

Earth Science Reference Table Game

By: Nancy Volk

MOST*

Game Directions:

The class is divided into teams of four. Each team takes turns answering the following questions. The students will use the Earth Science Reference Table for Physical Setting/Earth Science as a reference to solve the questions.

Step 1:

Please state the page number and the title of the chart that answers the question. (Two points awarded)

Step 2:

Answer the specific question correctly for two points.

(Each question can be awarded up to four total points)

Questions

- 1 What planet is more than 17 times the mass of the Earth?
- 2 Where is the barometric pressure recorded around a station model?
- 3 In what period did the earliest mammals appear?
- 4 Uranium-238 decays to what element?
- 5 Which is the faster wave, an S wave or a P wave?
- 6 Which layer of the atmosphere has temperatures that exceed 15 ° Celsius?
- 7 List the ocean currents that can be found between the equator and 20 ° North latitude.
- 8 The age of an object, by carbon-14 age dating, is found to be about 17×10^3 years old. How many half-lives does this represent?

VOCABULARY

Read through the ESRT and find 5 to 10 words that you do not know. Write these down in your notebook and define them.

MATERIALS:

Earth Science Reference Tables for Physical Setting/Earth Science

Notebook

Pencil or Pen

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Students should be able to know how to find:

The terms found in the Earth Science Reference Table (ESRT)

Correct chart to answer questions regarding the ESRT

Correct answers to the questions from the ESRT

Earth Science Reference Table Game

Name: _____

Date: _____

Partner(s) Name: _____

Questions *continued*

- 9 The Peru-Chile Trench is what type of boundary?

- 10 Convert 80 degrees Celsius to Fahrenheit and Kelvin.

- 11 Which layer of the earth is thought to drive plate tectonics on the surface?

- 12 The Adirondack Mountains are made of what type of rock? (Be specific)

- 13 What processes are involved in forming a metamorphic rock?

- 14 For water, which phase change releases 2260 J/g of energy?

- 15 Which planet's year is close to 88 days?

- 16 A particle of .1 cm would require a stream velocity of how much to be carried by the stream?

- 17 What planet has a mean distance from the sun of 227.9 million km?

- 18 List the states that border New York state.

- 19 In what era did the earliest flowering plants appear?

- 20 The specific heat of basalt is?

- 21 Name the plate found at 20 ° North latitude and 40 ° East longitude.

Earth Science Reference Table Game

Name: _____

Date: _____

Partner(s) Name: _____

Questions *continued*

22 In which era did the earliest insects, first coral reefs and first forests occur?

23 What is the formula for eccentricity.

24 Which element makes up 94 percent, by volume, of the earth's crust?

25 A white mineral has a greasy feel and a hardness of one.
This mineral is most likely called _____.

26 What is the time period during which Adirondack Mountain rocks were formed?

27 In the first four seconds after an earthquake, how far will the S wave travel?

28 Phacops, Tetragraptus and Stylonurus are examples of _____.

29 If the difference between the wet-bulb and dry-bulb temperatures is 3 ° Celsius, and the air temperature is 12 ° Celsius, the relative humidity will be _____ ° Celsius.

30 Where is the temperature located around a station model?

31 In what phase does earth's inner core exist?

32 A rock containing plagioclase feldspar, pyroxene, and amphibole with large crystalline structure would be called a _____.

33 Going from a gamma ray to a radio wave increases what characteristic of the electromagnetic wave?

Earth Science Reference Table Game

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Questions *continued*

34 Which era contains the earliest dinosaurs?

35 A mineral has a hardness of 2.5, cubic cleavage, and melts ice. What is this mineral's name?

36 Convert 29.60 inches to millibars.

37 The length of your pencil is?

38 List five major plates of the Earth.

39 Obsidian is made of what four components?

40 Create your own question and answer for the rest of the class.

New York State Standards

Physical Setting Earth Science: High School

Standard 4:

Key Idea 1, Key Idea 2, Key Idea 3