Virga is precipitation that:

Is frozen raindrops

Is small balls of ice

Falls for a short amount of time

Never reaches the ground

What instrument is used to measure humidity and dewpoint?

Psychrometer

Put the following clouds in order from lowest to highest height:, stratocumulus, cirrus, altocumulus

, nimbostratus, altocumulus, cirrus

How is a U-shaped valley formed?

By glaciers

Moraine

Soil horizon

Spheres

Atmosphere layers

Composition of earth

Instruments to measure

Minerals

Water table

Igneous, sedimentary, metamorphic

**TOSS-UP**

1. ERSC; Multiple Choice: Which of the following can form a U- shaped valley?

(W) Water

(X) Glaciers

(Y) Wind

(Z) Earthquakes

ANSWER: X- Glaciers

1. ERSC; Short Answer: What are glacial sediments called?

ANSWER: TILL

**TOSS-UP**

2. ERSC; Multiple Choice: Which of the following has the highest albedo

(W) Trees

(X) Rock

(Y) Soil

(Z) Snow

ANSWER: Z- SNOW

**BONUS**

2. ERCS; Multiple Choice: About how much solar radiation is absorbed by the earth?

(W) 20%

(X) 50 %

(Y) 70%

(Z) 90%

ANSWER: Y- 70%

**TOSS-UP**

3. ERSC; Multiple Choice: At which wind speed is a tropical storm considered a hurricane?

(W) 52 kilometers per hour

(X) 119 kilometers per hour

(Y) 154 kilometers per hour

(Z) 185 kilometers per hour

ANSWER: X- 119 KILOMETERS PER HOUR

**BONUS**

3. ERSC; Short Answer: What is the small calm spot in the center of a hurricane called?

ANSWER: EYE

**TOSS-UP**

4. ERSC; Multiple Choice: What type of lightning is most common?

(W) cloud-to-ground

(X) cloud-to-cloud

(Y) ground-to-cloud

(Z) cloud-to-air

ANSWER: cloud-to-cloud lightning

**BONUS**

4. ERSC; Multiple Choice: What kind of cloud produces a thunderstorm?

(W) Nimbostratus

(X) Altocumulus

(Y) Stratus

(Z) Cumulonimbus

ANSWER: Z- CUMULONIMBUS

**TOSS-UP**

5. ERSC; Short Answer: What is the border between the troposphere and the stratosphere called?

ANSWER: TROPOPAUSE

**BONUS**

5. ERSC; Multiple Choice: In which two atmospheric layers does the temperature decrease as the height increases?

(W) Troposphere and stratosphere

(X) Troposphere and mesosphere

(Y) Stratosphere and thermosphere

(Z) Mesosphere and thermosphere

ANSWER: X- TROPOSPHERE AND MESOSPHERE

**TOSS-UP**

6. ERSC; Short Answer: Which mineral is the most common in the Earth’s crust?

ANSWER: QUARTZ

**BONUS**

6. ERSC; Multiple Choice: Which of the following are varieties of corundum?

(W) Garnet and topaz

(X) Turquoise and sapphire

(Y) Sapphire and ruby

(Z) Aquamarine and emerald

ANSWER: Y- SAPPHIRE AND RUBY

**TOSS-UP**

7. ERSC; Short Answer: In which atmospheric layer is the ozone layer?

ANSWER: STRATOSPHERE

**BONUS**

7. ERSC; Short Answer: Which atmospheric layer is the largest?

ANSWER: THERMOSPHERE

**TOSS-UP**

8. ERSC; Multiple Choice: What is lava containing a high amount of silica called?

(W) Felsic

(X) Andesitic

(Y) Mafic

(Z) Basaltic

ANSWER: W- FELSIC

**BONUS**

8. ERSC; Multiple Choice: Which of the following rocks is not igneous?

(W) Basalt

(X) Pumice

(Y) Obsidian

(Z) Slate

ANSWER: Z- Slate

**TOSS-UP**

9. ERSC; Multiple Choice: What is a geologic body that cuts through a rock called?

(W) Laccolith

(X) Dike

(Y) Sill

(Z) Batholith

ANSWER: X- DIKE

**BONUS**

9. ERSC; Multiple Choice: Which of the following is a geological process that builds mountains?

(W) Orogeny

(X) Transgression

(Y) Aggredation

(Z) Diagenesis

ANSWER: X- TRANSGRESSION

**TOSS-UP**

10. ERSC; Multiple Choice: What does a line with triangles represent on a weather map?

(W) Cold front

(X) Warm front

(Y) Occluded front

(Z) Stationary front

ANSWER: W- COLD FRONT

**BONUS**

10. ERSC; Multiple Choice: What front causes clouds that produce rain over a wide area?

(W) Cold Front

(X) Warm Front

(Y) Occluded Front

(Z) Stationary Front

ANSWER: X- WARM FRONT

**TOSS-UP**

11. ERSC; Multiple Choice: Which of the following is not a result of El Niño?

(W) Warmer water in the West Pacific

(X) More nutrients in the West Pacific

(Y) Increased rainfall in the West Pacific

(Z) Increased drought in the West Pacific

ANSWER: X- MORE NUTRIENTS IN THE WEST PACIFIC

**BONUS**

11. ERSC; Multiple Choice: What is the strength of the Southern Oscillation based on?

(W) Temperature

(X) Humidity

(Y) Air pressure

(Z) Wind

