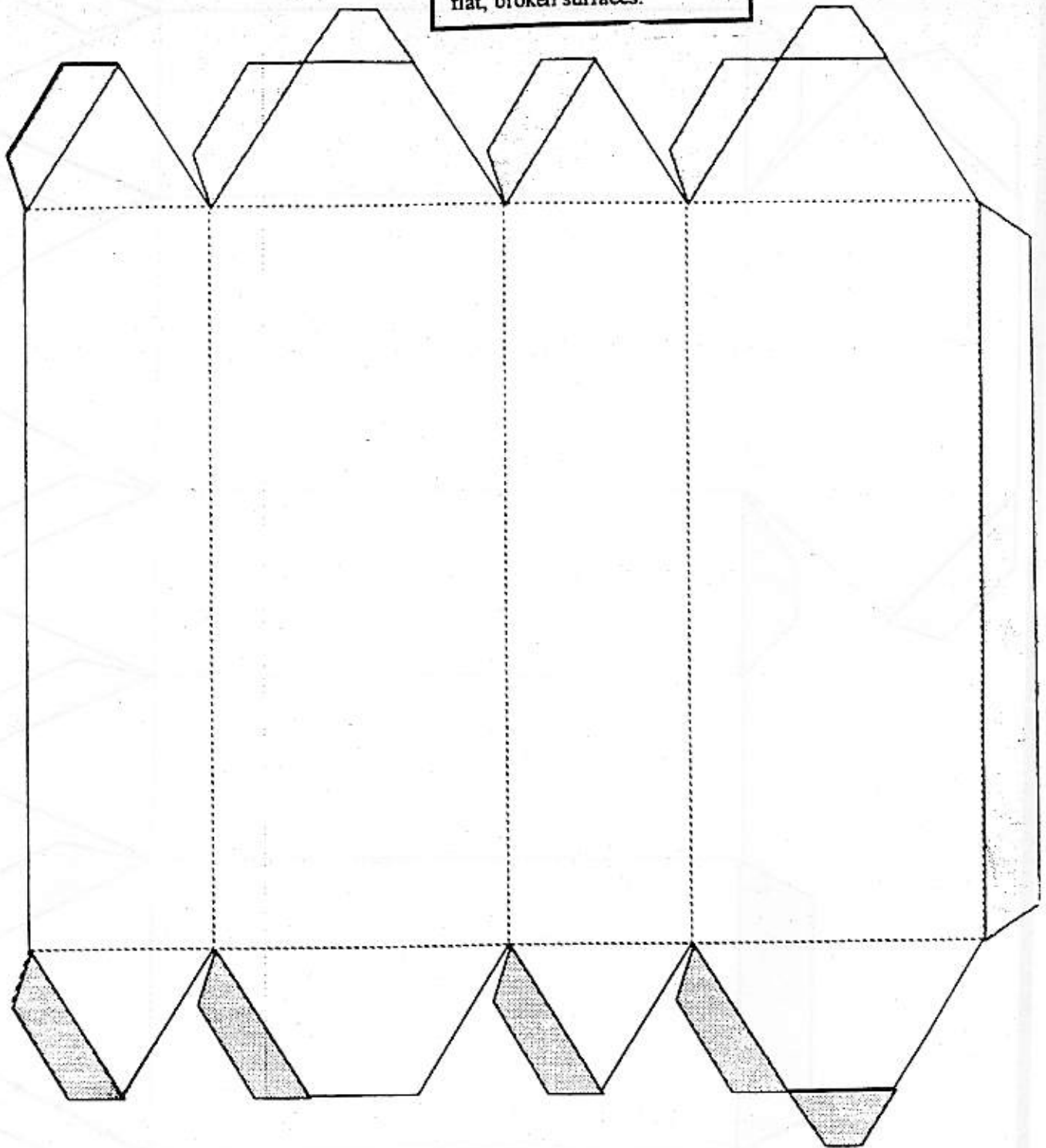


Feldspar

Feldspar often is milky white but sometimes is pink, gray, or yellowish.

Feldspar is the most common mineral in the earth's crust.

