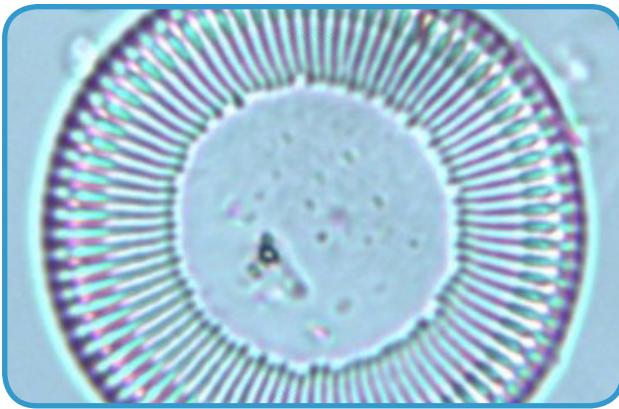


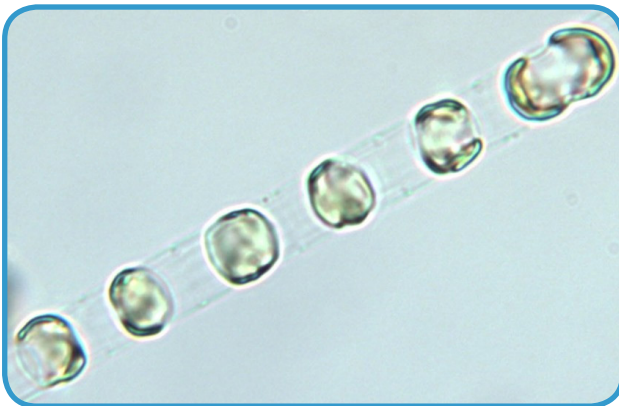
fact sheet



Pennate diatom



Centric diatom



Chain-forming diatom

Algal Group:

Bacillariophyceae (diatoms)

Description:

Diatoms are microscopic, unicellular organisms that have a cell wall made of silicon dioxide. For this reason, they are said to live in “glass houses.” There are thousands of types of diatoms. They exist in two general shapes: cigar or pen-shaped (called pennate) and disk/drum-shaped or cylindrical (called centric). Golden in appearance, diatoms are unique because they produce oil whereas other types of algae make starch.

Habitat:

Diatoms are distributed throughout marine and freshwater habitats. Marine diatoms are generally found during the spring and autumn because they are mainly cold-water organisms and can tolerate low light. Freshwater diatoms can grow in standing water and are seen as a brownish sludge on the bottom. In rapid flowing streams, diatoms may coat rocks and stones with a gelatinous material that makes them slippery.

Significance:

Some diatom species can produce aromatic odors when present in small numbers. However, these same species often produce a fishy odor when they become more abundant. Diatom blooms can be initiated by an increase in nitrates and phosphates. Diatoms play an important role in the environment, serving as a primary food source for zooplankton (mainly crustaceans and fish larvae) and as a major source of atmospheric oxygen.