EARTHQUAKE PLOTTING

#

Name _____

Directions : using pages 322 of your book plot the earthquakes using longitude and latitude

: when finished plotting locate and label the major earthquake zones that your map shows (page 323 will help you locate these areas)

Answer the questions below :

1. What earthquake zone had the most earthquakes that you plotted ?

_____

2. Where and what magnitude was the largest earthquake you plotted ?

_____

3. Where any of the earthquakes you plotted in the U.S.A. _____ if yes where ?

_____

4. Name the forces responsible for earthquakes ? _____,

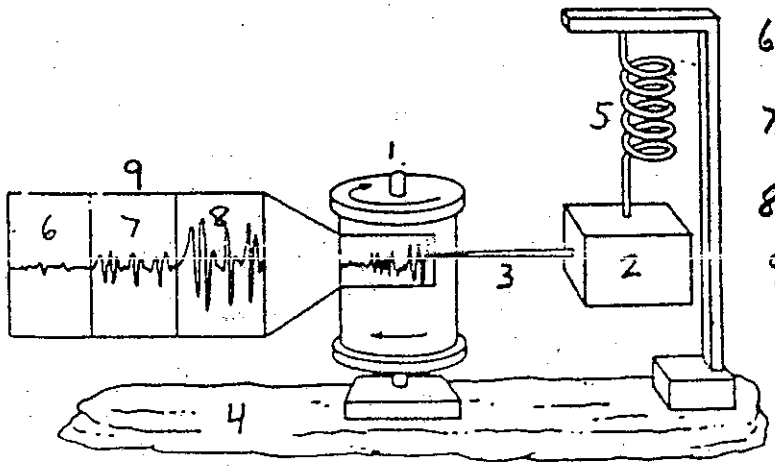
_____, _____.

