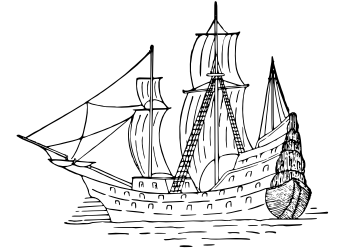


Name: _____

Importance of Boat Building and the Nile River In Ancient Egypt

A marine engineer designs, builds and maintains ships. Ships are important for many reasons, including for trade, travel, and defense. For example, the United States Navy hires marine engineers to build submarines for our country's military use. Other companies, such as those that build yachts, employ marine engineers to build luxury boats that transport people from one destination to another. These yachts can be very expensive!



Marine engineers also build other types of ships, like fishing vessels and oil tankers. Because 71 percent of the Earth's surface is covered by water, boats have always been an essential form of transportation.

While "marine engineer" is a modern-day term, boat building is a centuries-old activity that used many of the same engineering principles that are used today. For example, Ancient Egyptians built different types of boats thousands of years ago that had specific purposes. Today, you will imagine that you are a marine engineer in Ancient Egypt. Follow the steps below.

Step 1: Read about Boat Building in Ancient Egypt

Read the article below about Ancient Egypt. Then answer the questions.

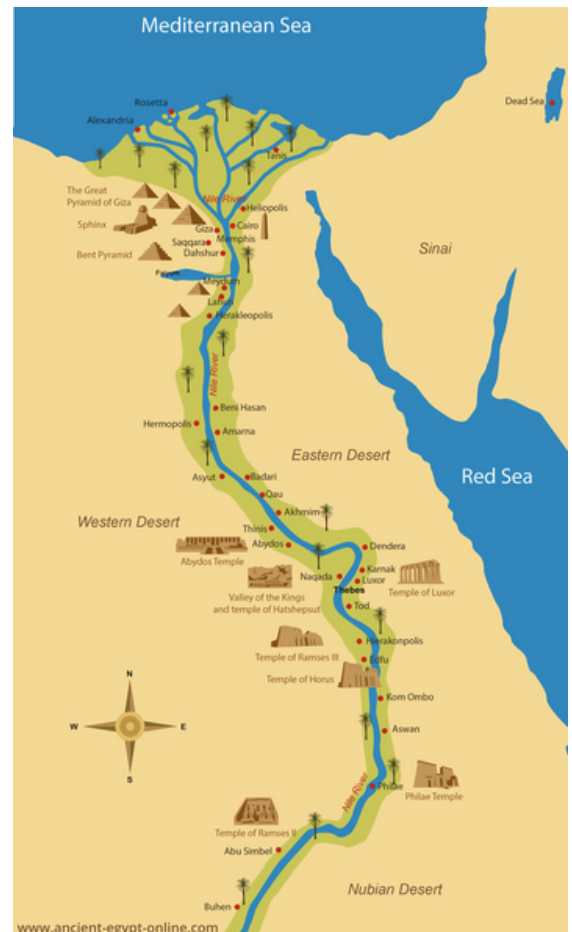
Egypt's Location

Egypt is located in the northeast corner of Africa. The country borders two important water features: the Mediterranean Sea to the north and the Red Sea to the east. However, the most important water source in Egypt is the Nile River. Stretching over 4000 miles, the Nile is the longest river in the world. For thousands of years, the Nile River has been critical to the economic, military, and cultural growth and success of the Egyptian people.

Egypt was one of the first river-valley civilizations. These early civilizations built their cities along rivers. Rivers provided people with a source of water to grow crops and allowed people to establish trade routes and transport people, animals, and goods along the river. The Egyptians built their cities along the Nile River.

This map shows the location of important cities and landmarks of Ancient Egypt along the Nile River.

Credit: <https://www.ancient-egypt-online.com/images/map-of-ancient-egypt.png>



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Importance of Boat Building and the Nile River In Ancient Egypt

The First Boats

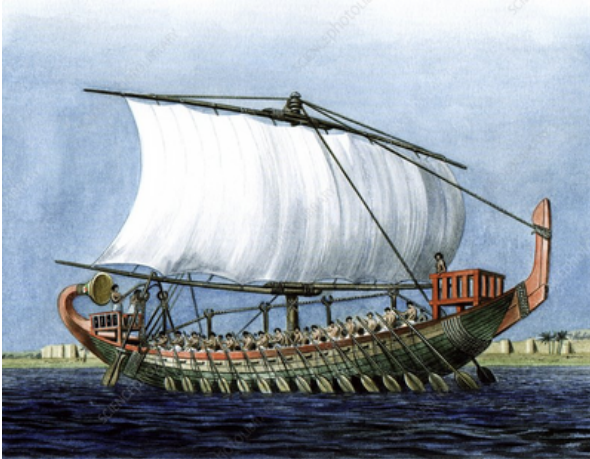
The Ancient Egyptians began building boats as early as 6000 BCE. These early boats, called skiffs, were constructed out of papyrus. Papyrus is a sturdy water reed that grows along the Nile. To build the skiffs, the Egyptians bundled the papyrus reeds together. The reeds were filled with air pockets, which allowed the skiffs to float.

