

## Making a Lead Line

A lead line is an ancient tool used for *sounding*: measuring the depth of water. Today, many boats have electronic depth sounders, but a lead line is a reliable back up.

At the bottom of your lead line is a fishing sinker made of lead. It weighs 12 ounces, or  $\frac{3}{4}$  of a pound. The hole at the bottom of the sinker will help us figure out the composition of the ocean floor.

You will need:

1. A blue and a red marker
2. Some blue and red ribbon
3. A ruler
4. A pair of scissors

Step 1. Starting at the bottom of the sinker, carefully measure 1 foot / 12 inches on the line. Mark this spot with the blue marker.

Step 2. Repeat this step 4 more times. You will have marked 5 feet (ft) from the bottom of the line.

Step 3. Measure one more ft. This will be the 6 ft. mark. At this point, mark the spot with the red marker. 6 ft = 1 *fathom*.

Step 4. Continue measuring and marking. Each foot will be marked with the blue marker except every 6 ft., or fathom, will get a red mark. You will have red marks at 6ft., 12 ft., 18 ft., 24 ft., etc.

Step 5. Cut pieces of blue ribbon about 2 inches long. Cut them with pointy ends. Cut one piece of blue ribbon for every blue mark. Cut a piece of red ribbon for every red mark, except cut the pieces of red ribbon 3 inches long.

Step 6. (This is tricky). The line is made up of 3 strands. Separate the strands of the line by twisting the line at the place where the line is marked. Feed the ribbon through the opening you have made ,then twist it open again and go around the strand , so the 2 ends of the ribbon are next to each other, making a "V". Then twist the line back to its original shape. Put a piece of blue ribbon at every blue mark, a red ribbon at every red.

You now have a reliable sounding tool. If you can multiply by 6, you can easily figure out water depth.