5. How do scientist tell when an earthquake is taking place when a seismic wave arrives at his or her seismograph ?

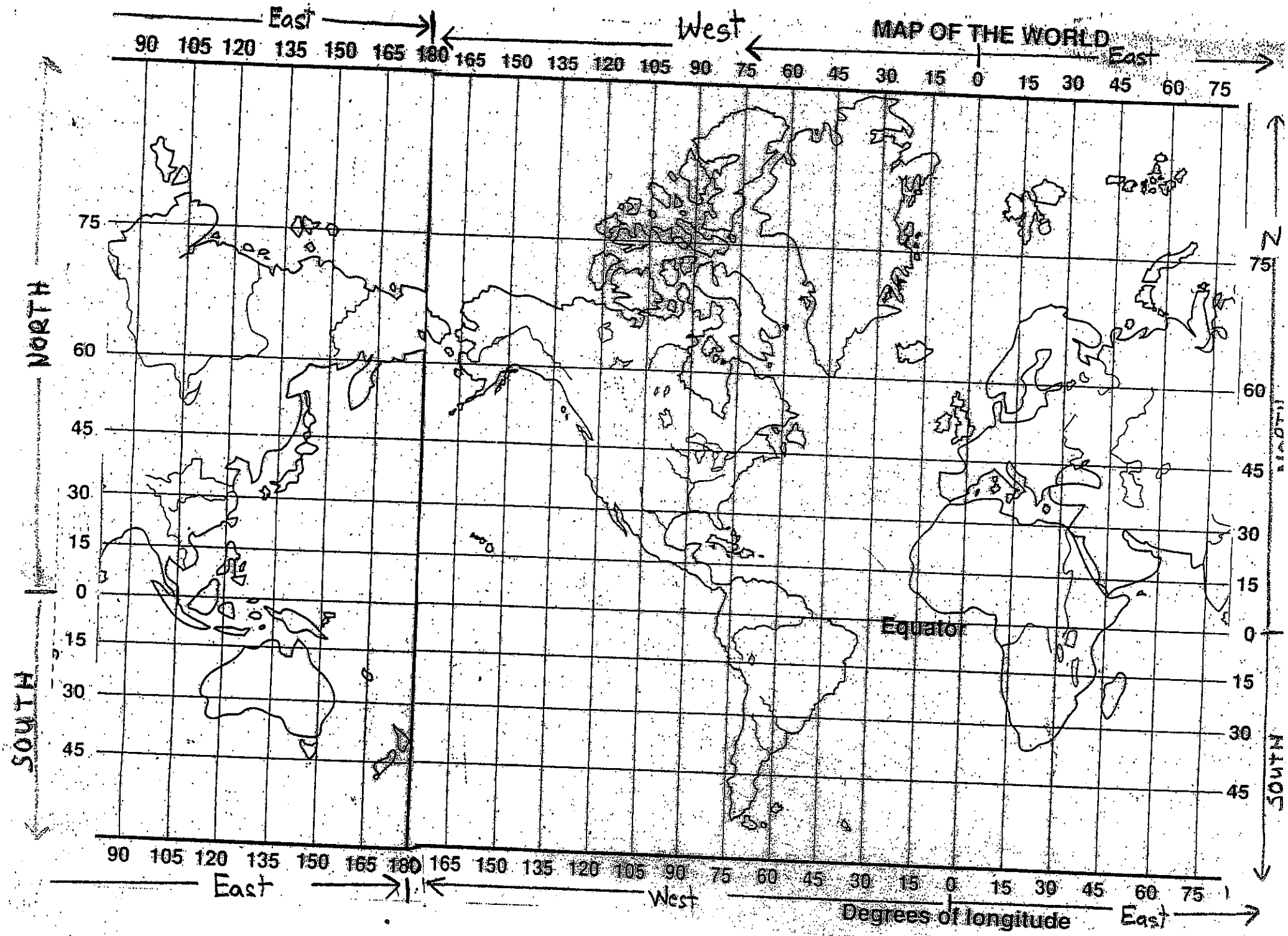
_____

LABEL THE PARTS OF THE SEISMOGRAPH BELOW : (PAGE 319)

1. _____
2. _____
3. _____
4. _____
5. _____



6 _____
7. _____
8 _____
9. _____


MAP OF THE WORLD
East
West
East
90 105 120 135 150 165 180 165 150 135 120 105 90 75 60 45 30 15 0 15 30 45 60 75
NORTH
SOUTH
75
60
45
30
15
0
15
30
45
Equator
N
NORTH
SOUTH
East
West
East
Degrees of longitude

Plot on Map provided

TABLE 15-1. VARIOUS REPORTED EARTHQUAKES

	Year	Location	Latitude	Longitude	Magnitude
1	1960	Agadir, Morocco	30°N	9°W	5.8
2	1963	Skopje, Yugoslavia	42°N	21°E	6.0
3	1971	San Fernando Valley	35°N	118°W	6.5
4	1973	Atlantic Ocean	1°N	30°W	4.6
5	1973	Andreanof Islands	51°N	179°W	4.3
6	1973	Ascension Island Region	7°S	13°W	5.1
7	1973	Jan Mayen Island Region	71°N	13°W	4.3
8	1973	Mediterranean Sea	36°N	22°E	4.7
9	1973	Atlantic Ocean	58°N	33°W	4.2
10	1976	Tangshan, China	39°N	118°E	8.2
11	1981	Greece	38°N	23°E	5.9
12	1981	New Zealand Region	49°S	164°E	6.1
13	1981	Samoa Islands	15°S	173°W	7.0
14	1981	Kuril Islands	44°N	147°E	6.6
15	1981	Off Coast of Chili	33°S	73°W	6.2
16	1981	Michoacan, Mexico	18°N	102°W	6.2
17	1982	Atlantic Ocean	1°S	22°W	5.8
18	1982	Aegean Sea	40°N	24°E	5.8
19	1982	Near Coast of Guerrero, Mexico	17°N	98°W	5.9
20	1982	Afghanistan-USSR Region	37°N	72°E	4.9
21	1982	Azores Islands Region	41°N	30°W	4.6
22	1982	Vancouver Island Region	49°N	129°W	4.4
23	1982	Atlantic Ocean	22°N	46°W	4.8

Earthquake Measurements

When recording an earthquake, seismologists make two kinds of measurements. They measure how much energy the earthquake releases, and how severely it shook the ground.

Before an earthquake starts, remember, forces build up in a part of the crust. These forces store energy in that part of the crust. When the earthquake takes place, that energy is released. It is this energy that shakes buildings and seismograph drums.

magnitude of an earthquake

quakes by magnitude. The Richter scale rates earthquakes from 1 to 10 according to their magnitude. See Table 15-1. An earthquake of magnitude 3 on the