Feldspar is easy to recognize by the way light "catches" on flat, broken surfaces.

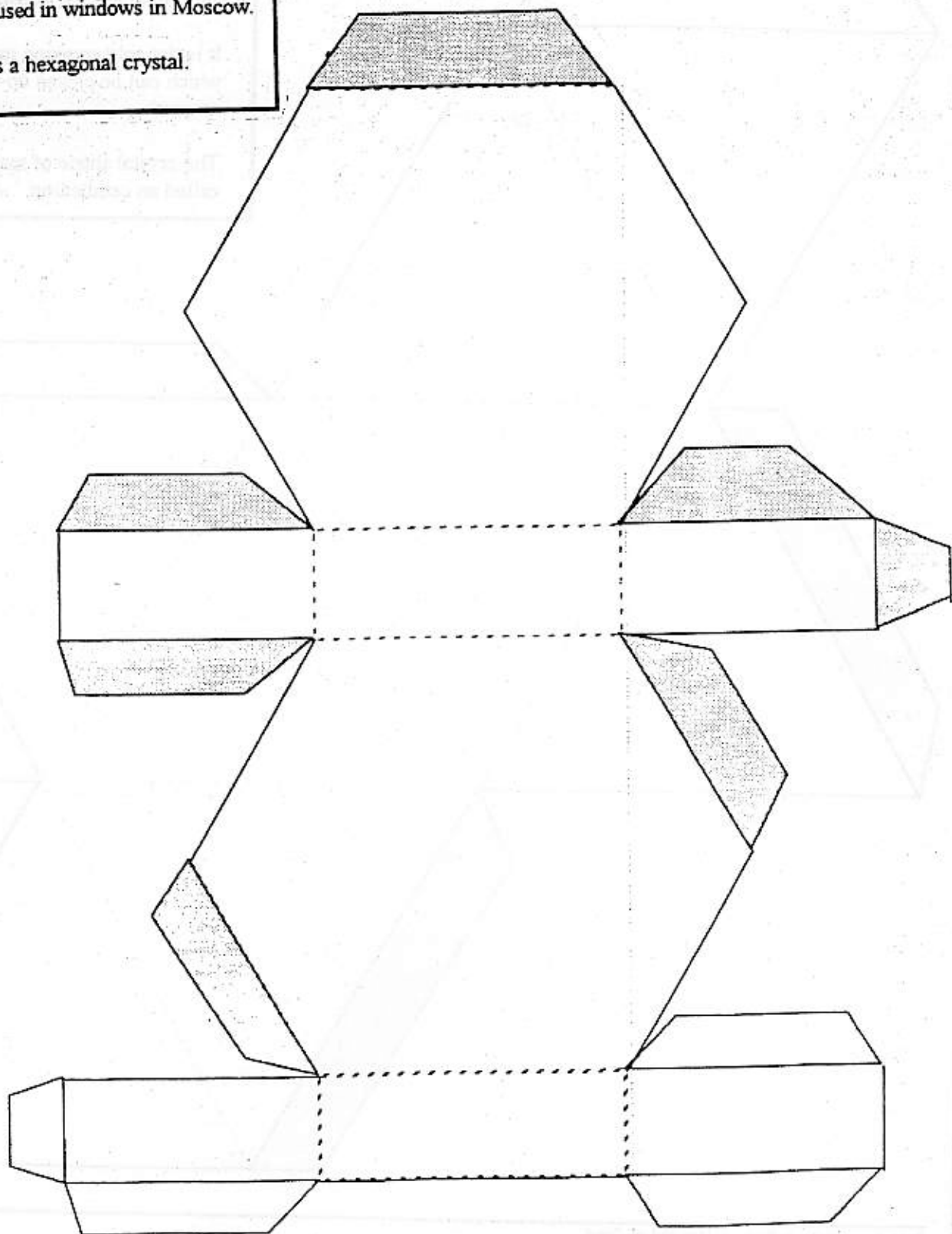


Mica peels off in paper-thin, shiny flakes.

It sometimes is used in electrical insulation. One type, called muscovite mica, was used in windows in Moscow.

Mica forms a hexagonal crystal.

