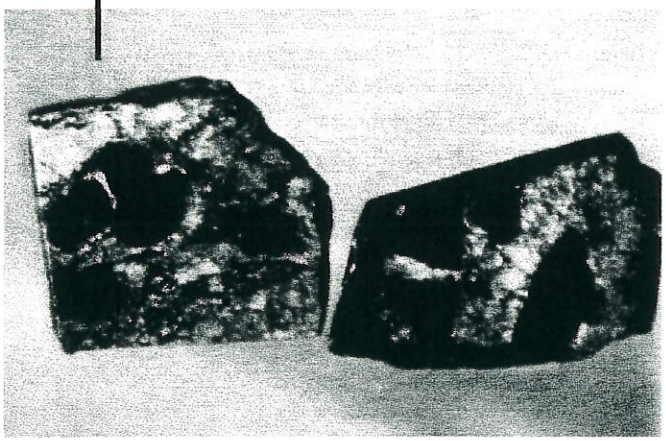
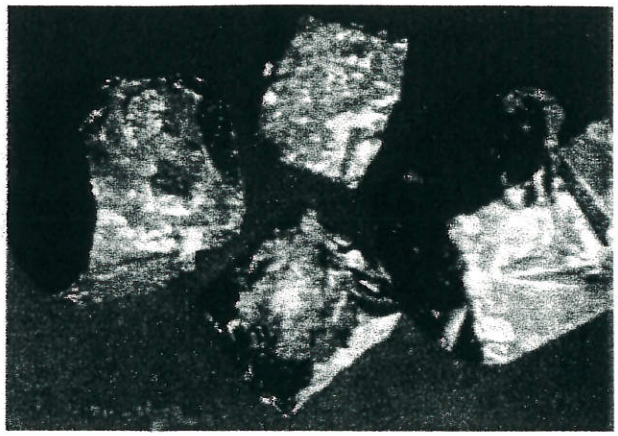
The Mineral

Example

Uraninite





Chemical Formula:	(UO_2)
Composition:	Uranium dioxide with small amounts of thorium.
Color	Greenish to brownish-black, steel black, black,
Luster	Submetallic, greasy, pitchy, or dull.
Cleavage	None
Hardness:	5-6

By,

Captain Tanner J. Smith

Uraninite

Ranging from greenish black to a steel black with tints of brown, Uraninite has a chemical formula of (UO_2) and a specific gravity that ranges from 6.4 to a 10.6.

Though once thought to be useless, Uraninite is now used as a "major ore of Uranium and Radium," along with it's good source of helium.

Uraninite is an extremely interesting mineral in the way that most collectors do not collect it, because of the hazard of it being to their health. In fact, Uraninite should not be handled if possible, and kept in a sealed container. This hazard is due to the large quantity of uranium, and in the fact that pure uranium will kill a person.

As found in crystals or cubes, Uraninite has a conchoidal (meaning shell like, caused by a blow) to an uneven fracture.

However, the words that came up most in my readings, was that Uraninite is highly radioactive. In this way, that's why it is used in nuclear weapons.

Did you know?

When a drop of concentrated nitric acid is set on Uraninite, the spot becomes strongly fluorescent.

Though not very popular, and with not a very high demand, out of a scale of 1-3 on prevalence (which means in the general use or acceptance) it has a 3.

Though it occurs with many minerals, some of the minerals we've studied that it occurs with are pyrite, feldspar, and quartz.

Uraninite is spread in small quantities throughout the world, but some of the main Uraninite producers are, France, Germany, South Africa, and Canada. The largest Uraninite crystals ever found were in Canada.

Its tenacity (how tough an object is) is very brittle, and that is another reason why collectors do not collect it.

It is best known in the field by it's "color, luster, radioactivity, and streak."

The mineral most like Uraninite in it's structure is Fluorite, though cleavage is somewhat different.

Varieties of Uraninite are pitchblende, and cleveite.

Pitchblende:

Sometimes categorized differently, as a different mineral, due to how impure it is.

Cleveite:

Contains "up to 10% of rare earth elements.

Uraninite has a hardness of between 5 and 6.

Bibliography

http://minerals.galleries.com

http://www.minerals.net

http://202.112.29.88/kuang/jzykl.html

With the help of Monty's mineral books in the classroom.