



# AQUAMARINE

EXPLORING THE BEAUTIFUL “WATER OF THE SEA” GEMSTONE

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# INTRODUCTION

Aquamarine, a serene blue to blue-green gemstone, is a member of the beryl family, which also includes emeralds and morganite.

Its name, translating to "water of the sea," reflects its tranquil color reminiscent of ocean waters.

Aquamarine is the birthstone for March and is believed to bring peace, tranquility, and courage to its wearer.



# UNIQUE COLOR



Aquamarine's distinctive color ranges from pale blue to light green, attributed to trace amounts of iron within its crystal structure.

The intensity of the color can vary, with deeper blues generally being more valued.

Heat treatment is commonly applied to enhance the blue hue by removing yellowish tones. (Wikipedia)



# TYPES OF AQUAMARINE

- **Santa Maria Aquamarine:** This variety is renowned for its deep, intense blue color and originates from the Santa Maria de Itabira mine in Brazil.
- **Maxixe Aquamarine:** Known for its deep blue coloration, Maxixe aquamarine's color can fade upon exposure to sunlight.
- **Greenish Aquamarine:** The greenish hue in aquamarine is due to natural iron content, and some stones undergo heat treatment to enhance the blue tone.



# AQUAMARINE GRADES

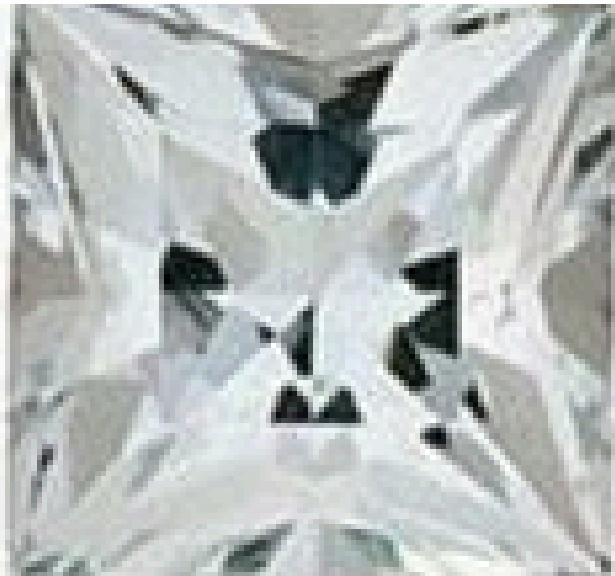
**Color: Darker blues are more valuable**

**Clarity: High-quality stones are eye-clean**

**Cut: Well-proportioned cuts enhance brilliance**

**Carat Weight: Large stones are available, but value depends on clarity and color**

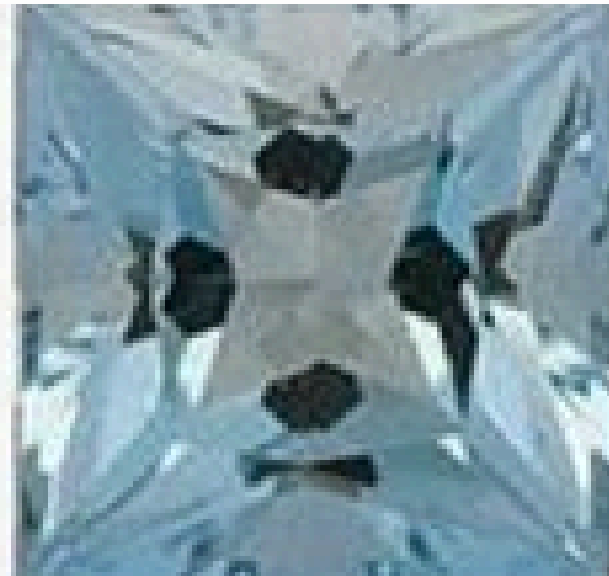
(Gemstonehub)



