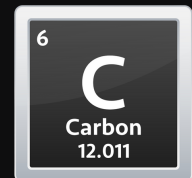




## WHAT IS A DIAMOND?



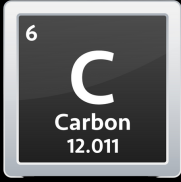
### *WHAT IS A DIAMOND?*

Diamonds are a form of carbon crystallized under extreme pressure and heat deep in the Earth's mantle. They are the hardest naturally occurring substance known and are prized for their luster and beauty in jewelry. Diamonds can also be used for industrial purposes such as cutting and polishing. They are often mined from kimberlite and lamproite volcanics.

### WHAT IS THE HISTORY OF DIAMONDS?

Diamonds have been known and valued for thousands of years. The earliest known diamond mines were in India and were active around 800 BC. Diamonds were also known to ancient civilizations in China, Greece and Rome. In the Middle Ages, diamonds were associated with power and prestige, and only the rich and powerful could own them.

The modern diamond market began to take shape in the late 19th century when large diamond deposits were discovered in South Africa. The development of new technologies for diamond mining and cutting ensured that diamonds became more widely available.



# DIAMONDS

## DID YOU KNOW?

In 1905, the world's largest rough diamond was found. It was named the Cullinan diamond and weighed 3,106 carats! It was later cut into many diamonds (9 large ones and 100 smaller ones).

## WHY ARE DIAMONDS AN IMPORTANT COMMODITY?

Diamonds are important for several reasons:

1. **Jewelry:** diamonds are highly prized for their beauty and brilliance and are often used for engagement rings, necklaces, bracelets and earrings. They are considered a symbol of love and commitment.

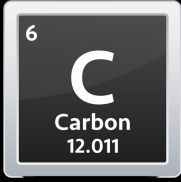
2. **Industrial Uses:** Diamonds are the hardest natural substance known, making them suitable for cutting and polishing other materials. Diamonds are also used in the manufacture of drills, saw blades and other tools.

3. **Investment:** diamonds are considered a store of value and are often used as an investment. They have a long history of increasing in value and can be passed down through generations as a family heirloom.

4. **Economic Impact:** Diamond mining and trading is an important source of income and employment for many countries and communities. The diamond industry also creates demand for other goods and services, such as transportation and logistics.

5. **Cultural significance:** diamonds have a rich cultural history and are often associated with special occasions, such as engagements and weddings. They are also used to commemorate important milestones and achievements.





# DIAMONDS

## DID YOU KNOW?

Only about 30 percent of diamonds mined around the world are gem quality.

## HOW ARE DIAMONDS MINED?

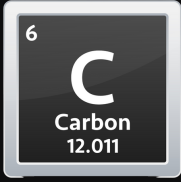
Diamonds are usually mined by one of two methods: Underground mining or open pit mining. Which method is used depends on the location and size of the diamond deposit.

1. **Underground mining:** this method is used when diamond deposits are located deep below the surface. Miners dig a network of tunnels and shafts to reach the diamonds. The ore is then brought to the surface to be processed. Underground mining is usually more expensive and labor intensive than open pit mining.

2. **Open pit mining:** this method is used when diamond deposits are near the surface. Miners remove the overburden (the soil and rock above the diamond deposit) and then mine the diamonds using large earth-moving equipment. Open pit mining is usually less expensive and less labor intensive than underground mining.

Once the diamonds are mined, they are sorted, cleaned, and then graded for color, clarity, carat weight, and cut, which determine the diamond's value.





# DIAMONDS

## DID YOU KNOW?

The word diamond comes from the Greek word “adamas.” It means invincible or indestructible.

## WHAT EVERYDAY PRODUCTS CONTAIN DIAMONDS?

Diamonds are used in a variety of everyday products, including:

1. **Cutting and grinding tools:** diamonds are the hardest natural substance known, making them ideal for cutting and grinding other materials. They are used in saw blades, drills and grinding wheels for a variety of applications, including construction, mining and manufacturing.

2. **Electronics:** diamonds are used as heat sinks in electronic devices such as cell phones, laptops and other electronic equipment. This is due to their excellent thermal conductivity.

3. **Medical devices:** due to their hardness and ability to withstand high temperatures, diamonds are used in medical devices such as scalpels and dental drills.

4. **Sports equipment:** diamonds are used to make sports equipment such as skateboard bearings and skis because they are durable and can withstand heavy use.

5. **Scientific equipment:** diamonds are used in scientific equipment such as microscopes and telescopes. Because of their transparency in a wide range of wavelengths, they are used as windows and lenses.

6. **Jewelry:** Diamonds are commonly used in jewelry such as engagement rings, bracelets, earrings, and necklaces.

