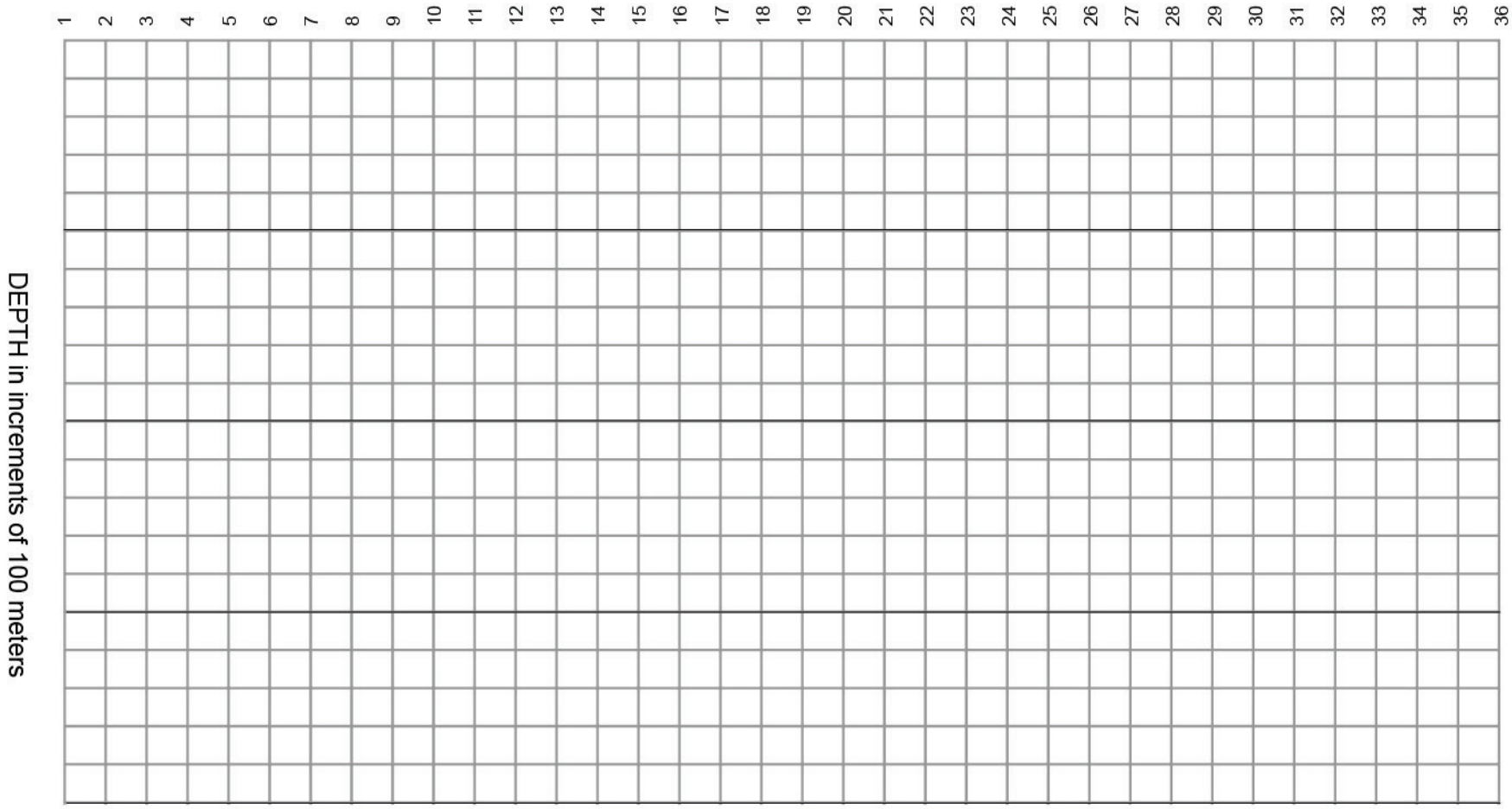
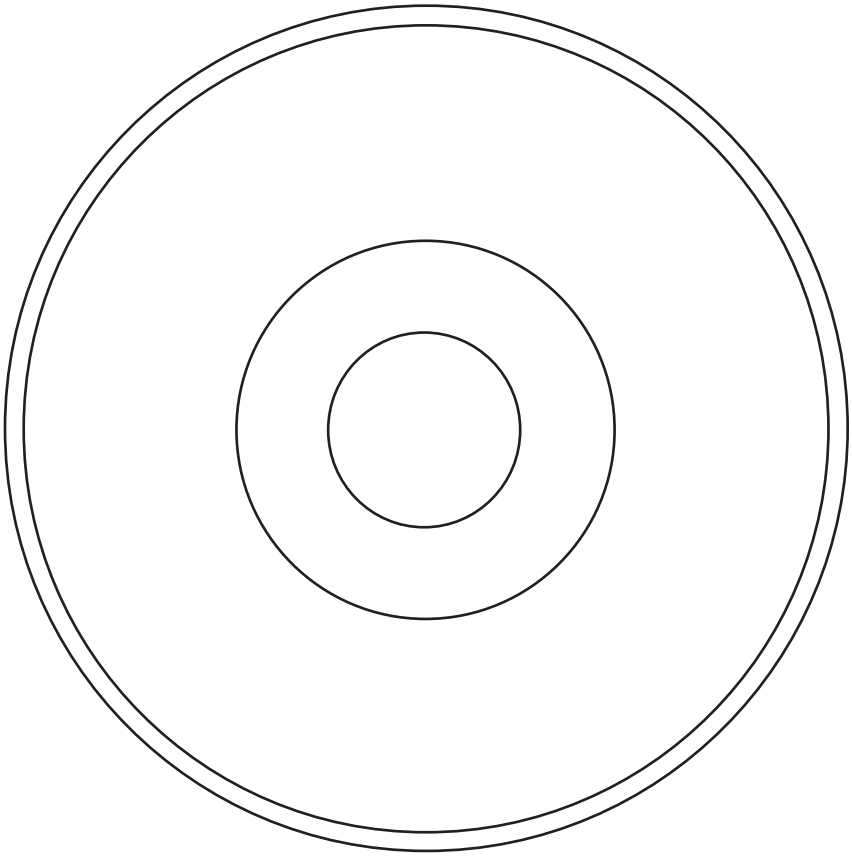
MAPPING THE OCEAN FLOOR

