

20/20 (A)
9-24-04

A. ✓

Name Michael Plasmeier Date 9/24

Science Quiz
Investigation 1: Gathering Evidence and Modeling



Each question is worth 5 pts.

1. Evidence is very important for scientists. Why?

Evidence is very important because the evidence leads you to your conclusion and all of the evidence comes out of your experiment which is a part of the scientific method.

2. In Investigation 1, you drew a sketch of the contents of the Mystery Bag and called that your model. How is a model different from a hypothesis?

A model is made using evidence, a hypothesis does not use the evidence gathered from the experiment because you haven't done the experiment yet.

3. Before doing Investigation 1, you were asked the following Key Question: How do you make a model of something that you cannot see? How would you answer this same question, now that you have completed the investigation?

I would answer the question a little differently as I did ^{before}. Models are made from evidence gathered using your other senses and from using your brain to piece together your evidence.

I learned more from the sheet about models than from the experiment.

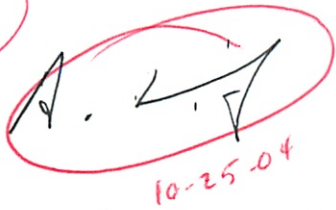
4. How do models help scientists and engineers?

Models help scientists be able to see things that they can't using evidence. They help show things that are too difficult to show. They also help share ideas among other scientists.

Models explain how things operate (work/function)

28/25 (A+)

10-6-04



NAME Michael Plasmeyer PERIOD 3 DATE 10/4
Science Quiz 2 - Investigation 2, Part A: The Interior of the Earth

Each question is worth 5 pts.

1. How did your support group calculate average wave speed after dropping the pebble? In what metric unit is average wave speed expressed?

We calculated the average wave speed of 9.93 cm/s by dividing the average travel time by the distance traveled. The average wave speed is expressed in centimeters per second.

2. Think about what your support group studied in Investigation 2, (Part A) and how it relates to scientists who make models of the inside of the Earth. What part of your experiment represented:

- a. An earthquake, which releases energy in the Earth?

The stone dropping into the water

- b. The movement of energy waves from the earthquakes (seismic waves) in the Earth?

The ripples through the water

c. The material in the Earth through which seismic waves travel?

The water in the pan.

d. The arrival of a seismic wave at a seismograph station where earthquakes are detected?

The ripples at the 2nd dot with the flashlight

BONUS QUESTION 3 pts.

Suppose you had a pan of water that was 100 cm long and after 10 trials of dropping a pebble into the pan at one end, the average wave speed was 33.7 cm/s. How long did it take waves to travel to the other end?

About 3 seconds if it takes 1 second to go $\frac{1}{3}$ of the way (33.7)

14
13/20 (F)
10-14-04

A-4 = 70% = 0-+ Make up

Name Michael Plasmeier Period 3 Date 10/11

Gisting For Earth - Quiz

Directions: Answer true or false for each statement below. If you answer false AND change the bold-typed word/phrase/number to make the statement true, you receive bonus pts.
Note: last names for scientists are sufficient, where it applies.

1. (T) Scientists believe that Earth is about **4.6 billion** years old.
2. ~~was~~ Galileo proved that Earth **was not** the center of the universe, as was thought to be true by people of ancient times.
3. (F) Polish astronomer, **Copernicus** (1473-1543), suggested around 200 years ago that the planets of our solar system and the sun were formed from a hot cloud of gas.
4. water Organisms can live on Earth because it is just the right distance from the Sun for **nitrogen** to form as a **gas**. liquid
5. ~~(F)~~ The atmosphere of Earth contains about **78 percent** oxygen, an essential element to many organisms. 21% (21%)
6. (+) more, more The nearer someone is to the center of the Earth the **less** they are pulled down by gravity and the **less** they weigh.
7. (T) Dangerous ultraviolet rays from the Sun are kept away from Earth by a layer of **ozone** high in the sky.
8. ~~(F)~~ The **continents** of the Earth were **once** molten. is in North America
9. ~~Mc Kenley~~ The highest point on Earth is **Mount Whitney** in the Himalayas, which peaks at a height of around 9 km. Everest
10. (+) Pangea A visitor to Earth 100 million years ago could have walked from Africa to America because the continents were joined together to form one huge continent called **Xanadu**.

short.