Mica

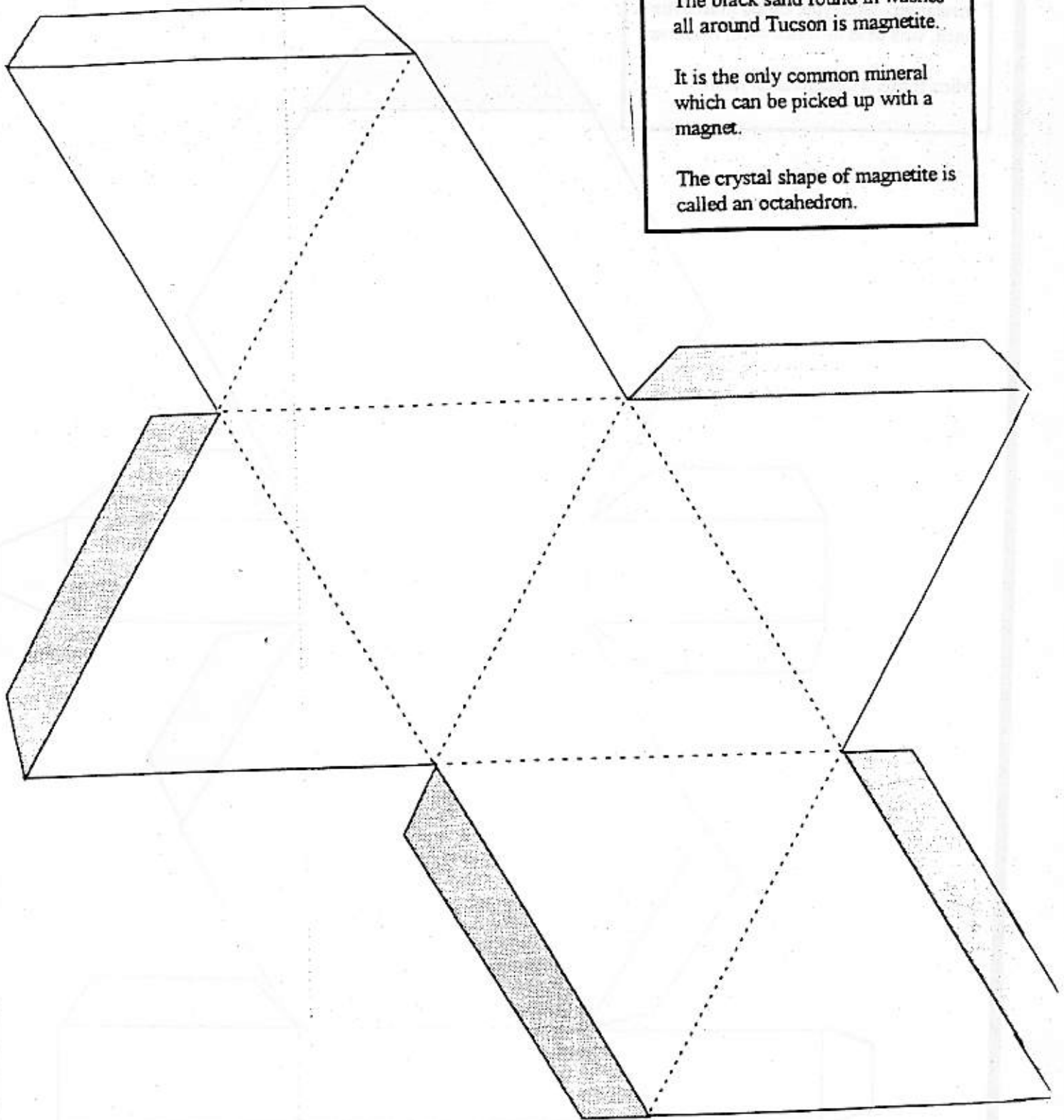


Magnetite

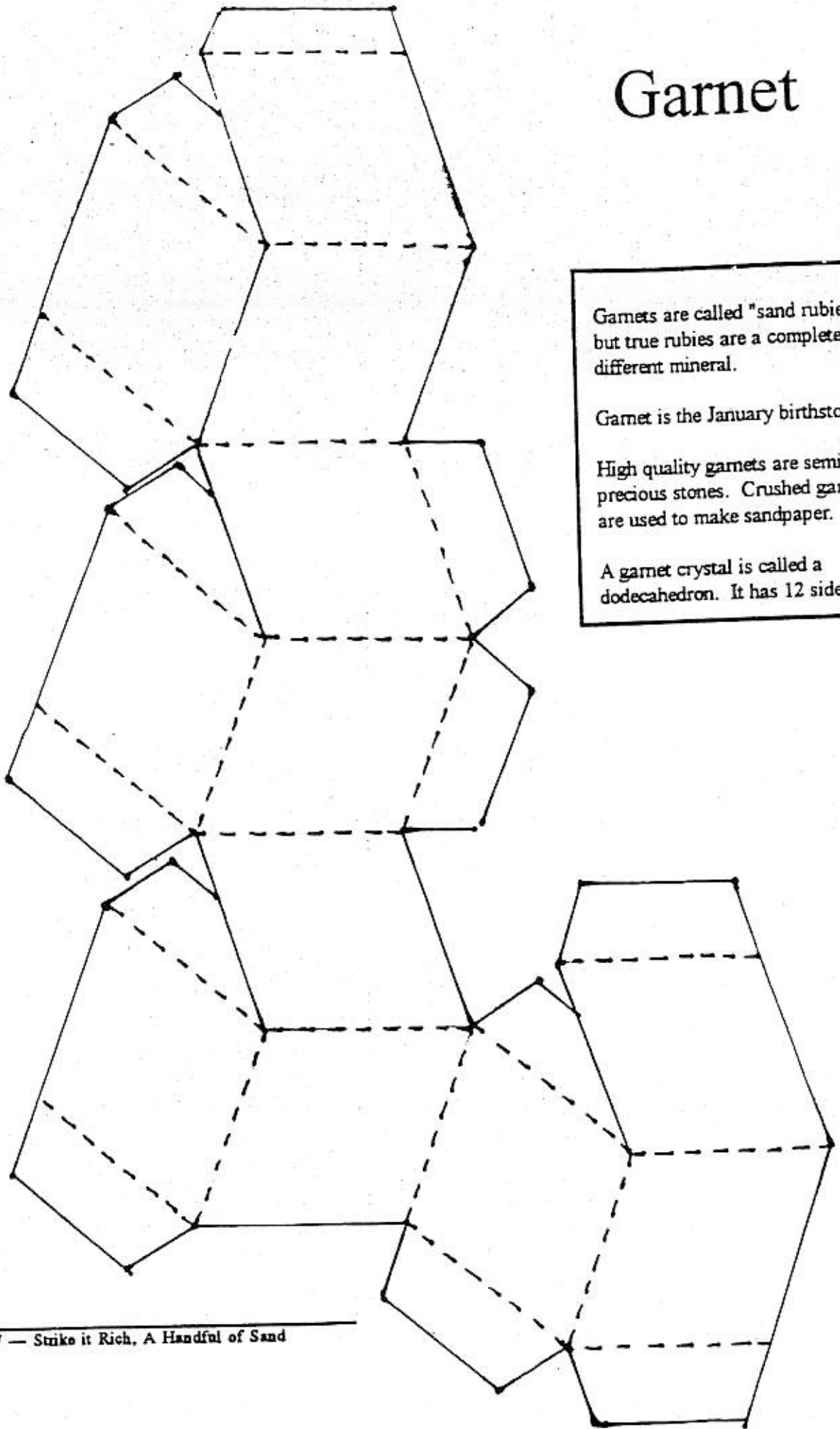
The black sand found in washes all around Tucson is magnetite.

It is the only common mineral which can be picked up with a magnet.

The crystal shape of magnetite is called an octahedron.



Garnet



Garnets are called "sand rubies" but true rubies are a completely different mineral.

Garnet is the January birthstone.

High quality garnets are semi-precious stones. Crushed garnets are used to make sandpaper.

A garnet crystal is called a dodecahedron. It has 12 sides