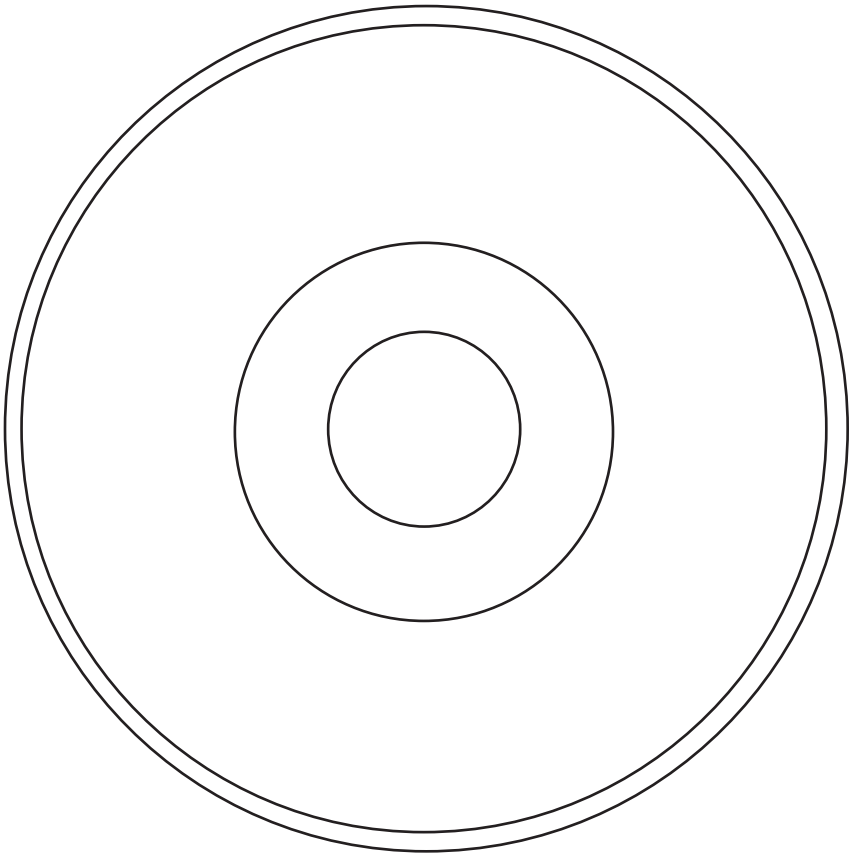
Use your wooden measuring rod to take depth measurements in your slice of ocean. After you are done, connect the dots to make a profile of your sea floor. When you are finished, open the cardboard to see how your map compares to the real profile.



