Gold is element number 79. It is the only metal that does not rust. It is known as a heavy metal. A bar of gold, like the kind you see in the old movies, weighs about 80 pounds, which is the weight of a small child. The total mass of gold, ever produced in the total history of the earth, would make a single cube measuring

20m X 20m x 20m.

Gold weight is measured in Karats. Pure gold is 24 K. Necklaces are made from less pure, but stronger, 18 K gold. Gold plating and gold leaf are thin layers of gold. Most computers have microchips with gold connectors. This means that old old computers can be melted down and the valuable gold can be recovered.

You can buy sub-micron thick films of pure gold, many other pure metals and countless mixtures and alloys thereof, off the street in any major city, and you've been able to do so for several thousand years. Leaf like this is so thin it has to be picked up with special Red Squirrel hair brushes and when it wafts down onto an object it conforms to the shape of the surface, settling in even to details as fine as a fingerprint.