GRADE B



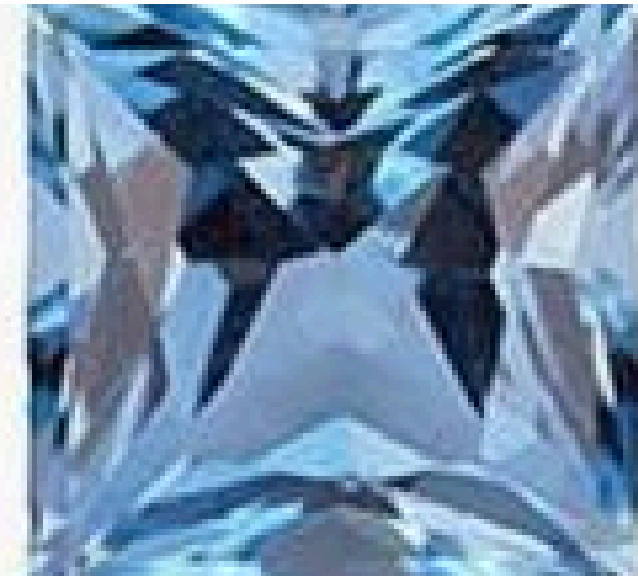
GRADE A



GRADE AA



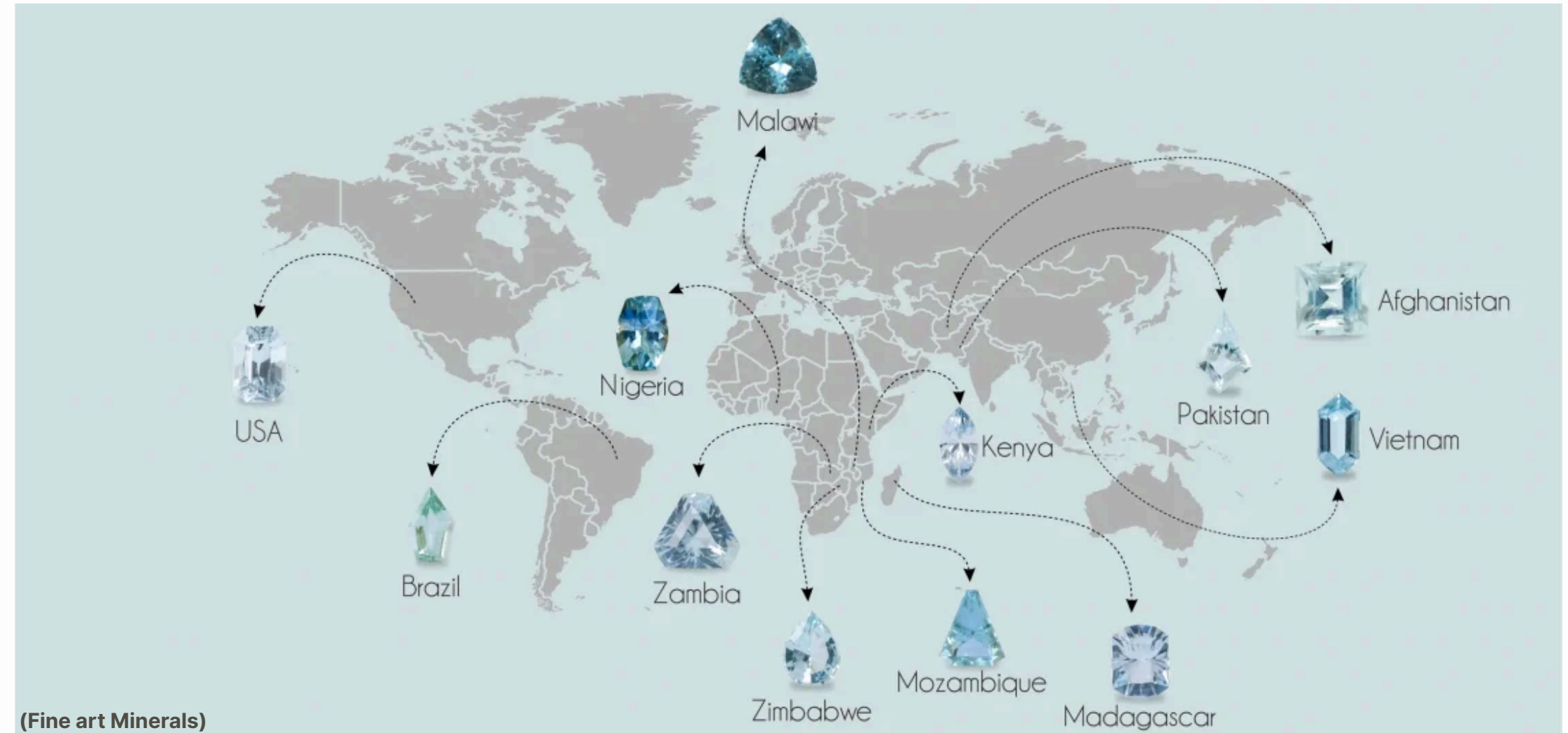
GRADE AAA



GRADE AAAA



# ORIGIN OF AQUAMARINE



- **Major sources:** Brazil, Nigeria, Madagascar, Zambia, Pakistan, Mozambique
- **Brazil** (Minas Gerais) produces the **highest quality stones**
- Found in **granite pegmatites** and **hydrothermal veins** (Wikipedia)

