CONTESTANT ID #: _____

GRADE LEVEL :_____

Place Contestant ID label here BEFORE Contest Begins

PSIA

25 YEARS

Inspiring Student Achievement

Listening Skills

District Contest

Grades 4/5 & 6-8

2022

Grader #1 Score: _____

Grader #2 Score: _____

Grader #3 Score: _____

FINAL SCORE: _____

(Please do not open test until the signal is given to begin.)

Listening Skills Contest
DISTRICT – 2022
"An Introduction to the History of Earthquakes"

1. From what country do we have the earliest descriptive information about earthquakes?
   A. South America C. China
   B. North America D. Japan

2. In what year was this first descriptive information posted?
   A. 580 B.C. C. 70 B.C.
   B. 1177 B.C. D. 1117 A.D.

3. The earliest we have descriptive information regarding earthquakes in Europe was . . .
   A. 580 B.C. C. mid 16th century
   B. 1471 D. late 14th century

4. The earliest known earthquakes in the Americas were in . . .
   A. Mexico C. Peru
   B. Missouri D. Panama

5. When was the earliest earthquake in the Americas known to have occurred?
   A. 1471 C. 1741
   B. mid 13th century D. late 14th century

6. What is the name of the descriptive scale used to classify the shaking felt by an earthquake?
   A. Meteoroid McCallen Sliding Scale
   B. Richter Magnitude Scale
   C. Modified Mercalli Intensity Scale
   D. none of these

7. What is the name of the scale that measures the seismic energy of an earthquake quantitatively?
   A. Meteoroid McCallen Sliding Scale
   B. Richter Magnitude Scale
   C. Modified Mercalli Intensity Scale
   D. none of these

8. When was the device that measures the amount of strength released by an earthquake invented?
   A. 1895 C. 1891
   B. 1935 D. 1989

9. What is the first name of the person who invented the device that measures seismic energy released by earthquakes?
   A. Malcolm C. Richard
   B. John D. Charles

10. What was the life span of the person who invented the device that measures strength of an earthquake?
    A. 1891-1989 C. 1878-1935
    B. 1812-1895 D. 1895-1945

11. In recorded history, what was the highest measure of seismic energy produced by an earthquake?
    A. 9.2 C. 9.5
    B. 9.0 D. 9.3

12. In what country did the largest earthquake occur?
    A. Peru C. China
    B. Chile D. Indonesia

13. When did that largest recorded earthquake occur?
    A. March 27, 1964 C. May 22, 1960
    B. March 11, 1961 D. November 4, 1952

14. In what city did the largest earthquake occur?
    A. Sumatra C. Valdivia
    B. Bio-Bio D. Sendai

15. Where did an earthquake trigger a catastrophic tsunami?
    A. Kamchatka C. Prince William Sound
    B. Sumatra D. Assam

16. About how many people perished in the earthquake that triggered the tsunami mentioned above?
    A. 230,000 C. 250,000
    B. 225,000 D. 1,200,000

17. Which of these regions was among those listed as having earthquakes with a seismic reading of 8.6?
    A. Rat Islands C. Assam
    B. Sendai D. Valdivia

Listening Skills Contest
DISTRICT – 2022
"An Introduction to the History of Earthquakes"

18. Worldwide, how many earthquakes occur each day?
    A. 500 C. 1400
    B. 275 D. 1600

19. When did the 9.0 earthquake in Japan take place?
    A. March 11, 2011 C. December 26, 2004
    B. February 27, 2010 D. November 4, 1952

20. In what area did the other 9.0 earthquake take place?
    A. Sendai C. Bio-bio
    B. Kamchatka D. Sumatra

21. In what country did the earthquake referred to in Question 20 take place?
    A. USA C. Russia
    B. Indonesia D. Tibet

22. How thick is the outer layer of the earth's crust?
    A. 20 miles C. 70 kilometers
    B. 50 miles D. 56 miles

23. The outer layer consists of about _____ large, irregularly shaped plates.
    A. a half dozen C. two dozen
    B. a dozen D. 43

24. Most earthquakes occur where in relation to the plates?
    A. at the boundaries where the plates meet
    B. in the center of the plates when disturbed
    C. at the top of the plates with the molten layer
    D. at the bottom of the plates during fracking

25. The _____ depth of an earthquake is the depth from the Earth's surface to the region where an earthquake's energy originates.
    A. center C. extreme
    B. actual D. focal

26. Seventy kilometers is equal to how many miles?
    A. 52.4 C. 43.5
    B. 135 D. 38

27. Earthquakes with depths from 70 to _____ kilometers are classified as intermediate.
    A. 200 C. 700
    B. 300 D. 435

28. A deep earthquake may reach depths of more than _____ miles.
    A. 200 C. 700
    B. 300 D. 435

29. The depth to the Earth's core is about _____ kilometers, so the deepest earthquakes originate in relatively shallow parts of the Earth's interior.
    A. 3,960 C. 6,370
    B. 4,360 D. 5,280

30. Where and when did the most destructive earthquake in recorded history take place in North America?
    A. St. Louis, Missouri in 1960
    B. Laredo, Texas in 1965
    C. Prince William Sound, Alaska in 1932
    D. San Francisco, California in 1906

PSIA
Private Schools Interscholastic Association

Listening Skills
District 2023
Contestant Answer Sheet

GRADERS: Write scores and initial.

