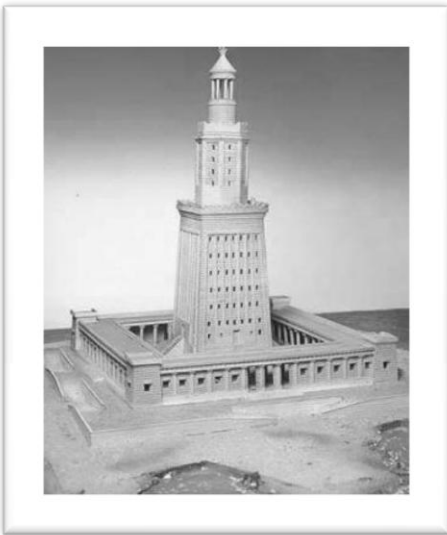


# What is a Lighthouse?

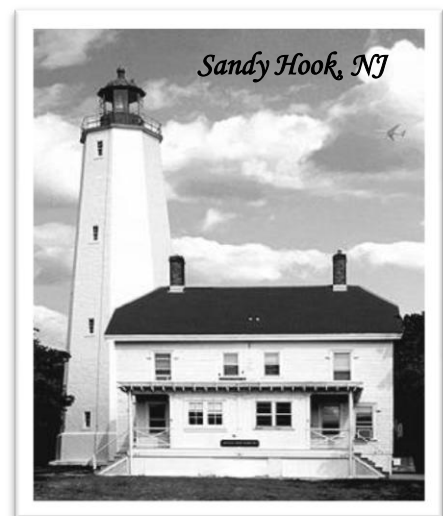
A *lighthouse* is a tower topped with a very bright light called a *beacon*. The beacon is used by sailors to help guide their ship at night. Lighthouses come in all shapes and sizes. They are usually located on the coast, on islands, or in the middle of busy *harbors*. Florida lighthouses are commonly found near inlets, on low lying islands called *keys*, or over dangerous underwater *reefs*. No matter where it is located the purpose of a lighthouse is always the same; to warn ships of danger and guide them safely on their way.



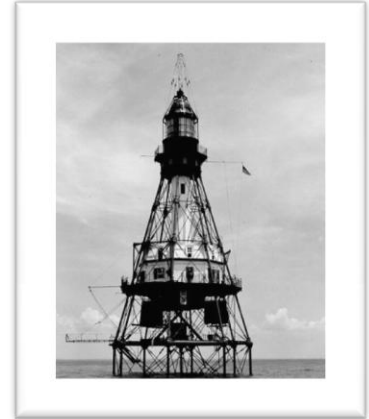
The world's first recorded lighthouse was the Pharos Lighthouse in Alexandria, Egypt. Built in 280 B.C., the Pharos Lighthouse was more than 450 feet tall and had a giant statue of Poseidon (the Greek god of the sea) at the top. A huge bonfire was lit every night at the top of the tower and was visible from more than thirty miles away! The Pharos Lighthouse was so huge that it was named one of the Seven Wonders of the Ancient World. The tower was used for more than 1,500 years before it was destroyed by an earthquake in 1303 A.D.

The earliest American lighthouses were short towers commonly made of wood or stone. Many of these towers caught fire or fell down after only a few years of service. Of the forty towers that were constructed before 1800, only four survive. Built in 1764, the Sandy Hook Lighthouse at the entrance to New York Harbor is the nation's oldest surviving lighthouse.

Realizing sturdier towers were needed, the U.S. Light House Establishment all but abandoned the use of wood in its lighthouses and began building new ones out of brick and cut stone. Later towers were constructed out of iron and concrete as building technology improved. Completed in 1962, Charleston's 140 foot tall Sullivan's Island Lighthouse even has an elevator!



The height and shape of a lighthouse was determined by both its location and purpose. Lighthouses built on tall cliffs in the north were usually much shorter than those built on low lying barrier islands in the south. Keepers' dwellings were often attached directly to the tower in the north but were usually separate from the towers in the south. Reef Lights (lighthouses built directly over dangerous underwater reefs) had the keepers' quarters built into them.