# APPRAISING AQUAMARINE

## Evaluating the Aquamarine

When appraising aquamarine, gemologists assess the four Cs: color, clarity, cut, and carat weight.

## Natural or Treated

Natural, untreated stones with deep blue hues and excellent clarity command higher prices.

## Heat Treatment

Heat-treated stones are common and generally accepted in the market, but untreated stones may be more valuable to collectors. (Gem Society)







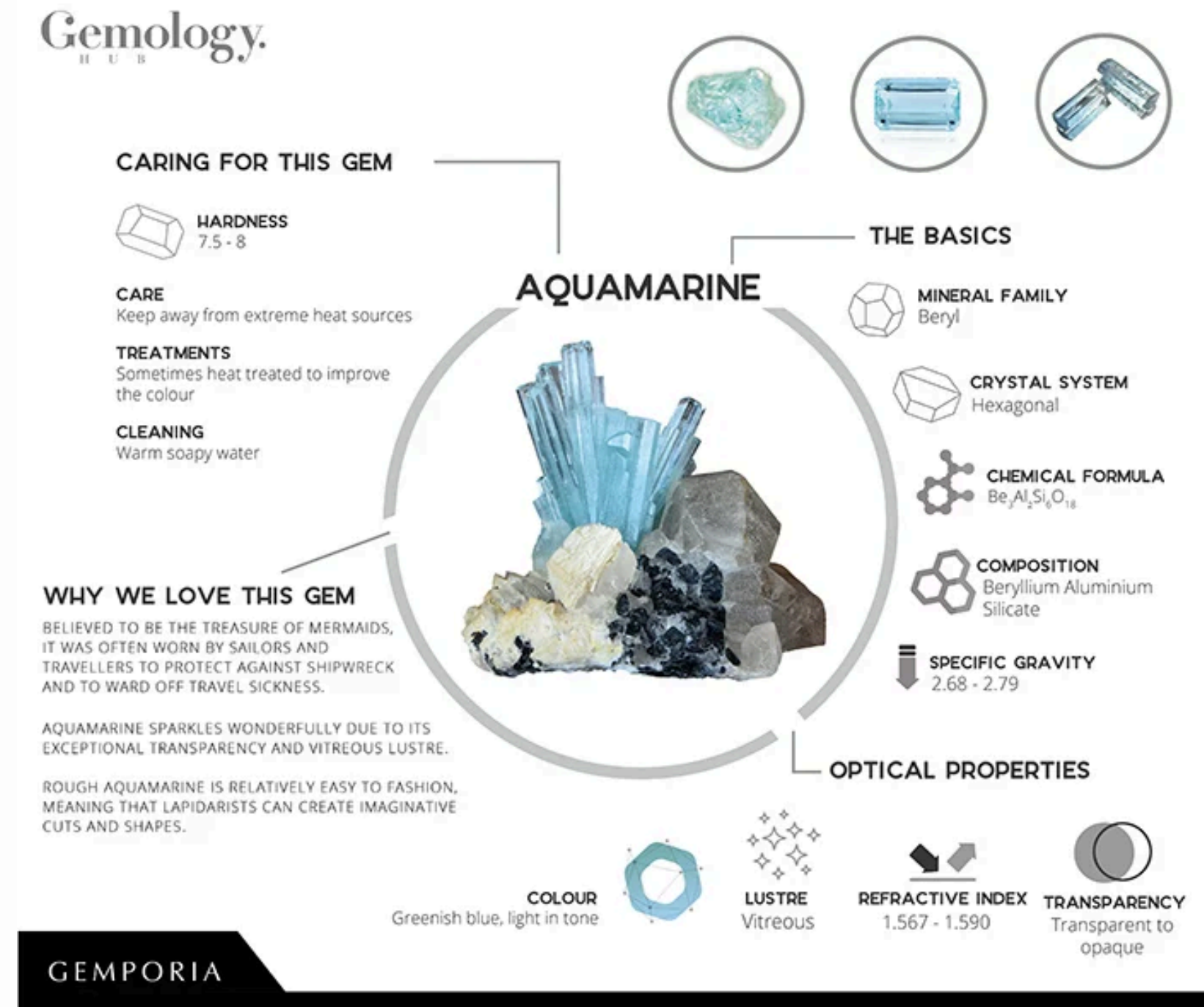
# CHARACTERISTICS OF (4CS)

