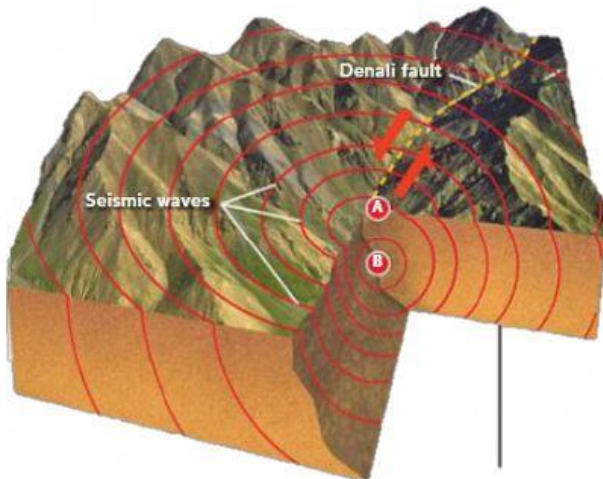


I. Complete the next statements, using the next clue words. (earthquake, seismic wave, focus, epicenter, seismograph)

1. A _____ is an instrument that records and measures an earthquake's seismic waves.
2. The _____ is the area beneath earth surface where rock that was under stress begins to break or move.
3. An _____ is the shaking and trembling that results from movement of rock beneath earth's surface.
4. The point on the surface directly above the focus is called the _____
5. _____ are vibrations that are similar to sound waves

II. Match the two points in the diagram to the two terms below.



6. Focus. Point _____

7. Epicenter. Point _____

III. Select all the options that apply. How are earthquake measured?

- | | |
|----------------------|--------------------------------|
| 8. Mercalli scale | 11. Jhony scale |
| 9. Ruler white scale | 12. The Moment Magnitude Scale |
| 10. Ritcher scale | |

13. p waves	can vibrate the ground from side to side
14. s. waves	can make the ground roll like ocean waves.
15. surface waves	compress and expand the ground.

The diagram shows a transverse wave moving to the right, indicated by a blue arrow labeled "Direction of waves". The wave is represented by a series of stacked blocks. Red 'X' marks are placed on the blocks at different points along the wave. A green line connects these 'X' marks, showing their vertical oscillation. A label "Particle motion" with a green arrow points to this vertical oscillation, indicating that particles move perpendicular to the wave's direction.

A 3D block diagram of a longitudinal wave. The top surface is green with small figures of people. Inside the block, red arrows point horizontally back and forth, representing particle motion. A blue arrow at the bottom points to the right, representing the direction of wave propagation. A label 'Particle motion' with a green arrow points to the red arrows, and a label 'Direction of wave' with a blue arrow points to the blue arrow.

A 3D diagram of a transverse wave. The wave is represented by a series of peaks and troughs. A blue arrow at the bottom points to the right, labeled "Direction of waves". Two red circles are drawn on the wave, with a green box labeled "Particle motion" pointing to them. The particle motion is shown as a vertical line passing through the center of the wave, indicating that particles move perpendicular to the direction of wave propagation.

19. Identify which Modified Mercalli Scale is correct?

Rank	Description
I -III	People notice vibrations like those from a passing truck. Unstable objects disturbed
IV-VI	Some windows brake. Plaster may fall.
VII- IX	Moderate to heavy damage. Buildings jolted off foundations.
X-XII	Great destruction. Cracks appear in ground. Waves seen on surface.