You forgot
+1 here
nope

and
+1
here

21
19/20 (A)
10-26-04

M. A.
11-2-04

Make-Up

Name Michael Plasoneier Period Date 10/26

Gisting For Earth - Quiz

Directions: Answer true or false for each statement below. If you answer false AND change the bold-typed word/phrase/number to make the statement true, you receive bonus pts.
Note: last names for scientists are sufficient, where it applies.

True 1. Scientists believe that Earth is about **4.6 billion years** old.

~~F - was~~ 2. Galileo proved that Earth **was not** the center of the universe, as was thought to be true by people of ancient times.

True 3. Polish astronomer, Copernicus (1473-1543), suggested around 200 years ago that the planets of our solar system and the sun were formed from a hot cloud of gas.

~~F - Oxygen~~ 4. Organisms can live on Earth because it is just the right distance from the Sun for **nitrogen** to form as a **gas**.

+1 ~~F - 21%~~ 5. The atmosphere of Earth contains about **78 percent** oxygen, an essential element to many organisms.

+1 ~~F - More, More~~ 6. The nearer someone is to the center of the Earth the **less** they are pulled down by gravity and the **less** they weigh.

True 7. Dangerous ultraviolet rays from the Sun are kept away from Earth by a layer of **ozone** high in the sky.

~~F - once~~ 8. The continents of the Earth were **once** molten.

~~F - McKinley~~ 9. The highest point on Earth is **Mount Everest** in the Himalayas, which peaks at a height of around 9 km.

+1 ~~F - Pangea~~ 10. A visitor to Earth 100 million years ago could have walked from Africa to America because the continents were joined together to form one huge continent called **Xanadu**.

28/25 (A+)

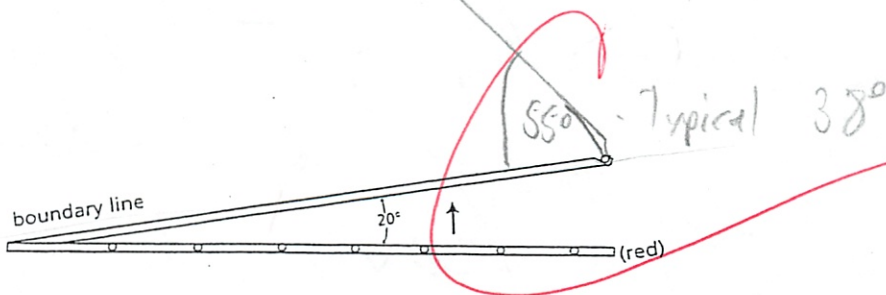
10-19-04

Name Michael Plasencia

Period _____ Date _____

Science Quiz - Investigation 2, Part C: Modeling Wave Refraction

EACH QUESTION IS 5 PTS.



1. Complete the model of wave refraction above, as it appeared AFTER we completed Investigation 2, Part C.

2. The angle of the red line above the boundary is closest to:

- a. 60° - Ours
- b. 38° - Typical
- c. 90°
- d. 20°

3. The wave path

- a. appears to have shifted right.
- b. appears to have shifted left.
- c. did not shift.
- d. should not have shifted.

in relation to what

Because C and D are the similar, they are not correct. If it did shift it would have gone right.

4. When a seismic wave crosses a boundary between two different materials,

- a. the greater the change in speed, the less the refraction.
- b. the greater the change in speed, the greater the refraction.
- c. any change in speed, will not affect the path of the wave.
- d. none of the above.

5. If the speed of a seismic wave remains constant while traveling through the earth, one might conclude

- a. the density inside the earth from layer to layer is constant.
- b. the seismic waves follow a straight path.
- c. both a and b.
- d. none of the above.

Bonus +3 pts.