- **Color**: Aquamarine ranges from a **delicate light blue to a rich deep blue**, with the **deeper, more intense shades** being the most valuable and sought after.
- **Clarity**: High-quality aquamarines are **typically eye-clean**, meaning they are **free from visible inclusions**, enhancing their **brilliance and transparency**.
- **Cut**: The most **popular cuts include emerald, oval, and round**, each carefully **crafted to maximize the stone's brilliance, light reflection, and overall appeal**. Other **fancy cuts may also be used** to create unique and artistic jewelry designs.
- **Carat Weight**: Aquamarines are available in a **wide range of sizes**, with **larger specimens being relatively common** compared to other gemstones. However, their value is influenced by a combination of clarity, color saturation, and overall quality.



# GEMOLOGICAL PROPERTIES

- **Category:** Beryl variety
- **Chemical Formula:**  $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$
- **Color:** Pale blue to light green
- **Hardness:** 7.5–8 (Mohs scale)
- **Crystal System:** Hexagonal



- Belongs to the Beryl family
- Formed over millions of years in granite pegmatites
- Hexagonal crystal system with a conchoidal fracture



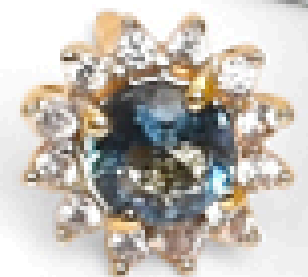
# PROCUREMENT INFORMATION

Procured  
from finished  
gems from 3-  
4 vendors.

Very time  
consuming to  
sort through  
the entire  
lot.

Only few  
vendors have  
this rare hue  
of  
Aquamarine.

Out of 100  
pcs, only 20-  
30 pcs  
matched our  
color criteria



# RARITY



Limited Source



Exceptional Clarity



Unique Color



Finding large, high-quality specimens is rare.



Specific geological conditions required for formation.



Market Demand



Each Aquamarine possesses distinct qualities.







# CARE AND MAINTENANCE

Aquamarine, with a hardness of 7.5 to 8 on the Mohs scale, is a relatively durable gemstone but still requires proper care and maintenance to retain its beauty and integrity. Proper cleaning of aquamarine helps preserve its luster and clarity. Here are the recommended cleaning methods:

- **Mild Soap Solution:** A gentle soap mixed with warm water is typically safe for cleaning aquamarine. Using a soft-bristle brush can help remove dirt and oils.
- **Ultrasonic Cleaners:** Many jewelers use ultrasonic cleaners for aquamarine, but caution is advised, especially for stones with visible inclusions or fractures.
- **Avoid Harsh Chemicals:** Chemicals such as bleach or ammonia can damage the stone and should be avoided.



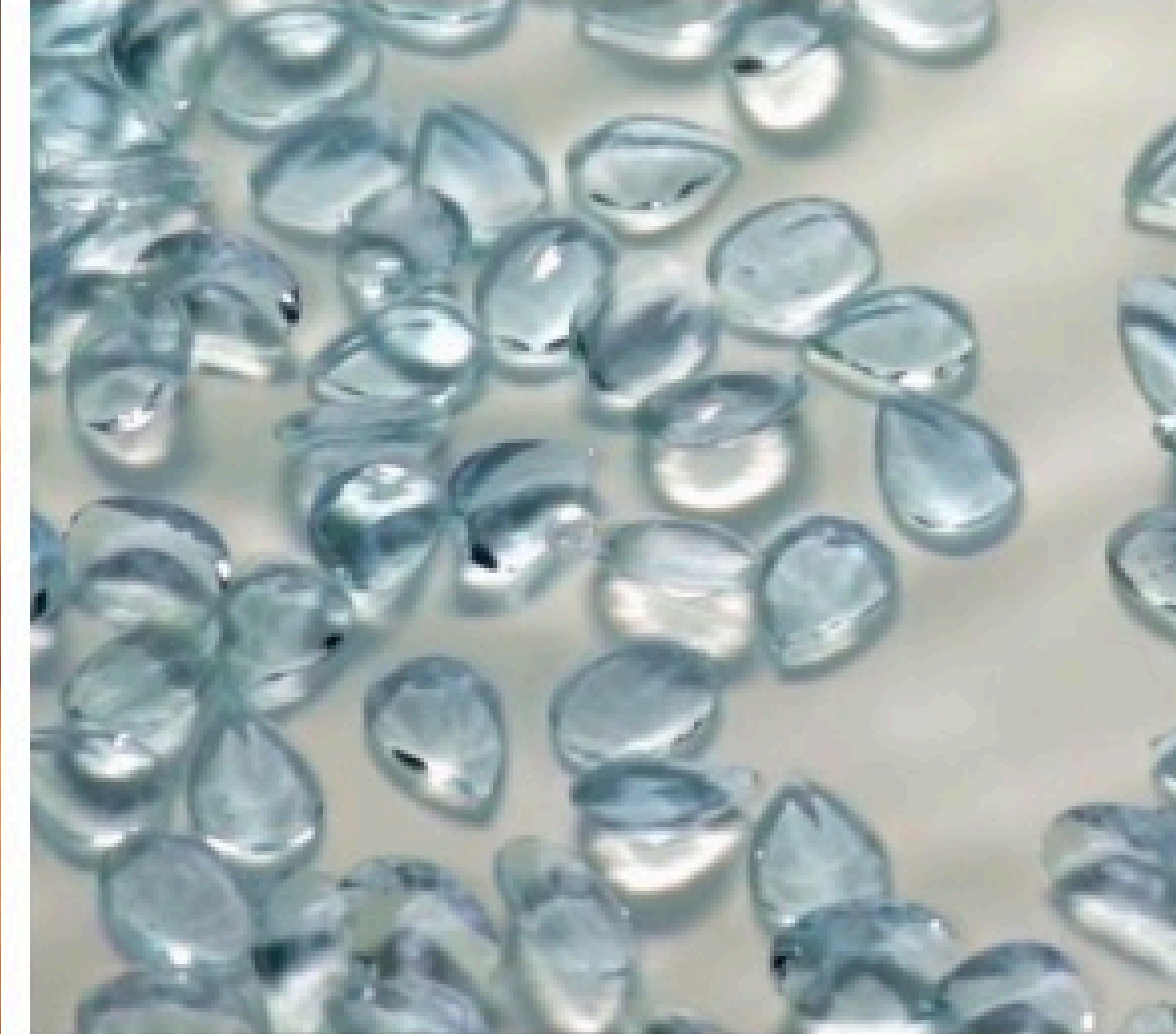


# MINING AQUAMARINE

- An artisanal miner is subsistence miner who is not officially employee but works independently.
- Mine minerals using their own resources, usually by hand.
- Extracts rough stone from ground using simple pulley system.
- They also use pickaxes, shovels and hammers.
- Mining aquamarine is a lengthy and tiring process.
- It makes these gemstones so special.



SNIPPETS OF  
CUTTING  
PROCESS







# FAMOUS PIECES OF AQUAMARINE



# DOM PEDRO AQUAMARINE



The **Dom Pedro Aquamarine** is the **world's largest cut aquamarine, weighing 10,363 carats**. Discovered in the **late 1980s in Minas Gerais, Brazil**, this remarkable gemstone was meticulously fashioned into an **obelisk shape by gem artist Bernd Munsteiner**. It is currently **on display** at the **Smithsonian Institution's National Museum of Natural History in Washington, D.C.**

# THE ROOSEVELT AQUAMARINE



The Roosevelt Aquamarine is a 1,298-carat gem presented to First Lady Eleanor Roosevelt during a diplomatic visit to Brazil in 1936. This impressive stone is among the largest cut aquamarines and is currently housed at the Franklin D. Roosevelt Presidential Library and Museum.



# QUEEN ELIZABETH'S AQUAMARINE TIARA



In 1953, to commemorate Queen Elizabeth II's coronation, the people and president of Brazil gifted her a necklace and matching pendant earrings featuring aquamarines and diamonds. The Queen was so enamored with the set that in 1957 she commissioned a matching tiara, which was later complemented by a bracelet and brooch from Brazil in 1958.



# MEGHAN MARKLE'S AQUAMARINE RING



**Meghan Markle, the Duchess of Sussex**, has been seen wearing a **striking aquamarine ring** that once belonged to her **late mother-in-law, Princess Diana**. The ring features a large **emerald-cut aquamarine** set on a **simple band** and is **estimated to be worth around £75,000**. Meghan first wore the ring at her wedding reception in 2018 and has since been spotted wearing it on several occasions.





# GEMLORE AND SYMBOLISM OF AQUAMARINE



## Maritime Legends:

The name "aquamarine" is derived from the Latin words aqua (water) and marina (sea), reflecting its deep connection to oceanic elements. Ancient mariners believed that aquamarine originated from the treasure chests of mermaids and served as a talisman to protect sailors from the perils of the sea, ensuring safe voyages and calming turbulent waters.

## Symbol of Youth and Happiness:

Beyond its maritime associations, aquamarine has been regarded as a symbol of youth, happiness, and eternal life. Its clear, tranquil color is thought to embody the essence of spring and renewal, bringing joy and hope to those who wear it.







## Healing and Protective Properties

In various traditions, aquamarine has been credited with numerous healing properties. It was **believed to alleviate ailments related to the throat, stomach, and teeth.** Additionally, the gemstone was thought to **enhance clarity of mind, promote wisdom, and protect against deceit.** During the **Middle Ages**, aquamarine was **considered an "oracle" crystal**, used in **divination practices** to reveal **hidden truths** and **foresee future events.**

## Association with Love and Relationships

Aquamarine has also been **linked to love and marital harmony.** In ancient times, it was **believed to rekindle the love of married couples** and was **often given as a gift to celebrate anniversaries.** In India, aquamarine jewelry became a **traditional wedding gift, symbolizing a long and prosperous union.**





LET'S PLAY AND ACE THE  
QUIZ



1. What does the name "Aquamarine" mean?
  - a) Sky stone
  - b) Water of the sea
  - c) Ocean jewel
  - d) Blue crystal
2. Which is the largest cut aquamarine in the world?
  - a) The Roosevelt Aquamarine
  - b) Queen Elizabeth's Aquamarine Tiara
  - c) The Dom Pedro Aquamarine
  - d) Meghan Markle's Aquamarine Ring
3. What is a key feature of high-quality aquamarine?
  - a) Deep green color
  - b) Presence of many inclusions
  - c) Deep blue hue with high clarity
  - d) Red fluorescence under UV light
4. Which famous aquamarine piece was gifted to Queen Elizabeth II by Brazil?
  - a) Dom Pedro Aquamarine
  - b) Meghan Markle's Aquamarine Ring
  - c) The Roosevelt Aquamarine
  - d) Aquamarine Tiara







5. Which of these is NOT a known type of aquamarine?

- a) Maxixe Aquamarine
- b) Santa Maria Aquamarine
- c) Imperial Aquamarine
- d) Midnight Aquamarine

6. What was aquamarine believed to protect sailors from?

- a) Storms and shipwrecks
- b) Poisonous sea creatures
- c) Losing their way
- d) Running out of food

7. Who previously owned Meghan Markle's aquamarine ring?

- a) Princess Diana
- b) Queen Elizabeth II
- c) Kate Middleton
- d) Prince Harry

8. What is aquamarine traditionally associated with?

- a) Strength and war
- b) Fire and passion
- c) Tranquility and courage
- d) Darkness and mystery





9. Where is the highest-quality aquamarine (Santa Maria) found?

- a) India
- b) Brazil
- c) Russia
- d) Australia

10. What is the most common cut for aquamarine gemstones?

- a) Heart cut
- b) Emerald cut
- c) Cushion cut
- d) Princess cut





THANK YOU. STAY  
CURIOUS, STAY INSPIRED!

**Picture Credits:** Shop LC, Gem Society, Wikipedia, Google Images, Pinterest, Shop LC Workshop, The Court Jeweller, The Sun, Vogue France, Gemporia, Fine Art Mineral, Smithsonian Institute, Gems NY, People.





## ANSWERS TO THE QUIZ

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