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more serious less serious

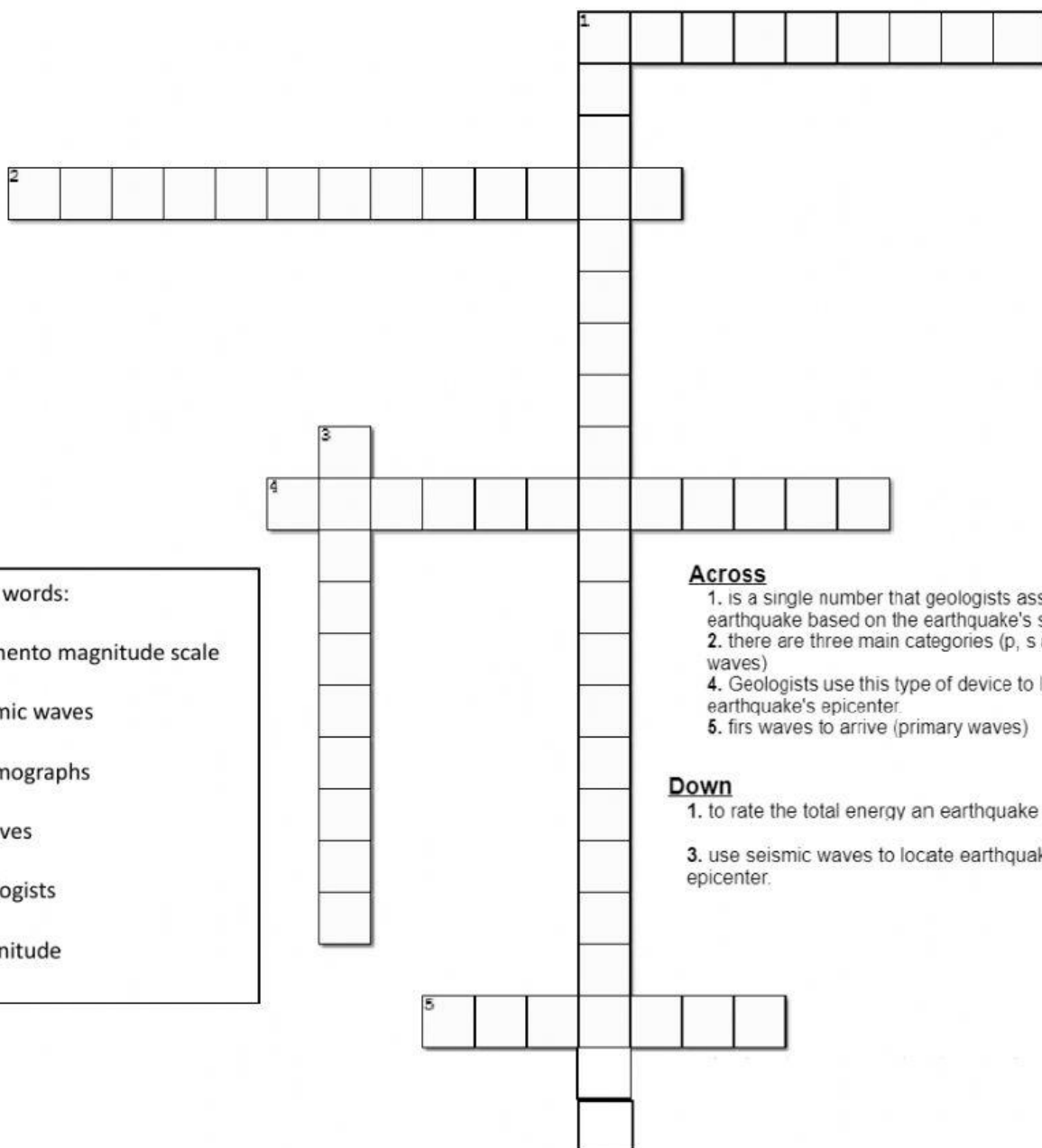


- a. the more energy released, the smaller the magnitude.
- b. the more energy released, the greater the magnitude.

VII. if the statement is true, write T. If the statement is false, write F.

22. _____ Earthquakes are caused by forces of mountain movement.
23. _____ The epicenter of an earthquake is below the focus.
24. _____ The shaking and trembling the results from movement of rock beneath Earth's surface is called an earthquake.

VIII. Complete the next crossword.



Clue words:

Momento magnitude scale

Seismic waves

Seismographs

P waves

Geologists

Magnitude

Across

1. is a single number that geologists assign to an earthquake based on the earthquake's size.
2. there are three main categories (p, s and surface waves)
4. Geologists use this type of device to locate an earthquake's epicenter.
5. firs waves to arrive (primary waves)

Down

1. to rate the total energy an earthquake releases.
3. use seismic waves to locate earthquake's epicenter.