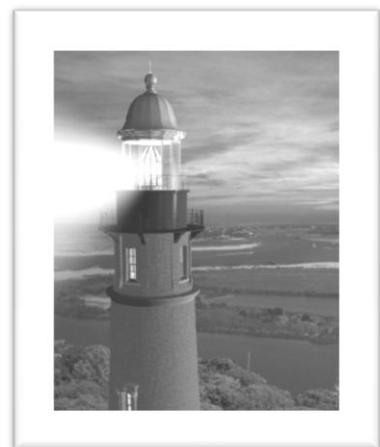


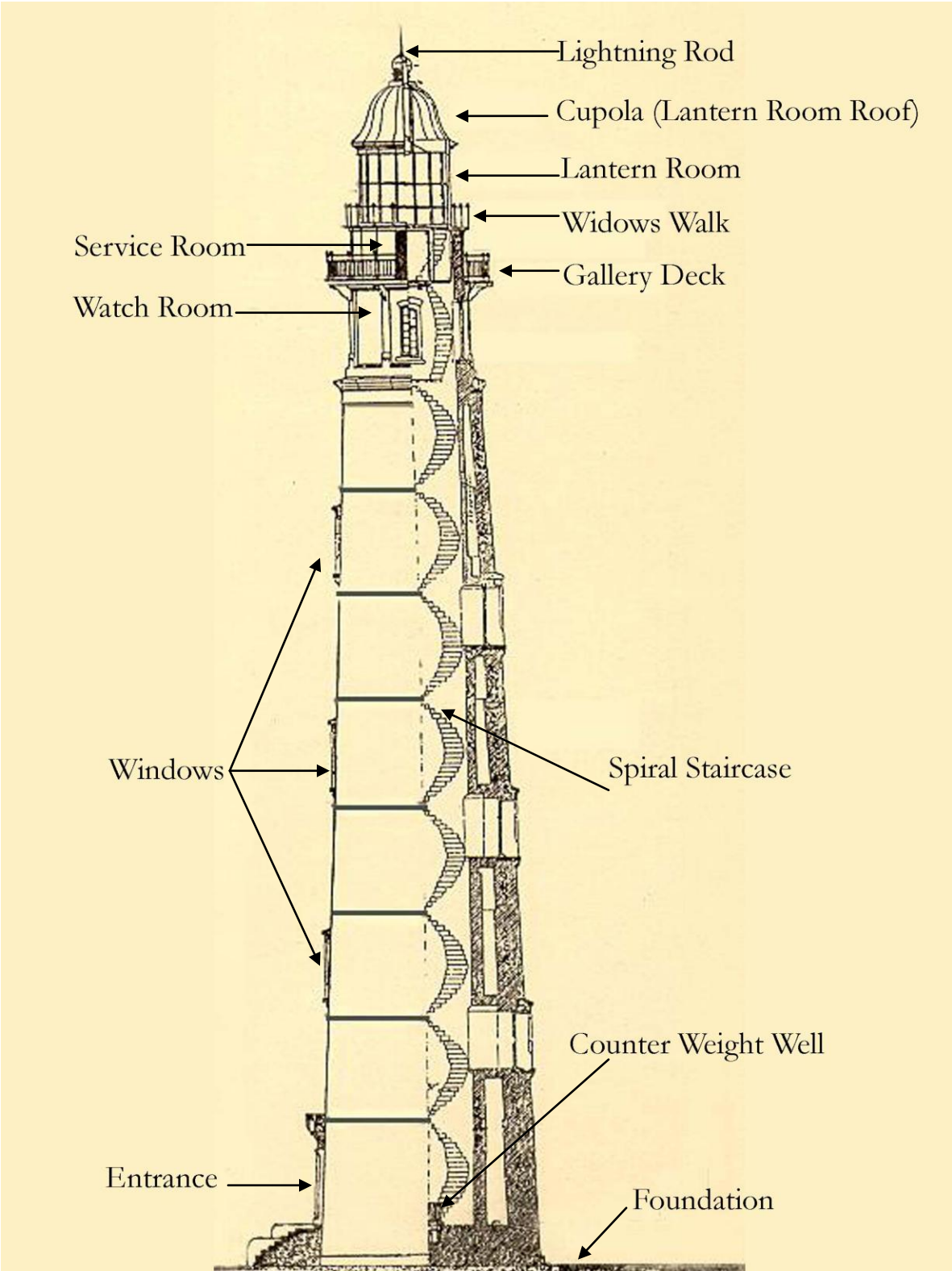
Lighthouses are very similar no matter their size, shape, or location. They all serve the same purpose and therefore have many things in common. The different parts that make up a lighthouse (let's call it lighthouse anatomy) are nearly identical in design all around the world.