QUESTIONS:

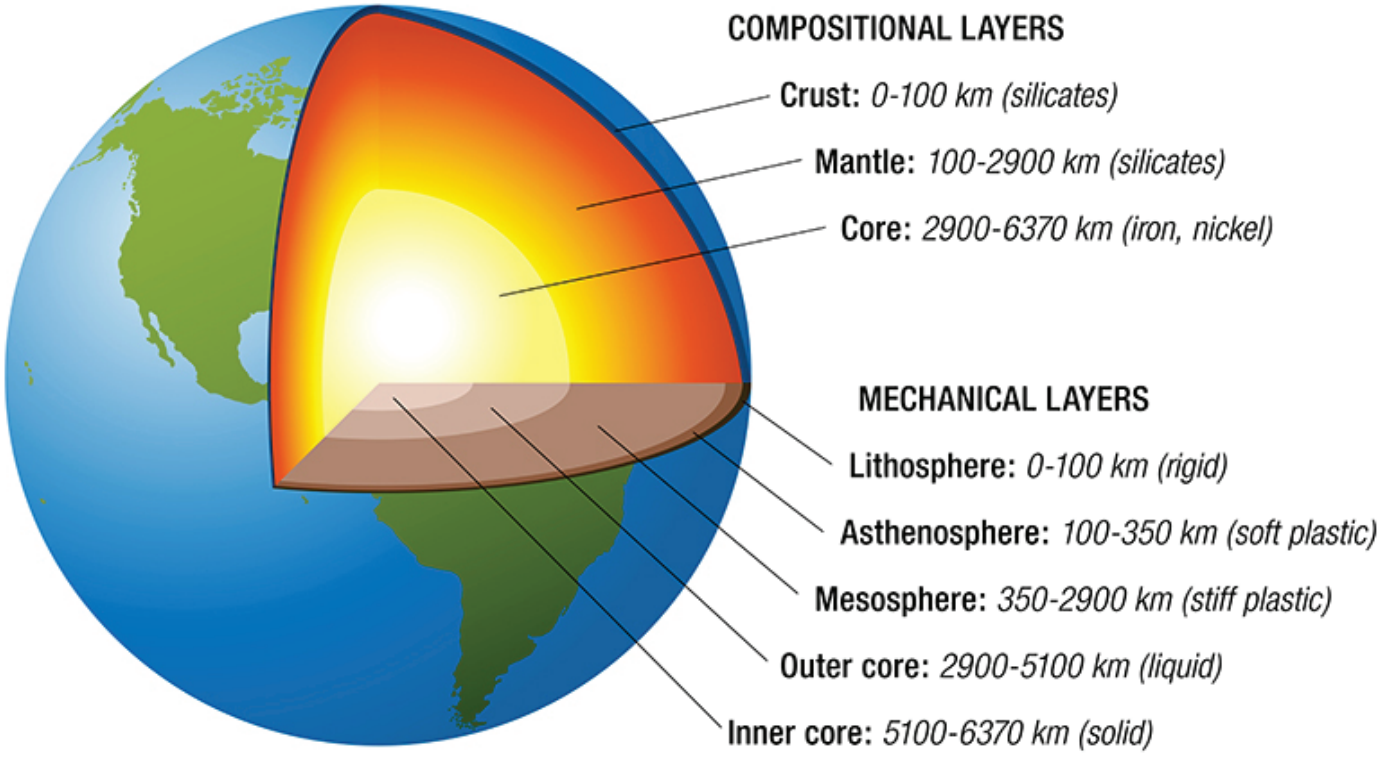
1) If you had taken more measurements, would your drawing have been more accurate? _____
2) In real ocean mapping, they often use _____ waves to measure depth.
3) If each block represents 100 meters of depth, how deep is the deepest part of your slice of ocean? _____
4) Were any of your measurements hard to interpret? Which numbers were hardest to record? _____
   Why? _____





