

# MEASURING – Level 1

*"Who has measured the waters and the hollows of his hand with the breadth of his hand, marked off the heaven? Who has held the dust of the earth in a basket or weighed the mountains on the scales and the hills in a balance." Isaiah 40: 12.*

Ever since the beginning, man has been trying to measure the world around him. That has not always been easy as he has not always had a ruler as we know it today.

The big question is "How do we measure up?" The only answer is, not very well at all. Our ruler for measuring up is our Lord and Savior, Jesus Christ. He kept the law perfectly for us and no matter how we try, we can not do it. Our only salvation is what Christ did for us. May you always keep your most important ruler foremost in your minds no matter what you are doing.

## **PERSONAL MEASUREMENTS**

In the beginning man used his body to take measurements. Today we use rulers and tapes. Noah was asked to build an Ark to house all the animals during the flood. The Lord asked Noah to build an Ark that was 300 cubits long and 50 cubits wide and 30 cubits high. A cubit is the distance from a man's elbow to the tip of his middle finger. In ancient days this distance was defined (by various countries) to be anywhere from 17.5 inches to 26 inches. In the English system, it was standardized at 18 inches. In today's measurements the ark would have been 450 feet long, 75 feet wide, and 45 feet high.

Some other common measurements we use today also came from the past. The fathom (usually used to measure depth of water) was established by the Egyptians and was the length of a man's outstretched arms (about 6 feet). In the 1100's King David I of Scotland ruled the inch to be the width of a man's thumb at the base of the nail. The foot, that's the easy one. It was the length of a man's foot. The yard originally was the distance from the tip of the nose of Henry I of England to his thumb on his outstretched arm. The mile came from Roman soldiers and was equal to 1000 double steps (or paces, as we will discuss later in this chapter).

We, in the United States, are one of the only countries to continue using inch, foot, yard, and mile. The rest of the world is almost all using the metric system of measuring. Everyone says we will also go to the metric system in the United States, but that has been said for a long time and may never come to pass. You should get to know both systems of measuring.

To help you make measurements outdoors without using a ruler, take a ruler and record your body measurements for future reference. Remember these will change as you grow, so be sure to update them at least once a year. After you become an adult, they will not change much. Use a copy of the "Personal Measurement Chart" to list your measurements.

Another important measurement you will use is your **PACE**, which is the distance that you cover in one step. You will use this in measuring chapters and compass courses. The pace is measured from the heel of one foot to the heel of the other foot. To find out the size of your

pace, mark off a distance of 100 feet on level ground. Walk this distance several times and count the steps it takes to go the 100 feet. Divide the distance (100 feet) by your average number of steps to arrive at the length of your pace in feet. Put it on your personal measurement chart. As you grow older, the size of your pace may change so you should recheck the size every year or so. As you go on your campouts and other Lutheran Pioneer outside activities these measurements should help you. Remember other people will measure Lutheran Pioneers on how you conduct yourself. Lutheran Pioneers is Christ centered and our actions should show that.

## **MEASURING STAFF**

"For in the same way you judge others, you will be judged, and with the measure you use, it will be measured to you." Matt. 7 : 2

Our sin sure doesn't let us measure up very well does it? Christ kept the law perfectly for us and that is really hard to comprehend for us sinners. Paul says it all for us in Romans 7:7 through 7:25. which you ought to read, but Romans 7:19 says it the best. "For what I do is not the good I want to do; no, the evil I do not want to do - this I keep on doing.

Christ should be our ruler for how we should conduct ourselves. Even though we are not capable of keeping all the Commandments does not mean we should not try. Keep Christ out there as an example and what other measuring tool do you need?

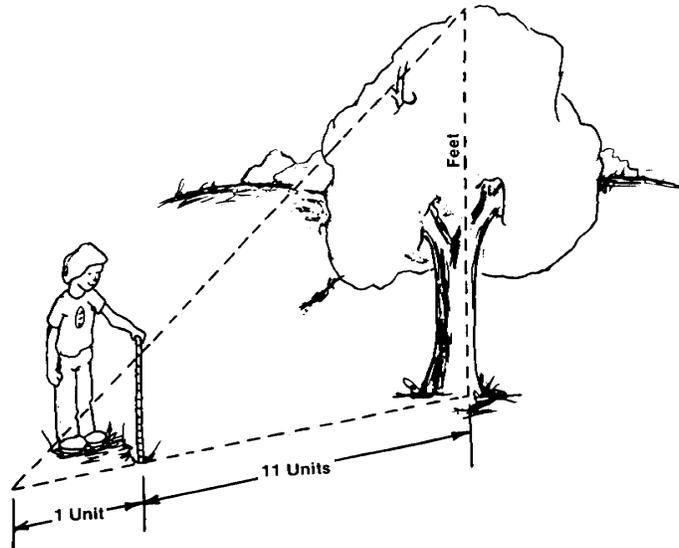
One of the possessions most valued by people that do a lot of walking is their staff. Besides helping you as you walk, you can also use the staff (or walking stick) to help you measure small objects and heights as explained later in this chapter.

To make your Pioneer Staff (walking stick), just do the following: Find a nice straight stick 48" long. If you cannot find a nice straight stick, use a 3/4 inch to 1 inch dowel that can be bought in a 48" length at your local hardware store. You could also cut the handle off an old broom to 48". So now what do you do?

It is suggested that you mark off each inch on the staff so measuring will be easier. You could use paint and paint each inch different colors, or inch wide colored tape works real well. A suggestion could be to alternate gold and red every other inch as they are the Lutheran Pioneer emblem colors. Now take your staff with you on your campouts and outings.

## INCH TO FOOT METHOD

You can use your staff to help you measure heights, called the INCH TO FOOT method. Starting at the base of the thing you want to measure, walk 11 paces. Have someone hold your Pioneer Staff at that point and walk 1 more pace. Now, laying on the ground at that point (12th, pace), sight on a line through the staff to the top of the object. For every inch on the staff the object is one foot, therefore the inch to foot method. Also, instead of pacing, you could lay the staff down end to end 12 times, mark that spot, and stand it back up on the 11th. spot, and proceed to measure.



Now keep your Pioneer Staff and a compass with you on your Pioneer outings and you should be able to measure anything that you would like to. How are you going to know how you measure up? You need something to tell you how you are doing. The BIBLE is your tool, there is where you will find the answers. Paul says in Romans 7:7. What shall we say then? Is the law sin? Certainly not! Indeed I would not have known what sin was except through the law. For I would not have known what it was to covet if the law had not said, "Do not covet."

You can find the law in the Bible, but what's more important you can also find the Gospel. Use your Bible, the tools to measure how we should conduct ourselves as Christians is in there as is the Good News of Jesus Christ.

Don't forget to keep your most important measuring tools with you also, your Bible and your Lord and Savior. Jesus, He is with you at all times and isn't that great.

**Measuring Level 1 Requirements:**

**MY PERSONAL MEASUREMENT CHART**

My height is \_\_\_\_\_

Height of my eyes from the ground is \_\_\_\_\_

My reach from the ground to the tips of my up stretched hands is \_\_\_\_\_

My reach across from finger tip to finger tip is \_\_\_\_\_

The length of my forearm from elbow to tip of middle finger is \_\_\_\_\_

The span of my hand from thumb to tip of my little finger is \_\_\_\_\_

Width of my thumb is \_\_\_\_\_

Length of my index Finger \_\_\_\_\_

Length of my foot is \_\_\_\_\_

Length of my step is \_\_\_\_\_

Length of my pace is \_\_\_\_\_