MINING METALS (GOLD)

Cynther
Chemistry
period 1

- Gold is a chemical element with the symbol Au (from Latin: aurum "gold") and an atomic number of 79.
- Gold is a dense, soft, shiny, malleable and ductile metal
- Pure gold has a bright yellow color and luster traditionally considered attractive, which it maintains without oxidizing in air or water
- Chemically, gold is a <u>transition metal</u> and a <u>group 11 element</u>.



Gold is the most <u>malleable</u> and <u>ductile</u> of all metals a single gram can be beaten into a sheet of 1 square meter.



Gold has only one stable <u>isotope</u>.

Gold which is also its only naturally occurring isotope.



 Technology related uses of gold in industrial applications, including electronics, dentistry, medicine and nanotechnology.

Examples:

Electronic is the single largest area of gold usage in technology. Gold is the material of choice in many electronic applications, especially telecommunications

For example, gold demonstrates excellent biocompatibility within the human body, resulting in a number of direct applications of gold as a medical material.



Gold is most economical in large, easily mined deposits.

Because of the softness of pure (24k) gold, it is usually <u>alloyed</u> with base metals for use in jewelry.



DIOR HOMME



The consumption of gold produced in the world is about:

50% in jewelry, 40% in investments, and 10% in industry

