



Ocean Bottoms

Getting Ready

The oceans' deepest areas are nearly 7 miles deep and oceans cover 2/3 of the Earth's surface! Yet, there's detailed maps of the ocean's bottom. How did this get done? You're going to find out!!!

Stuff to Make it Happen (Materials)

shoebox with lid* paper mache paste* newspaper* adhesive tape*
 ruler* container* pencil* soda straw marker* graph paper*

Making it Happen (*Be very careful poking holes in the lid with the sharp pencil!*)

1. Tear up a bunch of newspaper into strips and pieces. Someone else mix up the paper mache paste. Mix the paper strips and paste together thoroughly in the container. Use this for making the ocean bottom.

2. The shoe box bottom will be deep unexplored ocean bottom. It could have mountains, plains, valleys, canyons, or any feature you think! The ENTIRE box bottom must be covered with some feature. NONE of the ocean bottom items you put in here can be taller than the edge of the box however!!!

3. When you're finished, set aside to dry. Lay the shoebox lid, top side up, in front of you, with a narrow side closest to you. Lay your ruler down the lid's left hand side. Mark each inch from the top to the bottom. Do the same thing down the right hand long side. Connect these marks with a pencil line, use the ruler as a straight edge. Label the top line on the far left side letter A. Continue down the lines with B etc.

4. Lay your ruler across the box's narrow top. Mark each inch across the narrow side. Do the same with the bottom narrow side. Connect the marks with a pencil line, use your ruler for straight lines. Number the top left hand line down with a 1. Continue across the lines with numbers until you're out of lines!

5. Your box lid should look like a grid with lettered lines going down and numbered lines going across. With something sharp poke a hole the width of your straw EXACTLY where a down line and the across line meet. Be CAREFUL poking holes! When you're finished there must be a lot of very neat holes.

6. Use your ruler and marker to put 1/4" marks on your straw. Again be neat and accurate!

7. Make a copy of your lid with all its lettered and numbered lines on the graph paper.

8. Tape the lid on your shoebox. Be very careful not to let anyone see inside of it!

9. Exchange your box, lid, marked straw, and the lid's graph paper copy with another group. Start with the letter A, line 1 hole, push your straw in gently. Stop when you hit something. Record the straw's depth on the lid's graph paper copy. Continue until you've "depth charted" every hole. Record each "depth".

10. Try making a drawing of what you think your "ocean bottom" looks like using your "depth chart". (Use the graph paper.) When you're finished, remove the lid and compare to your drawing!