ANSWER: AIR PRESSURE

**TOSS-UP**

12. ERSC; Short Answer: In the three-cell model, which cell is closest to the equator?

ANSWER: HADLEY CELL

**BONUS**

12. ERSC; Short Answer: At which latitude are the doldrums?

ANSWER: 0 DEGREES

**TOSS-UP**

13. ERSC; Multiple Choice: What is a seasonal prevailing wind that brings rain called?

(W) Monsoon

(X) Land breeze

(Y) Sea breeze

(Z) Chinook

ANSWER: W- MONSOON

**BONUS**

13. ERSC: Short Answer: In which direction do trade winds blow?

(W) Northeast

(X) Northwest

(Y) Southeast

(Z) Southwest

ANSWER:W- NORTHEAST

**TOSS-UP**

14. ERSC; Multiple Choice: Which of the following is a contrail formed by?

(W) Airplanes

(X) Balloons

(Y) Birds

(Z) Strike-slip

ANSWER: W- AIRPLANES

**BONUS**

14. ERSC; Multiple Choice: What do lenticular clouds form near?

(W) Mountains

(X) Oceans

(Y) Plains

(Z) Lakes

ANSWER: W- MOUNTAINS

**TOSS-UP**

15 ERSC: Short Answer: On the Richter scale, how many times stronger is a magnitude 6 earthquake than a magnitude 4 earthquake?

ANSWER: 100 TIMES

**BONUS**

15. ERSC; Multiple Choice: What kind of fault is the San Andreas fault

(W) Normal Fault

(X) Reverse Fault

(Y) Listric

(Z) Strike-slip

ANSWER: Z- STRIKE-SLIP

**TOSS-UP**

16. ERSC; Multiple Choice: What kind of seismic wave moves entirely horizontally?

(W) P Wave

(X) S Wave

(Y) Love Wave

(Z) Raleigh Wave

ANSWER: Y- LOVE WAVE

**BONUS**

16. ERSC; Short Answer: Which seismic wave cannot travel through liquid?

ANSWER: S WAVE

**TOSS-UP**

17. ERSC; Multiple Choice: Volcanic clouds have what effect on the climate?

(W) An increase of temperature

(X) A decrease of temperature

(Y) An increase in humidity

(Z) A decrease in humidity

ANSWER: X- A DECREASE OF TEMPERATURE

**BONUS**

17. ERSC; Multiple Choice: Which of the following is not in the Ring of Fire?

(W) North America

(X) Australia

(Y) South America

(Z) Asia

ANSWER: X- AUSTRALIA

**TOSS-UP**

18. ERSC; Multiple Choice: What is frost that does not first condense as liquid called?

(W) Hoar frost

(X) Black frost

(Y) Rime

(Z) Frost Flowers

ANSWER: W- HOAR FROST

**BONUS**

18. ERSC; Short Answer: What is the temperature at which air will condense called?

ANSWER: DEWPOINT

**TOSS-UP**

19. ERSC; Multiple Choice: What does an anemometer measure?

(W) Temperature

(X) Air pressure

(Y) Humidity

(Z) Wind speed

ANSWER: Z- WIND SPEED

**BONUS**

19. ERSC; Short Answer: What does a hygrometer measure?

ANSWER: HUMIDITY

**TOSS-UP**

20. ERSC; Multiple Choice: What condition is different for the formation of snow and hail?

(W) Temperature

(X) Wind speed

(Y) Sunlight

(Z) Air pressure

ANSWER: W- TEMPERATURE

**BONUS**

20. ERSC; Multiple Choice: Which cloud can produce a shower?

(W) Cumulus

(X) Stratus

(Y) Altostratus

(Z) Cirrus

ANSWER:W- CUMULUS

**TOSS-UP**

21. ERSC; Short Answer: What is the top soil horizon called?

ANSWER: O HORIZON

**BONUS**

21. ERSC; Short Answer: Which soil horizon is between the A and B horizon?

ANSWER: E HORIZON

**TOSS-UP**

22. ERSC; Multiple Choice: What is the second hardest mineral?

(W) Calcite

(X) Corundum

(Y) Magnetite

(Z) Diamond

ANSWER: X- CORUNDUM

**BONUS**

22. ERSC; Short Answer: What is the chemical formula of quartz?

ANSWER: SiO2

**TOSS-UP**

23. ERSC; Multiple Choice: What two elements are most common in the outer core?

(W) Iron and Oxygen

(X) Iron and Nickel

(Y) Nickel and Oxygen

(Z) Iron and Nickel

ANSWER: Z- Iron and Nickel

**BONUS**

23. ERSC; Multiple Choice: Which of the following is not a metamorphic rock?

(W) Granite

(X) Marble

(Y) Slate

(Z) Schist

ANSWER: W- GRANITE

**TOSS-UP**

24. ERSC; Multiple Choice: What two elements are most common in the outer core?

(W) Iron and Oxygen

(X) Iron and Nickel

(Y)

(Z)

ANSWER:

**BONUS**

24. ERSC; Multiple Choice: What does the lithosphere consist of?

(W) The crust

(X) The mantle

(Y) The crust and upper mantle

(Z) The outer core

ANSWER:

**TOSS-UP**

25. ERSC; Short Answer: Put the following clouds in order from lowest to highest: Cirrus, Cumulus, Stratus

ANSWER: STRATUS, CUMULUS, CIRRUS

**BONUS**

25. ERSC; Multiple Choice: Virga is precipitation that:

(W) Is frozen raindrops

(X) Is small balls of ice

(Y) Falls for a short amount of time

(Z) Never reaches the ground

ANSWER: Z- Never reaches the ground