All lighthouses have a *beacon* (light) at the top. The beacon is housed in a room with large windows all the way around called a *lantern room* that is topped with a domed roof called a *cupola*. A *spiral staircase* (or sometimes a ladder) provides a way to climb to the top of the tower. Most lighthouses also feature a few rooms near the top. The *service room* is used to store cleaning and maintenance supplies in while the *watch room* serves as a place for the keeper to keep watch from at night when the beacon is lit. Additional features common to nearly all lighthouses include external catwalks called the *gallery deck* and *widows walk*, a *lightning rod*, windows, and a *ball vent* at the very top of the lighthouse that allows heat to escape.

No matter their size or shape, lighthouses have served an important role in keeping ships and sailors safe from harm. Their shining lights have served as important navigational aids for thousands of years and have prevented countless shipwrecks by warning unsuspecting vessels away from unseen dangers. Although they are now considered old fashioned and obsolete, lighthouses continue to serve as symbols of hope to this day.

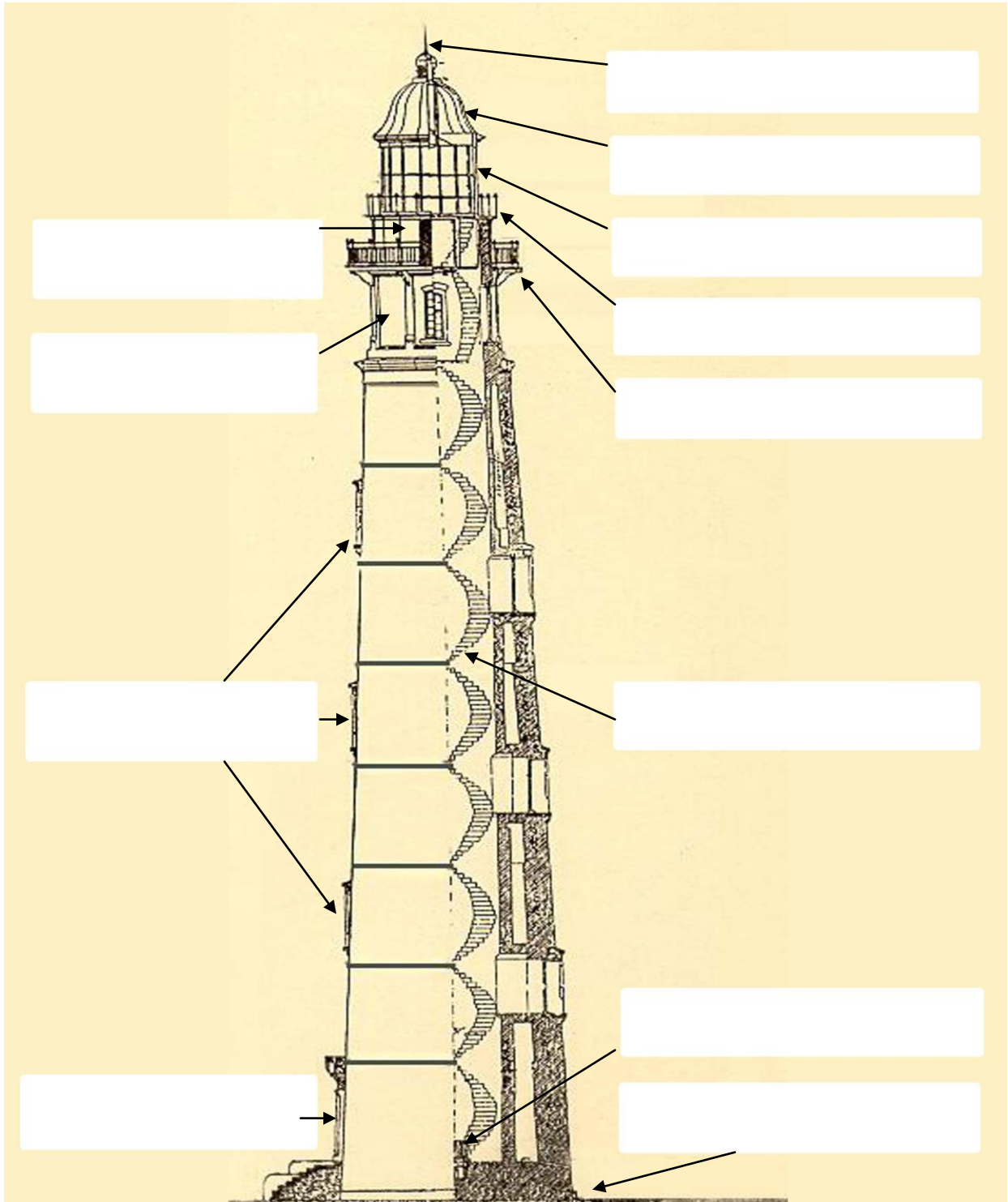




Student Name: \_\_\_\_\_

Date: \_\_\_\_\_

Directions: Identify each part of the lighthouse below



## Lighthouse Anatomy Terms

- 1 Lightning Rod:** Lighthouses are struck by lightning a regular basis. Metal poles called lightning rods are attached to the tops of lighthouses to help minimize the damage created by lightning strikes. A lightning rod is attached to a thick copper wire that runs from the top of the lighthouses down to the ground. When lightning strikes the tower, it enters through the lightning rod, travels down the wire, and goes into the ground where it can cause less damage.
- 2 Cupola:** The cupola is the roof of the lantern room. Because temperatures inside the lantern room can often soar well above 110 degrees, a metal ball at the top of the cupola provides ventilation and allows the heat to escape.