How did we show that light waves travel at different speeds depending on the medium?

We showed that light waves traveled at different speeds depending on its medium by putting a pencil in a glass of water. This showed that light travels at a different speed when it travels through water. This relates to the fact that earthquake waves travel at different speeds inside the earth's different materials.

10/21

Dear Ms. D'Andrea

I can't believe I forgot to come for the re-test. My mind was so involved in the election and I was helping her set up after school. It slipped my mind. And I am suppose to be responsible. Yeah right. I guess I give up. I am not responsible.

- Michael Plasmier

Mike -
this happens.

If you would like to arrange another date - let me know!

Ms. D'Andrea
10/22

White Board - Volcanoes 10-19-04

Team Presentation Rubric

	4	3	2	1
Group Participation	Each member contributed to the presentation, knew what to do, and when to do it. Showed confidence.	Each member contributed to the presentation	Majority of the members contributed to the presentation.	Only a few members contributed to the presentation.
Organization	Organized, sequential, concrete, on topic	Organized, sequential, and on topic	Somewhat disorganized and off topic at times.	Disorganized, jumped from one idea to another.
Transitions	Transitions from one presenter to the next were successful and clear.	Transitions from one presenter to the next were evident.	Transitions not always apparent.	No transitions
Closing	Closing- concise, effective, and summaries the main idea.	Closing-clear, effectively brought to an end.	Closing-somewhat abrupt, short	No closing
Volume	Volume of the group- everyone could be heard and confident.	Volume of the group- everyone could be heard	Volume of the group- Majority of the group could be heard	Volume of the group- only a few could be heard

Mike
Cristabel 20/20 (A)
Maria

NAME Michael Plasmeior

EXIT

Slip Responsibility.

I have been thinking about what you told me on Friday. It might be the fact that I could never show that I was responsible, because I never had a chance. Responsibility is also more than turning in homework.

True enough -
T.D. Akhen
10-19-04

NAME Michael Plesmeier

EXIT Slip

I am coming after
school today to make
up test - Earth.

Fine. See You then -

T. P. Adams

10-20-04

NAME _____

EXIT

Slip

I will hopefully test
and remember to come Tue
to make up notes + re-take Earth
Test

- Michael Plasmeier

Good Luck!
12-26

Michael P.

Name Michael Plasmeier Period 3 9/30/04 Journal Check #1

8th Grade Science Journal Grading Rubric

Your science binder/journal is an important component of your science experience. In using your Journal as you investigate Earth science questions, you are mirroring what scientists do.

This rubric will be used to evaluate the quality of your journal entries. Use the categories below, as a guide.

<u>CATEGORY</u>	<u>SUPER (5 pts)</u>	<u>AVERAGE (3 pts)</u>	<u>NEEDS IMPROVEMENT (1 pt)</u>
<u>Science Notebook</u>	You have a 3-ring binder for science class papers only.	You have papers from science class and other classes in your science binder.	You DO NOT have a science binder. You will need to get one ASAP.
<u>Assignments</u>	Contains ALL of the assignments we have completed in class. Assignments are in order.	Contains SOME of the assignments we have completed in class. Assignments are more or less in order	Is MISSING most of the assignments we have completed in class. Assignments are in any order.
<u>Notes</u>	Contains ALL of the notes we have taken in class.	Contains SOME of the notes we have taken in class.	Is MISSING most of the notes we have taken in class.
<u>Communication</u>	Usually communicates with clarity and precision.	Sometimes with clarity and precision.	Rarely communicates with clarity and precision.
<u>Neatness</u>	The notebook is neat in appearance.	Some of the notebook is neat.	The notebook is not neat in appearance.

