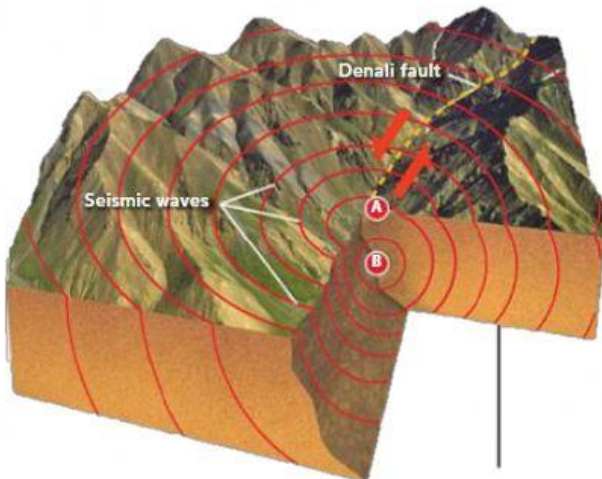


I. Complete the next statements, using the next clue words. (earthquake, seismic wave, focus, epicenter, seismograph)

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, as indicated by a blue arrow labeled "Direction of waves". The wave is represented by a series of green hills and brown valleys. A red 'X' marks a particle on the wave. A green arrow labeled "Particle motion" points vertically upwards from the particle, indicating that the particles move perpendicular to the direction of wave propagation.

A 3D block diagram of a transverse wave. The wave is represented by a series of vertical rectangular blocks. Red arrows on the blocks point up and down, indicating the direction of particle motion. A blue arrow below the blocks points to the right, indicating the direction of wave propagation. A green box with the text 'Particle motion' has a line pointing to one of the red arrows. The top surface of the blocks is green and shows small figures of people standing on it.

A 3D block diagram of a surface wave. The wave is shown as a series of hills and valleys moving horizontally to the right, indicated by a blue arrow labeled "Direction of waves". Within the hills and valleys, red circles highlight the vertical up-and-down movement of particles, labeled "Particle motion".

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

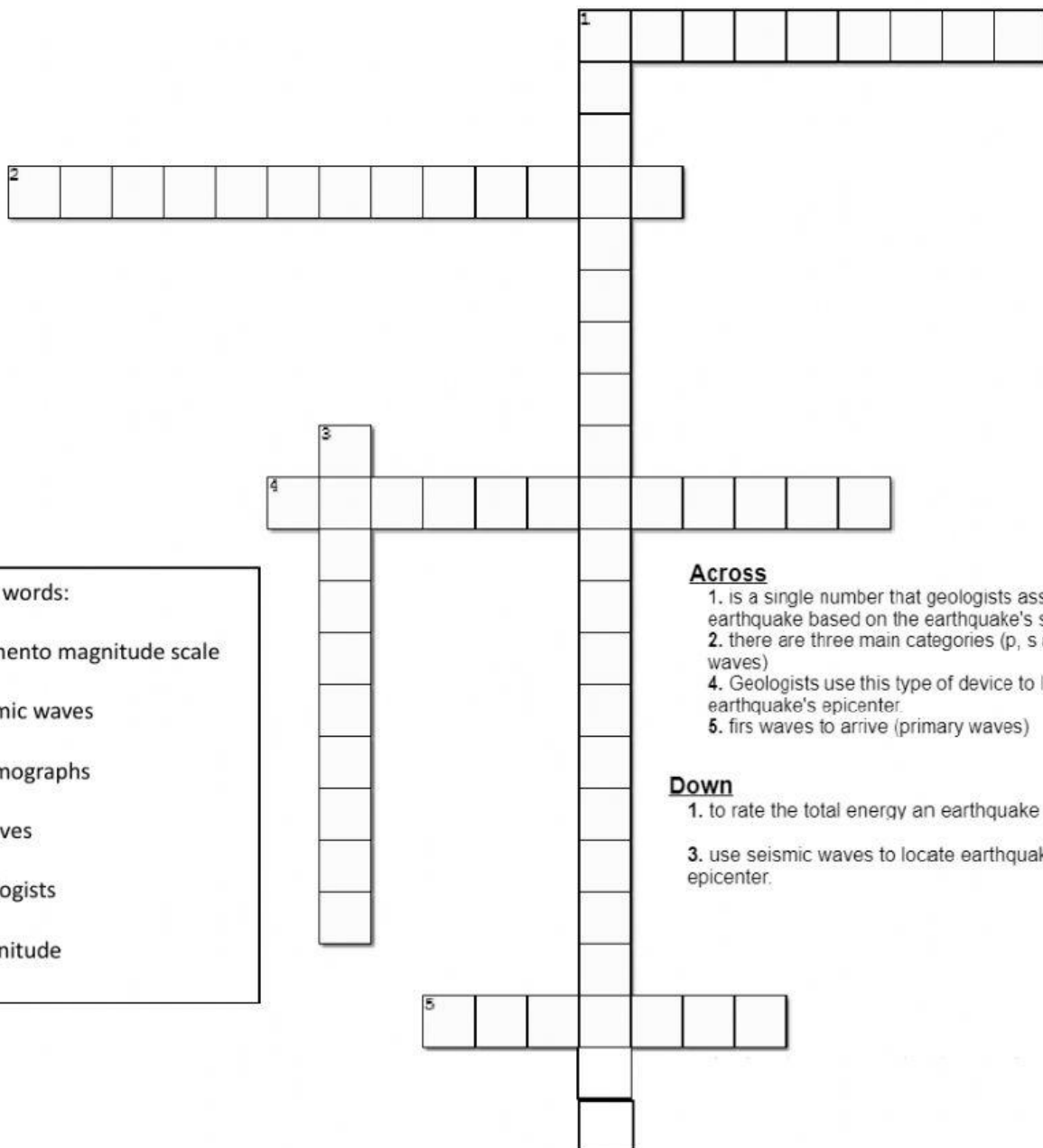


- a. the more energy released, the smaller the magnitude.
- b. the more energy released, the greater the magnitude.

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.