- 3 Lantern Room:** The lantern room is the most important room in a lighthouse because that is where the lighthouse beacon (or light) is located. The walls of the lantern room are made of glass so the light can be seen at night.
- 4 Widow's Walk:** Named after the wives of sailors who watch for the return of their husband's ship from the top of their house, the widow's walk is a narrow platform that provides access to the outside of the lantern room.
- 5 Gallery Deck:** The gallery deck is a platform that circles the tower just below the lantern room. You can access the gallery deck from the service room through a heavy iron door. Lighthouse keepers would watch the weather and scan the horizon for approaching ships from the gallery deck.
- 6 Service Room:** The service room is the room just below the lantern room where keepers would store cleaning equipment, spare parts for the beacon, and tools for working on the lighthouse.
- 7 Watch Room:** The watch room is where keepers kept their log. A log is a kind of journal that keepers wrote brief descriptions of daily events, weather conditions, and notes in. Additional items used by keepers while on watch or while working at the top of the lighthouse were stored in this room as well.
- 8 Windows:** Most lighthouses had windows to cool the tower and provide light.
- 9 Spiral Staircase:** Most lighthouses have a long circular staircase leading from the bottom of the tower to the top. Landings are located about every 15 feet.
- 10 Counterweight Well:** Before electricity, lighthouse beacons were turned using a system of gears powered by weights that hung down the center of the tower. The counterweight well would catch any weights that broke loose.
- 11 Entrance:** Every lighthouse has a door leading into it.
- 12 Foundation:** A lighthouse's foundation keeps it from falling over.