Skiffs were used only to travel along the Nile. This is because the boats were not strong enough to travel through the harsher waters of the Red and Mediterranean Seas. As knowledge of boat building grew, Ancient Egyptians constructed ships made out of wood. These ships were much larger and sturdier compared to the skiffs. This meant that they could handle rougher waters that boats encountered traveling on the Red and Mediterranean Seas. The wood boats could also carry more people and goods compared to skiffs.

To build the ships, the Egyptians used two types of wood: acacia wood from Egypt and imported cedar wood from Lebanon. The boats were constructed without nails. Instead, boat builders used short wood planks that hooked together and then were tied with ropes. A large wood mast was also placed in the middle of the ship, which held a large square sail.

The Technology of Boat Building

The use of sails meant that the Egyptians were familiar with principles of aerodynamics, which is the study of the movement of air. The Egyptians learned that their ships could move more quickly by creating sails to harness the power of the wind. They also added large oars on each side of a ship. Men handled these large oars so the ship could move when there was little to no wind. With these new tools, Egyptians were able to travel farther because they now could harness the wind and use more manpower to navigate their ships.



Adding sails to ships meant that longer trips could be made up and down the Nile.

Picture credit: <https://www.sciencephoto.com/media/83265/view/ancient-egyptian-river-boat-artwork>

Trade

With sturdier ships, Egyptians could travel further distances. This allowed them to trade with other Egyptian cities along the Nile. Egyptian trade ships carried different kinds of goods. For example, large blocks of stone were transported from the Egyptian city of Aswan to be used at the different building sites in other Egyptian cities for the pyramids and temples. Cedar and acacia woods were transported to Egyptian cities along the Nile to boat builders to build more ships. Cattle, grain, pottery, and food were also shipped up and down the Nile.

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Importance of Boat Building and the Nile River In Ancient Egypt

During the period 1991-1783 BCE, Egyptian pharaohs built a canal to connect the Nile River with the Red Sea. As a result, new trade routes were established with countries in the Middle East, such as Syria and Anatolia.



This is an example of what an Ancient Egyptian trade ship might have looked like.

Credit: <https://digitalcollections.nypl.org/items/510d47da-98c1-a3d9-e040-e00a18064a99>

Military

Ships were also built for the Egyptian military. The ships were large enough to carry as many as 250 soldiers. Most ships were not used for sea battles. Instead, the ships transported messages and information to military leaders stationed at forts along the Nile. The ships also carried soldiers, food, and other supplies to those forts.

Ceremonies

The Egyptians also constructed ships for special purposes, like ceremonies. For example, ships were used to move statues and other representations of Egyptian gods from temple to temple. In addition, mummified bodies of pharaohs and nobility were also transported across the Nile to their tombs and burial sites.

Name: _____

Importance of Boat Building and the Nile River In Ancient Egypt

Answer the questions below using complete sentences.

5. Do you think Ancient Egyptian civilization could have survived without boats and ships? Use evidence from the passage to support your claim.

Name: _____

Importance of Boat Building and the Nile River In Ancient Egypt

Step 2: Being a Marine Engineer

Imagine you are a marine engineer in Ancient Egypt. It is your job to write a job ad to hire boat builders to help you build a new boat. Write your job ad on a piece of paper or on your computer.

Your job ad must include the following information:

- Title for the job
- Description of the job (at least two sentences that describes what the person would be doing on a day-to-day basis)
- List of three personality traits that are needed (e.g., self-starter, motivated, dedicated) and explain why each one are needed to be a successful boat builder in Ancient Egypt
- Description of the next boat that will be built, including what materials will be used and what the boat will be used for
- Your contact information so people will know how to reach you if they want to apply for the job

Want to see what a real job ad looks like?

Click here to see examples: <https://drive.google.com/drive/folders/1SBq9f6JQldfSNosmtFTdqb07gl0CBal1?usp=sharing>