REFERENCE PICTURES THAT MAY HELP YOU

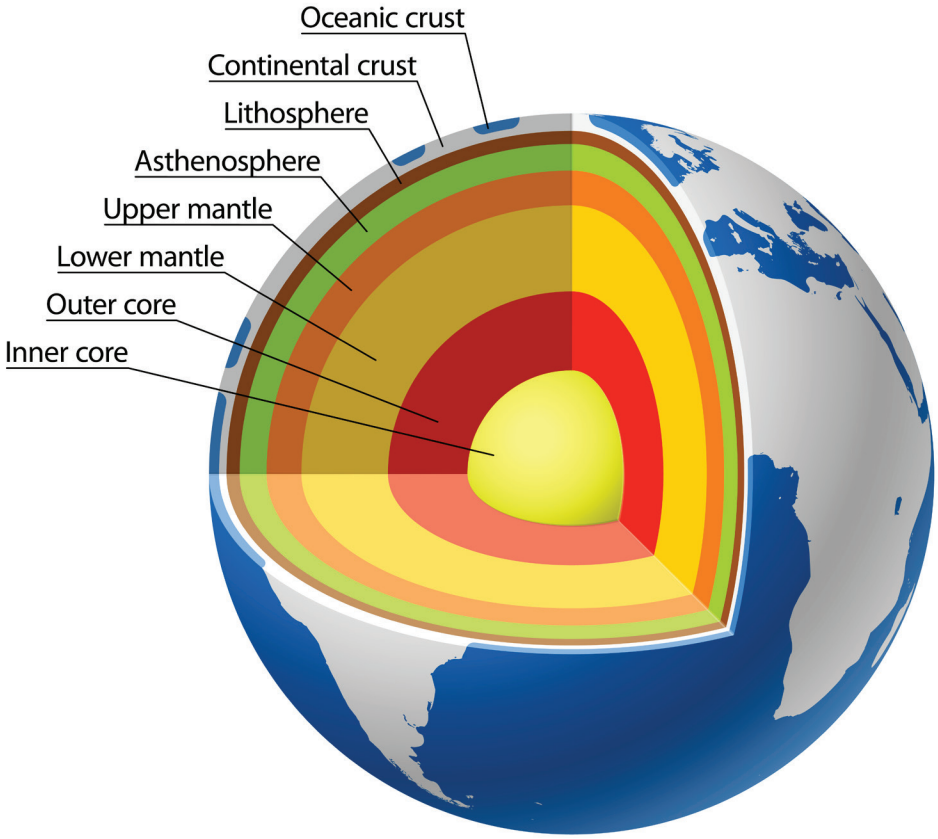
(You do not have to include all these layers. Only the basic 4 are required: crust, mantle, outer core, inner core)
Notice that some layers are defined by what they are made of, and other layers are defined by texture. This helps us understand why we see different labels of various drawing in books and on websites.



APPROXIMATE TEMPERATURES OF LAYERS:

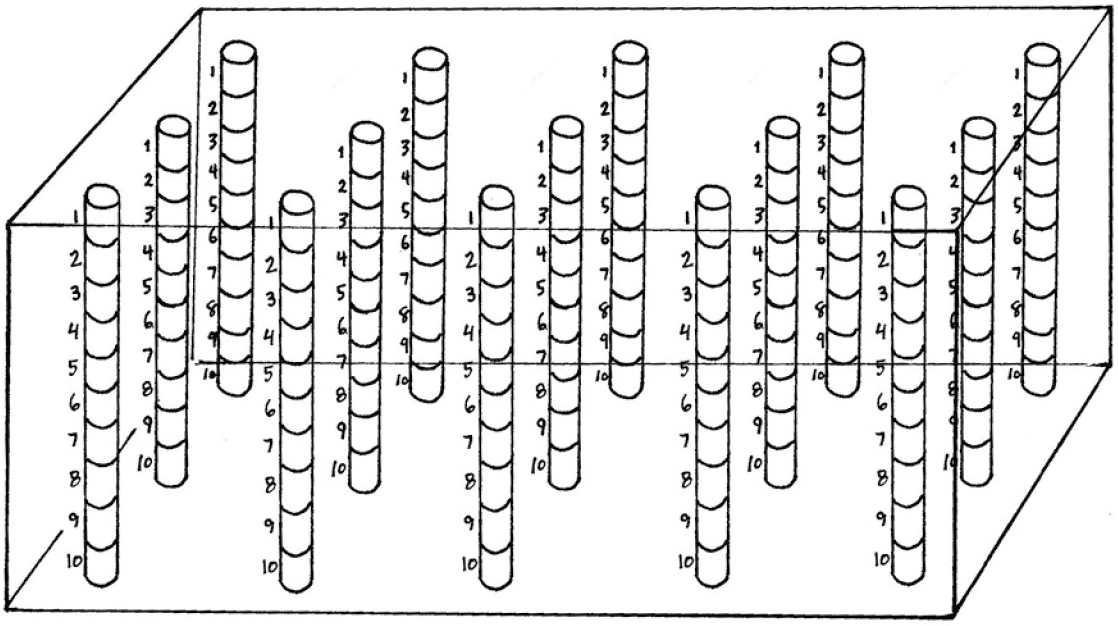
Crust: 0° to 1,000° C
(0 to 1,800° F)
Outer mantle: 2,000° C
(3,600° F)
Inner mantle: 3,000° C
(5,400° F)
Outer core: 4,000-5,000° C
(7,200-9,000° F)
Inner core: 6,000° C
(11,000° F)

The MOHO is the dividing line between the crust and the mantle.



CORE SAMPLING and STRATA MAPPING

Your assignment is to create a geological map of your property. You will need to take core samples of at least 15 different sites. (If your core sample has less than 10 layers (strata), just use the numbers you need and leave the bottom ones blank.) After you have your core samples recorded, figure out what each horizontal layer (strata) is made of and color it appropriately.



EACH LAYER AS SEEN FROM THE TOP:

1

2

3

4

5

6

7

8

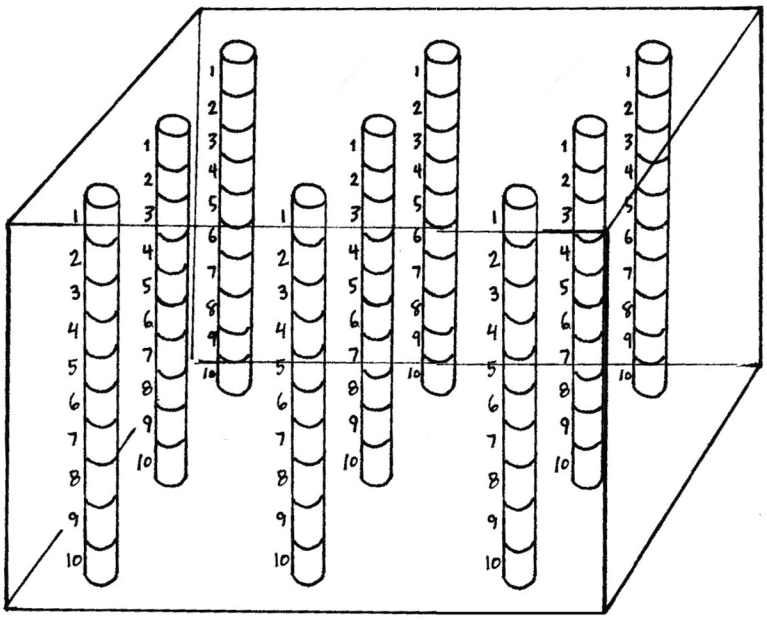
9

10

KEY:

CORE SAMPLING and STRATA MAPPING

Your assignment is to create a geological map of your property. You will need to take core samples of at least 9 different sites, but you can take more samples if you want to. (If your core sample has less than 10 layers (strata), just use the numbers you need and leave the bottom ones blank.) After you have your core samples recorded, figure out what each horizontal layer (strata) is made of and color it appropriately.



EACH LAYER AS SEEN FROM THE TOP:

1

5

9

2

6

10

3

7

4

8

KEY: