#### <u>Feb. 12, 2020</u>

- 1. Sharpen Pencil
- 2. Sit in assigned seat silently
- Take out 4th 6 Weeks District Test Review and STUDY!!!

<u>Advisory</u> Explain Topic: Thinking for yourself

BLACK HISTORY VIDEO

1. Explain 5 more things you learned from this video.

Things that were new and/or reminded you of things you heard before.

2. Explain how this video made you feel overall.

**TEK 6.10** Earth and space. The student understands the structure of Earth, the rock cycle, and plate tectonics. The student is expected to:

(A) build a model to illustrate the compositional and mechanical layers of Earth, including the inner core, outer core, mantle, crust, asthenosphere, and lithosphere;

(B) classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation;

(C) identify the major tectonic plates, including Eurasian, African, Indo-Australian, Pacific, North American, and South American; and

(D) describe how plate tectonics causes major geological events such as ocean basin formation, earthquakes, volcanic eruptions, and mountain building.

LO: Students will apply knowledge over earth's layers, rock cycle, pangea, tectonic plates and plate tectonic boundaries to complete a 4th 6 weeks district test review.

DOL: Students will complete a 4th 6 weeks district review over earth's layers, rock cycle, pangea, tectonic plates and plate tectonic boundaries with 100% completion.

#### Agenda 1. PDN

- 4th 6 Weeks Review Quiz Game (behavior allowing)
- 3. Book Work if Behavior does NOT allow)
- DOL (Complete 4th 6 weeks review packet)

#### Book Work.. Vocabulary Graphic Organizer Vocabulary Word Definition Picture

1. Read silently pgs. 268-271, Use pgs. 268-271 to complete Vocabulary Graphic Organizer per word.

Words: mineral, igneous rock, sedimentary rock, metamorphic rock

2. Read silently pgs. 286-289, Use pgs. 286- 289 to complete Vocabulary Graphic Organizer per word

Words: Rock Cycle, magma, sediment

3. Read silently pgs. 304-313, Use pgs. 304-313 to complete Vocabulary Graphic Organizer per word

Words: crust, mantle, lithosphere, asthenosphere, outer core, inner core, convection currents

4. Read silently pgs. 318-323, Use pgs. 318-323 to complete vocabulary graphic organizer

Words: plate, divergent boundary, convergent boundary, transform boundary, plate tectonics, pangaea, fault, rift valley

5. Read silently pgs. 332-341, Use pgs. 332-341 to complete vocabulary graphic organizer

Words: earthquake, ring of fire, volcano, magma, lava

#### Review Game Quiz Style

- 1. Teacher will assign groups
- 2. Each group will be allowed 2 textbooks, 1 dry erase board, 1 dry erase marker and 1 dry erase eraser (Paper Towel)
- 3. Teacher will read aloud the question and show on screen
- 4. Teacher will start 20 second timer
- 5. Students are to discuss in group and write correct answer on board
- 6. When time is up teacher will say "TIMES UP, Boards UP"
- 7. Students must raise board or loose point even if answer is correct
- 8. Teacher will check answers and record points as earned (TEACHER HAS FINAL SAY PERIOD!)
- 9. Students will erase boards and prepare for next question
- 10. Teacher will allow 1 minute to check/correct question in Review packet before going to next question

#### TEACHER WILL DEDUCT POINTS FOR POOR SPORTSMANSHIP, CHEATING, YELLING OUT, OUT OF SEAT, ANY AND ALL OFF TASK BEHAVIOR!

### TEK 6.10 Earth and Space Quiz Game Questions



# When we think of land we stand on, what we are actually standing on is the

#### A: mantle B: continental crust C: oceanic crust D: core

### **Continental Crust**



# If I was to travel to the very center of the Earth which layer would I stop my travels in (the middle)?

- A: mantle B: crust
- C: outer core D: inner core

### **Inner Core**



#### If I were able to stand on the bottom of the ocean like Aquaman I would be standing on top of the

A: mantle B: continental crust C: oceanic crust D: core

### **Oceanic Crust**



## What is moving within the mantle that causes it to liquefy?

### A: lithosphere B: Convection Currents C: cold rising D: asthenosphere

## **Convection Currents**

The Earth can be divided into layers based on composition. Which of the following correctly lists Earth's layers in order from the center to the surface?

A: outer core, inner core, asthenosphere, lithosphere B: asthenosphere, lithosphere, outer core, inner core C: inner core, asthenosphere, lithosphere, outer core D: inner core, outer core, asthenosphere, lithosphere

### inner core, outer core, asthenosphere, lithosphere



# The inside of the Earth consists of four major layers. Which is the hottest layer?

#### A: mantle B: inner core C: outer core D: Crust

### Inner Core



#### The thinnest layer of the Earth is the ...

A: mantle B: inner core C: outer core D: crust

### Crust



# If I were able to stand on the bottom of the ocean like Aquaman, I would be standing on top of the \_\_\_\_\_.

#### A: mantel B: Continental Crust C: Oceanic Crust D: Core

### Oceanic Crust



# What is the layer called that I would be standing on if I climbed a mountain?

- A: mantel B: Continental Crust
- C: Oceanic Crust D: Core

### **Continental Crust**



#11-14 on Review Sheet

# In which layer would I find the highest temperatures?

#### A: Crust B: Inner Core C: Mantel D: Outer Core

### Inner Core



What is the name of the layer labeled A in the diagram?

A: Inner Core B: Outer Core

C: Mantel D: Crust



### Crust



What is the name of the layer labeled B in the diagram?

A: Inner Core B: Outer Core

C: Mantel D: Crust



### Mantle



What is the name of the layer labeled C in the diagram?

A: Inner Core B: Outer Core

C: Mantel D: Crust



### **Outer Core**
#14

What is the name of the layer labeled D in the diagram?

A: Inner Core B: Outer Core

C: Mantel D: Crust



# Inner Core



#11 on Review Sheet

# Oceanic Crust is



continental crust.

#### A: more dense B: less dense

C: thicker D: heavier

# More dense



#12 on Review Sheet

- As you move from the surface of Earth to the inner core, what happens to the temperature?
- A: it increases B: it decreases
- C: it stays the same
- D: it increases, then decreases

## It Increases



#13 on Review Sheet

#### The lithosphere consists of:

A: the inner and outer core

- B: the outer core and mantle
- C: the crust and upper mantle
- D: the crust and the asthenosphere

# The crust and upper mantle



#14 on Review Sheet

# Which layer of the Earth's interior is liquid?

#### A: crust B: inner core

#### C: mantel D: outer core

# **Outer Core**



#15 on Review Sheet

# Convection currents are found in the layer.

A: Crust B: Mantle

#### C: Asthenosphere D: Lithosphere

# Mantle



#16 on Review Sheet

# Which layer has 3 different parts, upper/middle/lower?

#### A: Crust B: Inner Core

#### C: Mantle D: Outer Core

## Mantle



### There are \_\_\_\_\_ different groups that all rocks

- can be placed in.
- A: two
- B: three
- C: four
- D: five

### three



#18 on Review Sheet

#### Rocks are made up of

- A: volcanic material
- **B:** sediments
- C: minerals
- D: chemicals and clasts

### minerals



#19 on Review Sheet

The rock cycle is ...

A: a nonliving, solid material that was formed in nature and has particles arranged in a repeating pattern

B: The changing and evolution of rocks from one type of rock to another that takes place over time.

# The changing and evolution of rocks from one type of rock to another that takes place over time.



#20 on Review Sheet

- What is an igneous or sedimentary rock that has been changed by extreme pressure and heat?
- A: Igneous
- **B: Sedimentary**
- C: Metamorphic
- D: Igneous-Sedimentary

# Metamorphic



Sedimentary rock is formed by....

- A: heat and pressure
- B: compaction/cementation of sediment
- C: melting then cooling to solidify
- D: mixing chemicals together

# compaction/cementation of sediment



# Which type of rock is formed when molten magma or lava solidifies?

- A: Igneous
- **B: Sedimentary**
- C: Metamorphic



# Igneous



#22 on Review Sheet

# Sediments that have been pressed together to form which type of rock?

- A: Igneous
- **B: Sedimentary**
- C: Metamorphic

# Sedimentary



#23 on Review Sheet

Identify the series of geological processes that can transform magma into granite, granite into sand, and sand into sandstone

A:cooling; weathering and erosion; compacting and cementing

B:melting; heat and pressure; cooling

C: weathering and erosion; compacting and cementing; cooling

D: weathering and erosion; compacting and cementing; heat and pressure

# cooling; weathering and erosion; compacting and cementing



# What type of rock is known to have crystals in them?

- A: Igneous
- **B:** Sedimentary
- C: Metamorphic



### Igneous



Which of these statements is true?

- A: Rocks can only change on the earth's surface
- B: rocks can change from one type to another
- C: rocks can only change inside the Earth
- D: Rocks never change

# rocks can change from one type to another



#25 on Review Sheet

### What is the name of the image in this

- diagram?
- A: North America
- B: Pangea
- C: Tectonic Plates
- D: Continents





# Pangea


#26 on Review Sheet

Continental drift is when the \_\_\_\_

- A: continents are all stuck together
- B: Magma pushing up through a crack in the Earth's Crust
- C: The slow movement of land over the earth's surface
- D: The Fast movement of land over the earth's surface

33: Answer

# The slow movement of land over the earth's

surface

#34

#### What is Pangea?

- A: multiple oceans
- B: a supercontinent
- C: One or two continents stuck together
- D: How the Earth looks now

