

ALL THE WORLDS GOLD v1

All The World's Gold

We here at NumberSleuth are all about exploring the world of numbers, and with this infographic we decided to take a look at the numbers behind the entire amount of gold in the world as well as other facts about gold. Below are a series of questions that we began with and the answers we discovered in our research. We believe that this is the most thorough and in-depth resource with facts about the world's gold on the Internet and we hope you have as much fun reading through the information as we did in putting it all together.

1. How much above-ground gold (gold that has been mined) is there in all the world?

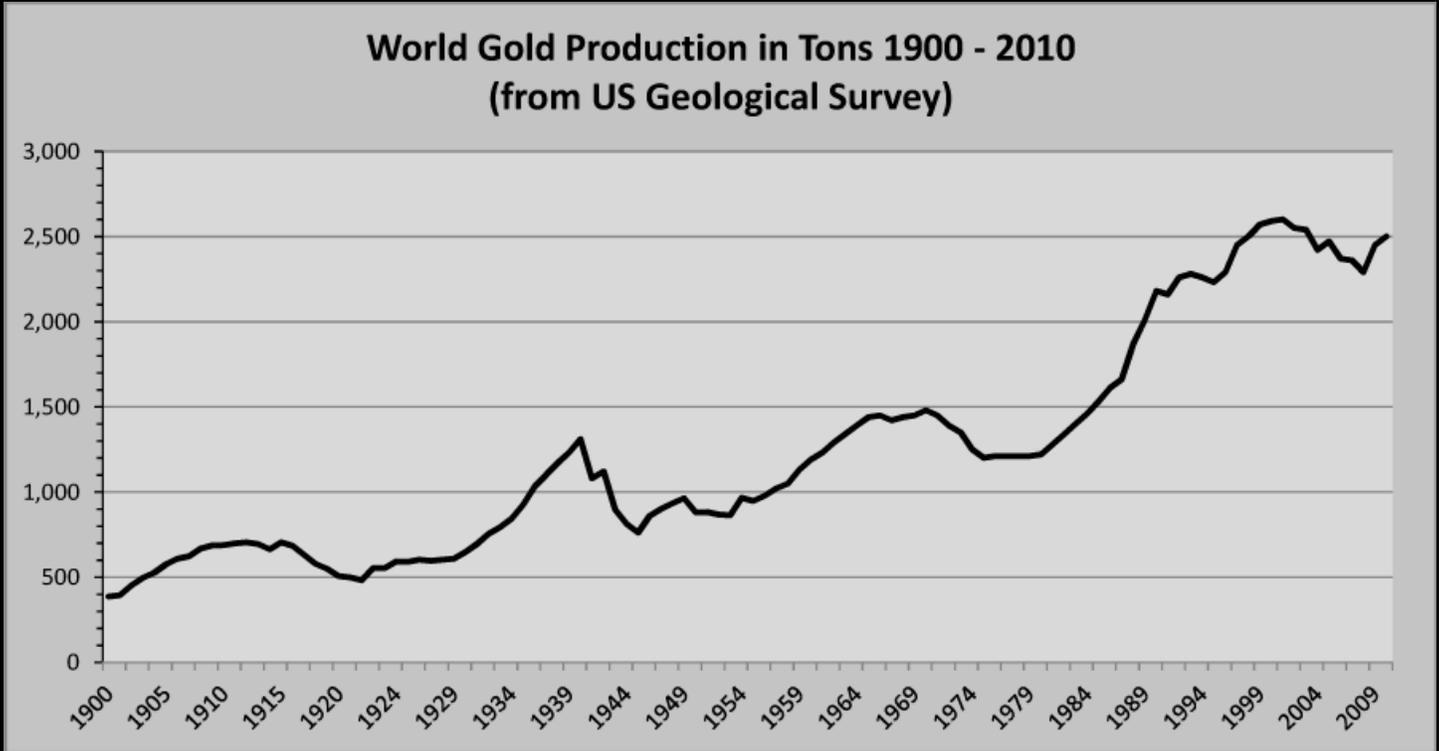
The best estimate at the end of 2011 is that around 165,000 metric tons (or tonnes) have been mined in all of human history. That's about 181,881 ordinary tons or 363,762,732 pounds, or 5,820,203,717 ordinary ounces. Gold typically is measured in what are known as troy ounces, which are a little bigger than ordinary ounces (a troy ounce is 31.1034768 grams whereas an ordinary ounce is 28.3495231 grams). There are 32.1507466 troy ounces in a kilogram or 32,150.7466 troy ounces in a metric ton.

"More than half of all humanity's gold has been extracted in the past 50 years. Now the world's richest deposits are fast being depleted, and new discoveries are rare. Gone are the hundred-mile-long gold reefs in South Africa or cherry-size nuggets in California. Most of the gold left to mine exists as traces buried in remote and fragile corners of the globe. It's an invitation to destruction. But there is no shortage of miners, big and small, who are willing to accept."

2. How much gold gets mined per year worldwide?

The table below shows world gold production from 1900 thru 2011. Production in 1900 was around 400 metric tons per year and has consistently moved up over the years. It is currently around 2,500 metric tons per year. The all time high was reached in 2001, with 2,600 metric tons of gold production worldwide. The total gold mined from 1900 to the present is just under 141,000 metric tons. Given that humans have mined a total of 165,000 metric tons over the course of history, that leaves just 24,000 metric tons mined before the 20th century.

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4. How much gold, really, is 165,000 metric tons (the total mined throughout human history) and 2,500 metric tons (the total that's currently mined annually)?

An Olympic swimming pool is 50 by 25 by 2 meters. It therefore contains 2,500 cubic meters of water. Each cubic meter of water is one metric ton. Gold is 19.3 times as dense as water. Therefore an Olympic swimming pool would contain 48,250 metric tons of gold. It follows that 3.42 Olympic-sized swimming pools could contain all the gold that's ever been mined. Another way to imagine this is to think of all the gold in the world ever mined as a single cube. That would be a cube with each side just over 20 meters, or 67 feet, in length. Given that about 2,500 metric tons of gold is mined each year, this annual production of gold would fit in a cube whose sides were 5 meters, or 16.6 feet, in length. All the production of gold in the world for a given year would thus fit in a 20 by 30 foot room with an 8 foot ceiling.

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5. Given 165,000 metric tons as an upper bound on available gold, how much does that leave to each human on the planet?

Humanity has just hit the 7 billion mark. That leaves just under 24 grams of gold to each person on planet earth, or .76 troy ounces or .83 ordinary ounces per person. In an ordinary male gold wedding band at 18-karat purity, there are about 5 grams of pure gold. That means every person on planet earth could own about 5 gold rings. At the current price of \$1,750.00 per troy ounce of gold, that leaves \$1,326.00 in gold for each person on planet earth. "Gold production has increased by a factor of 2.1 from 1959 to 2010. At the same time, the world population has been multiplied by a factor 2.2. Thus we produced more or less the same amount of gold per inhabitant as in 1959.