

Objective

The student will be able to estimate lengths in millimeters.

Vocabulary

cultured gemstone

harvest

Background

The pearl was probably the earliest recognized gemstone. Greeks believed they were divine teardrops and the Chinese believed they stood for preciousness and purity. Ancient Syrians wore pearl necklaces, and highborn Roman women wore massive pearl earrings. Even the English crown jewels include pearls.

Pearl oysters, which are only distantly related to the commercially harvested oyster, do not occur in the United States. Most come from the South Sea and Persian Gulf. The silver-lipped oyster, LaPaz oys-

ter, and the black-lipped oyster are the most common natural pearl producers.

Most any mollusk is capable of making "pearls." When small particles of sand, shell, or mud work their way into the mollusk body, they are covered with nacre, creating a "pearl." But only the South Sea and Persian Gulf species produce peals that are round and have a valuable luster.

Today, the pearl industry exists largely on cultured pearls. This process was developed in Japan and requires that a "seed" of foreign material be implanted into the oyster. The pearl forms around the seed. Most of these pearls are superior to natural pearls. The most common size pearl used in necklaces is eight millimeters in diameter. Although, they are available in other sizes. One necklace of 45 cultured pearls 16 to 19 mm in diameter recently sold for over \$2 million! Over 2000 pearl farms operate in Japan, the world's leading pearl exporter.

Exercises

Pearls are bought and sold based on their diameter which is measured in millimeters.

- •Estimate the number of millimeters in one inch.
- •How many 8 mm pearls would it take to be one inch in length?
- •A choker necklace is 14 to 16 inches long. How many 8 mm pearls would it take for a choker?
- A princess necklace is 16 to 20 inches long. How many 8 mm pearls would it take for a princess?
- A matinee necklace is 20 to 26 inches long. How many 8 mm pearls would it take for a matinee?
- An opera necklace is 28 to 32 inches long. How many 8 mm pearls would it take for an opera?

- •A rope necklace is 40 inches long. How many 8 mm pearls would it take for a rope?
- \bullet Estimate the number of 12 mm pearls in one inch.
- •How many 12 mm pearls would it take for a choker? A princess?
- •How many 12 mm pearls would it take for a matinee? An opera?
- *Estimate the number of 16 mm pearls in one inch. How many 16 mm pearls would it take for a choker? A princess? A matinee? An opera?