34: Answer

### A super continent



#28 on Review Sheet

#### Who first proposed the theory of Continental Drift?

- A: Albert Einstein
- **B: Harry Hess**
- C: Alfred Wegener
- D: Ms. Sharp



# Alfred Wegener



#29 on Review Sheet

- What where the clues used to support the continental drift theory?
- A: fossil remains
- B: Geological landforms (Rock formations)
- C: Continents fit together like a puzzle
- D: All the Above

36: Answer

# Fossil Remains, Land Formations (Rocks), continents seem to fit together like a puzzle



#30 on Review Sheet

#### The border between two tectonic plates is called

a

A: Freeway

B: Ridge

C: Trench

D: Boundary



# Boundary



#31 on Review Sheet

# Using the diagram provided, which plate is the North American Plate?







D



#### #32 on Review Sheet

# Using the diagram provided, which plate is the African Plate?







#33 on Review Sheet

# Using the diagram provided, which plate is the Eurasian Plate?





D



# Where on the map does the Pacific Plate and the North American Plate from a boundary?





D



#34 on Review Sheet

What type of rock is formed from weathering and erosion, deposition and compaction?

A: Igneous

**B: Sedimentary** 

C: Metamorphic



#### 41: Answer

# Sedimentary



#35 on Review Sheet

What type of rock is formed from melting, followed by cooling and solidification?

A: Igneous

**B: Sedimentary** 

C: Metamorphic





# Igneous



#36 on Review Sheet

What type of rock is formed from heat and pressure accompanied by chemical activity?

A: Igneous

**B: Sedimentary** 

C: Metamorphic





### Metamorphic



#37 on Review Sheet

What occurs along a convergent boundary when one plate is sucked down under another?

A: Fault

**B:** Subduction

C: Suction

D: Magma



### Subduction



#38 on Review Sheet

What is the new thing that is formed in ocean at a divergent boundary?

- A: mountains
- B: pebbles
- C: ocean floor
- D: seaweed



### **Ocean Floor**



#39 on Review Sheet

# What part of the Earth's layers do the plates float on top of?

- A: Lithosphere
- B: Core
- C: Crust
- D: Asthenosphere



# Asenthosphere



#40 on Review Sheet

- If I want to visit a Mid-Ocean Ridge, what type of plate boundary do I need to visit?
- A: Convergent
- B: Divergent
- C: Subduction Zone
- B: Transform



# Divergent



#41 on Review Sheet

- If I want to visit a Subduction Zone, what type of plate boundary do I need to visit?
- A: Convergent
- B: Divergent
- C: Mid-Ocean Ridge
- B: Transform



# Convergent



- What type of natural disaster is most likely to occur along a transform boundary?
- A: Earthquake
- B: Tornado
- C: Flood
- D: Forest Fire



### Earthquake


- If I wanted to recreate how a mountain is formed what direction would my tectonic plates move?
- A: Not at all
- B: Past each other
- C: Away from each other
- D: Towards each other

50: Answer

# **Towards Each Other**

#43 on Review Sheet

If I want to create a volcano at/near a subduction zone what type of plate boundary would I need to by?

- A: Convergent
- B: Divergent
- C: Transform
- D: No where near one

## 51: Answer

# Convergent



#44 on Review Sheet

What type of plate boundary is represented in the diagram below?

A: Convergent

B: Divergent

C: Transform





## Transform



#45 on Review Sheet

What type of plate boundary is represented in the diagram below?

- A: Convergent
- B: Divergent
- C: Transform





# Divergent



#46 on Review Sheet

What type of plate boundary is represented in the diagram below?

A: Convergent

B: Divergent

C: Transform





# Convergent



#47 on Review Sheet

# What type of landform is created when oceanic crust and continental crust meet to form a

- subduction zone?
- A: Trench
- **B:** Glacier
- C: Mountain

D: Mid-Ocean Ridge





# Trench

## TEK6.10 EARTH & SPACE Answer Key

1

- Behavior Expectations 1. Communication: Level 1, whispers
- 2. Movement: NONE, stay in your seat at your groups table
- 3. Participation: Cooperative, polite and on task within small group
- 4. Activity: Board Game
- 5. Goal: Complete review packet with 100% completion

### Procedure:

- 1. Place all the question cards in one stack where the questions are facing down towards the table.
- 2. Each person picks one playing piece and puts it on the start
- 3. Roll the dice to see who gets the highest, they go first
- 4. First person takes first card off of top of the deck, reads the question aloud and has 10 seconds to answer.
- 5. The person on the left of the person answering the question has the answer key, they count down from 10 once person with question finishes reading the question. This person tells the person if they got the question correct or not.

6. If the person answers correctly, they roll the dice and move the correct number of places on the board

If the person does not answer correctly the person does NOT roll and continue to step 7-8.

7. Everyone, including person answering the question writes the correct answer on their review packet

8. The card is returned to the bottom of the pile and play continues to the right, answer key also moves to the right one person

9. The person who gets to the finish line first, wins

If time still remains, reshuffle cards and play again.