

# Classroom Activity

## Measuring the Ark

*Mark Bergemann*

A great learning activity for all ages (4K–grade 12, even adults), is to go outside and mark off the actual size of Noah’s Ark. Students could first study the ark in their respective classrooms. Individual rooms, or the entire school together, could then go outside to mark off the actual size of the ark. This article provides some ideas on how this might be done.

The teacher should first introduce the ark to their class. This could be very brief. Older students, if time permits, may have a more extensive study. After this introduction, read the dimensions of the ark in Genesis 6:15 using a translation with cubits (KJV, ESV, NASB).

This is how you are to make it: the length of the ark 300 cubits, its breadth 50 cubits, and its height 30 cubits. Genesis 6:15 (ESV)

### What is a Cubit?

A cubit is the length from your elbow to your fingertips. How many inches is that? Each student could measure their own cubit and the teacher could measure hers.

People in ancient times used the cubit to measure things. That way, you could measure things without having to carry a ruler or tape measure in your pocket. People in Old Testament times used the cubit to measure the tabernacle and its contents including the Ark of the Covenant and altar (Exodus 25–38), Goliath (1 Samuel 17:4), Solomon’s Temple and its contents (1 Kings 6–8), and the statue of King Nebuchadnezzar (Daniel 3:1).

## Measuring with Your Hands and Feet

- Hand:** The width of your palm (about 4 inches) used to measure the height of horses.
- Span:** Length from your thumb tip to the tip of your little finger with your hand open and fingers apart (about half a cubit).
- Pace:** One full step as you walk (about 30 inches) used by Roman soldiers to measure the distance between cities as they marched.
- Fathom:** Width from fingertip to fingertip with your arms outstretched (about 6 feet). Sailors measured water depth in fathoms.
- League:** Distance you can walk in an hour (about 3 miles).

A foot was once the length of your foot, from your heel to your toes. An inch was the width of your thumb. While using parts of your body to measure length is convenient, there is a problem with measuring that way. Say I am building a house and go to buy many wooden boards, each ten feet long. If I buy boards cut to length by different people, each using their own foot to measure, the boards may not be the same length. That would not happen today, because now everyone uses the same foot measure—the one on a ruler. A foot is now the same length for everyone. Still, I often use my feet to measure distances, as my shoes are close to one foot long.

## How long was the cubit Noah used to build the ark?

Standardized cubit lengths ranging from 17.5–20.6 inches were used by ancient post-Flood civilizations.<sup>1</sup> Some English Bible translations define a cubit as being 18 inches long, giving the 300-cubit ark a length of 450 feet. Others define a cubit as 20.4 inches, giving the ark a length of 510 feet. The length of your cubit is fairly proportional to how tall you are. Do you think pre-Flood people were at least 6 foot 3 inches tall, making their cubit at least 20.4 inches?

---

<sup>1</sup> Bodie Hodge, “How Long Was the Original Cubit?” Answers in Genesis, <https://answersingenesis.org/noahs-ark/how-long-was-the-original-cubit/> (accessed 9-2-20)

## Measuring the Ark

A rope or heavy string could be cut to 15 feet and another to 17 feet, giving both short and long ten-cubit measures. The following example uses my congregation's Lutheran elementary school, where the north-south length of the school, parking lot, and church is about 500 feet. We start in front of the school building on its south end and mark one end of Noah's ark in chalk on the sidewalk. If we set Noah's Ark on the sidewalk, with one end here, where would the other end of the ark be? Is the ark as long as the school building? Is the ark even longer so that it goes all the way across the parking lot? Does the ark make it to the church? Let's see. One group of students uses the short cubit rope and another uses the long cubit rope to measure the length of the ark. Each ten-cubit length is marked with chalk on the sidewalk. They find that the other end of the short cubit ark is past the school, past the parking lot, and nearly past the church. The long cubit ark goes past the church. Amazing. The width of the ark could be measured in a similar way.

## Other Ideas

This measuring of the ark and comparing it to other objects can be expanded in many ways. For grade 5-9 science class, students could estimate the height of their school's gym and compare that to the height of the ark. Students can estimate the height of their gym by counting its height in bricks or cement blocks. Alternately, how much string does a helium balloon use to reach the gym ceiling? Make sure the balloon can lift a long string. Also, students could estimate the interior cubic volume of their gym and compare that to the volume of the ark. How many gyms would fit inside the ark?

*This article is an updated version of an October 2018 text used in Martin Luther College's online course "Creation Apologetics 102" [SCI9002].*