

Purpose: To be aware of the locations of earthquakes in the United States.

Materials: crayons or colored pencils, map of the U.S., pencil or pen

Procedure:

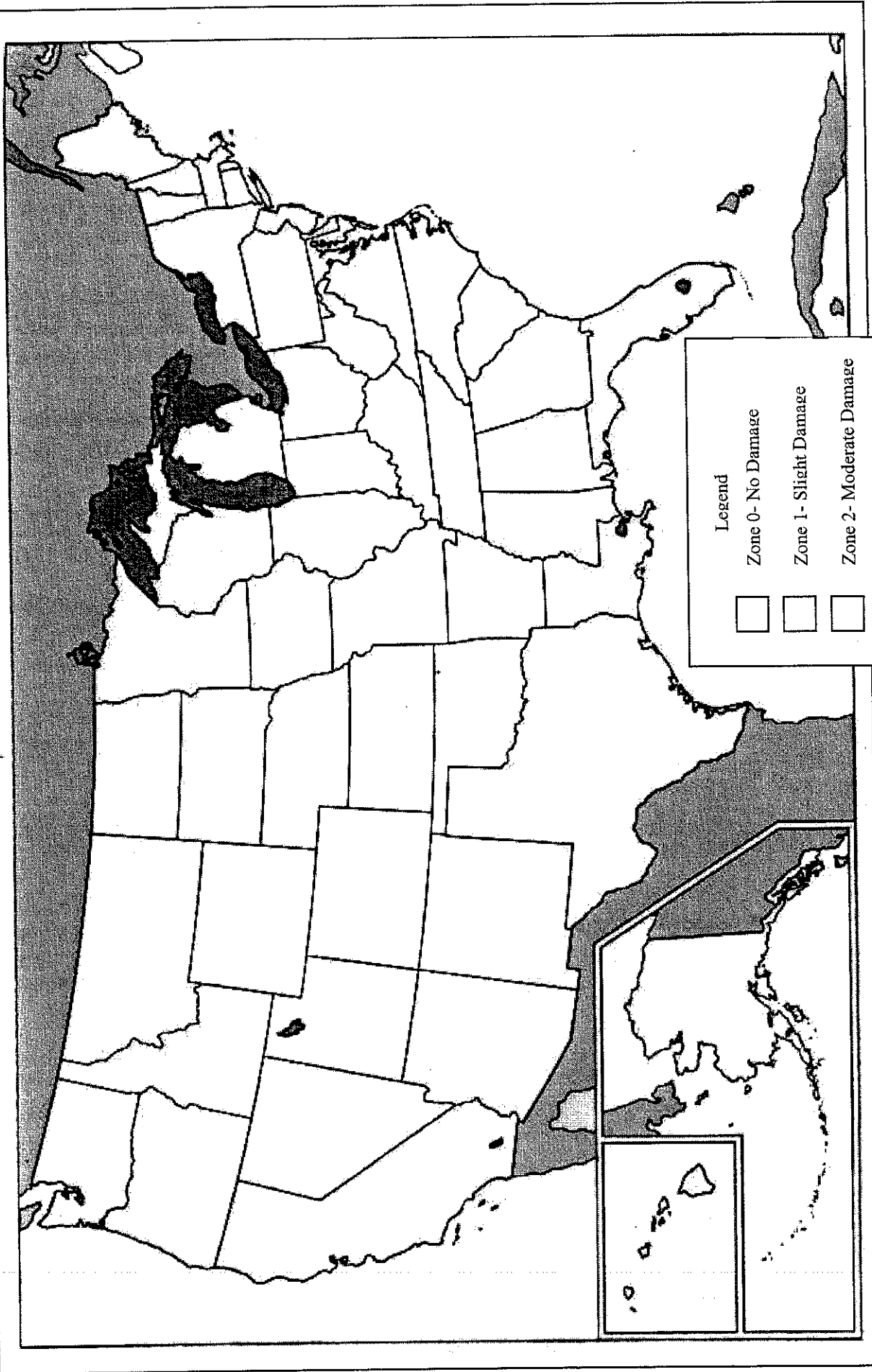
1. Read **ALL** directions first.
2. Each person should get a map / question sheet and do the entire lab on your own.
3. Use the Table on the back of this sheet for your data and do the following:
  - a) Write the number of earthquakes that each state had on **THAT STATE** on the map. **If there are high intensity earthquakes then double that number and add it to the first number.**  
For example, Alaska 12 (2 high intensity) should be:  
 $12 + (2 \text{ high intensity } \underline{\text{DOUBLED}} = 4), 12+4 = 16$ . Write **16** on Alaska.  
Texas:  $3+(1 \text{ high intensity } \underline{\text{DOUBLED}} =2), 3+2= 5$ . Write **5** on Texas.
  - b) Do all the states the same way as above.
4. When you finish writing the numbers on the states you need to color them a certain way. Here's the key:
  - a) If the state has 0 earthquakes, color it GREEN and color the box in the legend for **Zone 0-No damage** green also.
  - b) If the state has 1 - 3 earthquakes, color it YELLOW and color the box in the legend for **Zone 1-Minor damage** yellow also.
  - c) If the state has 4 - 7 earthquakes, color it ORANGE and color the box in the legend for **Zone 2-Moderate damage** orange also.
  - d) If the state has 8 or more earthquakes, color it RED and color the box in the legend for **Zone 3-Major damage** red also.
5. Put away the colored pencils and clean up your area.
6. After you finish coloring the map. Answer the questions on the back of the map in the space provided.
7. Make sure your name is on your paper and turn it into the in box when you are finished.

Data Table  
Damaging Earthquakes in The United States

	State	Recorded Earthquakes (High Intensity)		State	Recorded Earthquakes (High Intensity)
	Alabama	2		Montana	10 (3)
	Alaska	12 (2)		Nebraska	3
	Arizona	4		Nevada	12 (3)
	Arkansas	3		New Hampshire	0
	California	>150 (8)		New Jersey	2 (1)
	Colorado	1		New Mexico	5
	Connecticut	2		New York	5 (1)
	Delaware	0		North Carolina	2
	Florida	1		North Dakota	0
	Georgia	2		Ohio	6 (1)
	Hawaii	12 (2)		Oklahoma	2
	Idaho	4		Oregon	1
	Illinois	10		Pennsylvania	1
	Indiana	3		Rhode Island	0
	Iowa	0		South Carolina	6 (1)
	Kansas	2		South Dakota	1
	Kentucky	5		Tennessee	7
	Louisiana	1		Texas	3 (1)
	Maine	4		Utah	9 (2)
	Maryland	0		Vermont	0
	Massachusetts	4 (1)		Virginia	5
	Michigan	1		Washington	11 (2)
	Minnesota	0		West Virginia	1
	Mississippi	1		Wisconsin	1
	Missouri	9 (2)		Wyoming	3

Name:  
Period:

Science 8  
Lab: Seismic Risk



Question Sheet

Answer the following questions after making your seismic risk map.

1. In what states have damaging earthquakes **not** occurred?
2. In what part of the country have damaging earthquakes been concentrated?  
(Southeast, Northwest, Midwest, Southwest, West, East, South, North)
3. Based on **your** map, which states are most likely to have future earthquakes?
4. What state has the greatest risk? What other risks are do people in that state have?
5. Can you be sure an area will have no future earthquakes? Why?
6. Why is a seismic risk map useful?
7. Name the states where the earthquake risk is the lowest.
8. What other natural disasters could those states experience?
9. Compare your map to the printed one on the table. Which is more accurate?
10. Where in Michigan is there the greatest risk of earthquake damage? Is the risk high?  
Explain.