Established over a 60-year period of ground-breaking research on pearls, GIA's 7 Pearl Value Factors<sup>™</sup> provide a systematic way to evaluate nacreous pearls, and to describe their quality in a way everyone can understand.



# Caring for Pearls

With reasonable care, pearl jewelry can be a lasting treasure.

- For routine care, it's best to wipe pearls with a very soft, clean cloth after each wearing.
- Pearls should never be cleaned in an ultrasonic or steam cleaner. It's safe to use warm, soapy water for occasional, thorough cleaning (assuming that the nacre is in good condition). If the pearls are strung, be sure the silk is completely dry before wearing.
- Store pearls separately from gems and metal jewelry, which may scratch their surfaces.
- Never store pearls in a plastic bag. Plastic can emit a chemical that will damage the surface of pearls. The same is true of cotton wool.
- Never store pearls in a safe deposit box for a long time. Like your skin, pearls need a little moisture so that they will not dry out.
- · Pearls can be damaged by many chemicals and all acids. The list includes hair spray, perfume, cosmetics, and even perspiration. Always apply perfume, hair products and cosmetics before putting on your pearl jewelry.
- Remember: when dressing, pearls should be the last thing you put on and the first thing you take off.



# Cultured Pearl Varieties

### Akova

Pinctada fucata

- (Akoya pearl oyster)
- Bead and non-bead cultured
- Environment: Saltwater
- Colors: White or cream. some with hints of pink or green
- Size: Generally between 3-7mm but can occasionally reach 9-10mm

### Tahitian

Pinctada margaritifera (black-lipped pearl oyster)

- Bead and non-bead cultured
- Environment: Saltwater
- Colors: Eggplant purple, peacock green metallic grey, and greyish blue.
- Size: Generally between 7-12mm but can very occasionally reach over 16mm

## South Sea

Pinctada maxima (silver- or gold-lipped pearl oyster)

- Bead and non-bead cultured
- Environment: Saltwater
- Colors: Silver, white, and golden
- Size: Generally between 8-16mm but can very occasionally reach over 20mm

### Freshwater

Hyriopsis cumingii, or hybrid

- Bead and non-bead cultured
- Environment: Freshwater. Usually cultured in lakes and ponds. Occur in a wide range of sizes, shapes, and colors.

# 100.000

The estimated number of mollusk species. Only a small number are used to produce cultured pearls.





The size and weight of one of the largest ancient pearls ever found. In the Paphos pin from the temple of Aphrodite on the island of Cyprus.









1 in 10,000

The odds of finding a conch pearl.



14mm and 70 grains



Purchase pearls with confidence. Ask your jeweler to provide a GIA Pearl Report.



# About GIA

GIA is a nonprofit education and research institute dedicated to the study and the advancement of gemological science. Established in 1931, GIA exists to protect all purchasers of gemstones, by providing the education, laboratory services, research, and instruments needed to accurately and objectively determine gemstone quality.

To learn more visit www.gia.edu

# The World's Foremost Authority in Gemology<sup>™</sup>

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# Pearls and the GIA 7 Pearl Value Factors<sup>™</sup>





# Queen of Gems

Treasures from the earth's rivers, lakes, seas, and oceans. pearls have always embodied the power and life-sustaining nature of water.

The natural pearl is quite likely the earliest gem used for adornment. Our ancestors foraged seashores and riverbeds collecting mother-of-pearl shells for ceremony and exchange. When a rare pearl was found, it became a sacred possession.

Ancient Persians associated pearls with tears of the gods. Ancient Greeks believed they were created by moonlight on the water. To ancient Chinese, they guaranteed protection from fire. For Europeans, pearls symbolized modesty, chastity, and purity, and are still considered traditional gems for brides.

While natural pearls remain very rare, pearls today are no longer the sole property of royalty and the wealthy. Thanks to advances in modern culturing techniques, pearls are one of the most accessible gems worldwide.



# What is a Pearl?

Pearls are gems that form inside a living seawater or freshwater mollusk. They come in a dizzying array of sizes, colors, and shapes. This is due to the unique conditions under which pearls form, with mollusk species, environmental conditions, and often human ingenuity all playing a part in creating incredible diversity.