Score 1: _____ Score 3: _____

Score 2: _____ FINAL: _____

Contestant ID: _____ Grade Level: _____

INSTRUCTIONS: Place the PRINTED CAPITAL letter of each answer choice (A, B, C, or D) in the blank corresponding to the test item number. SCORING: +5 for each correct answer; –2 for each incorrect answer; no deduction for skipped or unanswered items. Visible erasures and mark-outs constitute a 2-point deduction ONLY if a correct answer is not written in the answer space.

1. _____
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29. _____
30. _____

PSIA
25 YEARS
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Listening Skills
District 2022

ANSWER KEY

INSTRUCTIONS: Place the PRINTED CAPITAL letter of each answer choice (A, B, C, or D) in the blank corresponding to the test item number. SCORING: +5 for each correct answer; –2 for each incorrect answer; no deduction for skipped or unanswered items. Visible erasures and mark-outs constitute a 2-point deduction ONLY if a correct answer is not written in the answer space.

1. **C**
2. **B**
3. **C**
4. **A**
5. **D**
6. **C**
7. **B**
8. **B**
9. **D**
10. **A**
11. **C**
12. **B**
13. **C**
14. **C**
15. **B**
16. **A**
17. **C**
18. **C**
19. **A**
20. **B**
21. **C**
22. **C**
23. **B**
24. **A**
25. **D**
26. **C**
27. **B**
28. **D**
29. **C**
30. **D**

LISTENING PASSAGE – District 2022

An Introduction to the History of Earthquakes

The earliest earthquake for which we have descriptive information occurred in China in 1177 B.C. The Chinese earthquake catalog describes several dozen large earthquakes in China during the next few thousand years. Earthquakes in Europe are mentioned as early as 580 B.C., but the earliest for which we have some descriptive information occurred in the mid-16th century. The earliest known earthquakes in the Americas were in Mexico in the late 14th century and in Peru in 1471, but descriptions of the effects were not well documented. By the 17th century, descriptions of the effects of earthquakes were being published around the world - although these accounts were often exaggerated or distorted.

The severity of earthquake shaking is assessed using a descriptive scale – the Modified Mercalli Intensity Scale. Earthquake size is a quantitative measure of the size of the earthquake at its source. The Richter Magnitude Scale measures the amount of seismic energy or strength released by an earthquake. The Richter Scale was developed in 1935 by American seismologist Charles Richter, who lived from 1891 to 1989.

Throughout the seismic recorded history, the 10 earthquakes that produced the highest measure on the Richter Scale were as follows: Number 1 was in Valdivia, Chile, on May 22, 1960 (9.5 on the Richter Scale); 2. Prince William Sound, Alaska, March 27, 1964 (9.2); 3. Sumatra, Indonesia, December 26, 2004 (9.1), which triggered a catastrophic tsunami that killed more than 230,000 people; 4. Sendai, Japan, March 11, 2011 (9.0); 5. Kamchatka, Russia, November 4, 1952 (9.0); 6. Bio-Bio, Chile, February 27, 2010 (8.8); 7. Rat Islands, Alaska, April 2, 1965 (8.7); 8. Sumatra, Indonesia, March 28, 2005 (8.6); 9. Assam, Tibet, August 15, 1950 (8.6), and 10. an 8.6 earthquake occurred 20 miles beneath the ocean floor on the coast of Indonesia.

The Earth is formed of several layers that have very different physical and chemical properties. The outer layer, which averages about 70 kilometers in thickness, consists of about a dozen large, irregularly shaped plates that slide over, under and past each other on top of the partly molten inner layer. Most earthquakes occur at the boundaries where the plates meet. In fact, the locations of earthquakes and the kinds of ruptures they produce help scientists define the plate boundaries.

The focal depth of an earthquake is the depth from the Earth's surface to the region where an earthquake's energy originates (the focus). Earthquakes with focal depths from the surface to about 70 kilometers (43.5 miles) are classified as shallow. Earthquakes with focal depths from 70 to 300 kilometers (43.5 to 186 miles) are classified as intermediate. The focus of deep earthquakes may reach depths of more than 700 kilometers (435 miles). The foci of most earthquakes are concentrated in the crust and upper mantle. The depth to the center of the Earth's core is about 6,370 kilometers (3,960 miles), so the deepest earthquakes originate in relatively shallow parts of the Earth's interior.

The San Francisco earthquake of 1906 was one of the most destructive in the recorded history of North America - the earthquake and the fire that followed killed nearly 700 people and left the city in ruins. The Alaska earthquake of March 27, 1964, was of greater magnitude than the San Francisco earthquake; it released perhaps twice as much energy and was felt over an area of almost 500,000 square miles. However, the destruction in Alaska was much less than that of the San Francisco earthquake since significantly fewer people populated that area.

Worldwide, there are around 1400 earthquakes each day (500,000 each year). Only about 275 of these can actually be felt.