### Natural Pearls

When the mantle of a mollusk is naturally irritated by what may be an organism of microbe size, a "pearl sac" forms and isolates the irritant within the mantle. The mollusk secretes calcium carbonate. often in the form of nacre, to cover the irritant. As the mollusk deposits further layers, the pearl gradually grows in size. Natural pearls occur randomly and most are usually irregularly shaped. Large round natural mantle pearls are especially rare—and prized.

#### Bead Cultured and Non-Bead Cultured Pearls

When a pearl forms with human assistance, the result is a cultured pearl. Technicians instigate formation by implanting a bead and/or piece of mantle tissue into a mollusk. The implanted tissue deposits layers of nacre over the bead (bead cultured), or over secreted organic material (non-bead cultured) and over time a miraculous pearl is born.

### Pearl Treatments

Human intervention may occur or continue after harvest in an effort to improve a pearl's color, shape, surface appearance, weight, and durability. Processes may include bleaching, heating, dyeing, irradiation, and coating to enhance color; peeling to improve shape and/or surface appearance; or filling and impregnation to increase weight or enhance durability.





#### What is a Keshi cultured pearl? 'Keshi" is an old trade term for a small natural seed pearl. Today, the term is often used to describe a non-bead cultured pearl of any size that forms in marine pearl-oysters or freshwater mussels as a by-product of the culturing process.



### What is a blister pearl?

A mollusk may initially produce a pearl in the mantle that eventually adheres to the inside of the shell and forms a "blister pearl" rather than forming in the mantle. Natural "blisters" occur around a variety of irritants that become trapped between the mantle and the shell. Natural "blister pearls" and "natural blisters" occur randomly in nature. Cultured blister pearls result from human intervention.

to overlie the bodycolor

# GIA's 7 Pearl Value Factors™

Size - Stated in millimeters, to two decimal places.

- Shape Described as round, near-round, oval, button, drop, semi-baroque or baroque. Pearls not falling into these groupings are described as they appear.
- Color A combination of the pearl's dominant bodycolor, overtone, and orient.
- Bodycolor takes into account hue, tone, and saturation • Overtone is a noticeable translucent color that appears
- Orient is a mixture of colors shimmering just below the pearl's surface
- Luster The light reflected from or near the pearl's surface, evaluated by the intensity and the sharpness of reflection.
- Excellent (reflections appear bright and sharp)
- Very Good (reflections appear bright and near sharp)
- Good (reflections are bright but not sharp)
- Fair (reflections are weak and blurred)
- Poor (reflections are dim and diffused)





**Surface** - Blemishes or irregularities confined to the pearl's surface, taking into account the size, number, nature, location, visibility, and type of surface characteristics.

- Clean (blemish-free or containing minute surface characteristics that are difficult to see)
- Lightly Spotted (only minor surface irregularities visible)
- Moderately Spotted (noticeable surface characteristics)
- Heavily Spotted (obvious surface irregularities that might affect durability)

Nacre Thickness - Average nacre thickness measurements for bead cultured pearls are optional descriptions on GIA reports. However, in cases where the nacre coating on a bead cultured pearl is too thin and/or damaged thereby potentially impacting durability, then GIA reports will clearly note this fact.

Matching - The uniformity of appearance in strands and multi-pearl pieces.

- Excellent (uniform appearance and drilled on-center)
- Very Good (very minor variations in uniformity)
- Good (minor variations in uniformity)
- Fair (noticeable variations in uniformity)
- Poor (very noticeable variations in uniformity)
- Not Applicable (for single pearls and certain intentionally mismatched items)

# How GIA Classifies and Identifies Pearls

Of all gem materials, pearls are the most challenging to evaluate. Size, weight, shape, color, whether the pearl is natural or cultured, and a host of other complex factors contribute to determining quality, desirability - and ultimately, value.

A leader in pearl identification and classification since 1949. GIA's commitment to education, research, and global quality standards, means you can be assured of the most trusted pearl assessment possible.

Gemologists specializing in pearls identify the pearl type, mollusk, and any detectable treatments using both standard and advanced testing equipment. Pearls are weighed with an electronic micro-balance and measured using special digital calipers. These specialists carefully compare the pearl examined to comprehensive pearl masters to determine color and classify other factors. A second team independently repeats all necessary observations and testing to ensure the most precise and objective evaluation. Your pearl or pearl jewelry may be examined by additional gemologists and research specialists as needed.