$\frac{23}{25}$ pts

23/25
11-2-04

Investigation 4, Part A

11-9-04 | 11-10-04

Rating Scale:

5 Excellent	4 Good	3 Average	2 Needs Improvement	1 Poor
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Table #2

Mike

Megan McCowan

Pat

Meredith

The members of this group . . .

follow directions	4
move into their group quietly	5
delegate a specific responsibility to each group member	4
gather and maintain all materials properly	5
obey all safety regulations	5
make sure every member of the group is involved	5
encourage each other	5
ask for help only after trying to solve the problem themselves	4
stay focused on the task	5
carefully document their findings	5
achieve positive results	5
effectively present their results	5
put away materials and clean up area when finished	5

4/10

(62)

RUBRIC

Oral Presentation

- 10 ^{group} S: The student makes an eloquent presentation. He or she has masterful control of the science content and uses superb oral presentation skills. Strategies such as visual aids, props, and/or humor are especially effective.
- 8 T: The student clearly knows the subject. Science concepts are used correctly. Specific details support the main ideas. Vocabulary appropriate to both the topic and the audience is used. Visual aids, which are interesting and clear, can be seen by everyone in the audience. The speaker is enthusiastic, can be easily heard by everyone, and uses eye contact and other body language to increase the effectiveness of the presentation. Positive humor or another strategy is used to stimulate interest. The audience is involved and has time to think about what is being said. The speaker accomplishes his or her purpose.
- 6 U: The presentation is similar to one receiving a rating of T, except that one or two elements are not excellent.
- 4 V: The presentation is similar to one receiving a rating of W, except that one or two elements are well done.
- 2 W: The student does not have a strong command of the topic. Science concepts are not used well, and supporting details are lacking. Visual aids are poor or lacking. The talk is more like a reading than an oral presentation. Some humor may be negative. Characteristics of the presentation such as volume, rate, enthusiasm, and body language do not work to the speaker's advantage. The audience is not involved in the presentation. The speaker does not accomplish his or her purpose.
- 1 X: The presentation is very poor or not done.

18/24 ©

11-8-04

M. P.

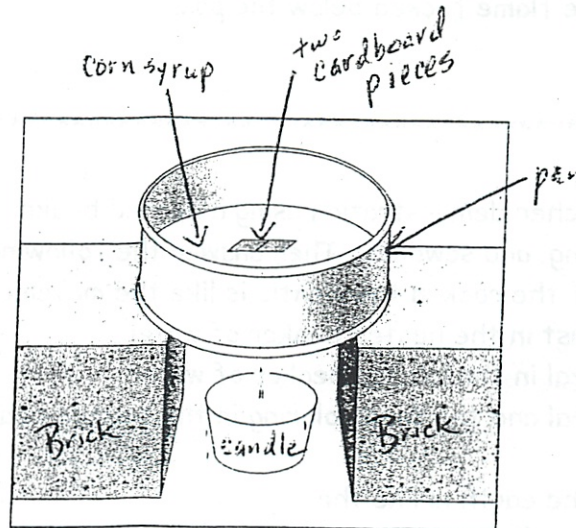
1/5

Name Michael Plasmier

Period 3

Science Quiz - Investigation 3: Forces That Cause Earth Movements

Each answer is worth 3 pts.



1. In the experimental setup pictured above
 - a. the earth's crustal plates are represented by the two bricks.
 - b. the earth's mantle is represented by the corn syrup.
 - c. the earth's core is represented by the pan.
2. After the candle was lit, several observations were made. One observation made was the movement of the cardboard. We concluded that this was the result of
 - a. a convection cell forming in the corn syrup.
 - b. the corn syrup evaporating.
 - c. bubbles forming on the surface of the corn syrup.
3. The name given to the zone below the earth's lithosphere, where mantle rocks are just hot enough and under enough pressure that they will deform and change shape, is called
 - a. the subduction zone.
 - b. the asthenosphere.
 - c. magma.

4. The earth's lithosphere seems to act like a passenger on a conveyor belt, somewhat like how
- a. the cardboard pieces were conveyed along the top of the corn syrup.
 - b. the corn syrup bubbled at the surface of the pan.
 - c. the candle flame flicked below the pan.

Think about the teacher demonstration using a heated beaker of water with oatmeal, food coloring, and sawdust. Then answer the following questions:

5. The movement of the rock in the mantle is like the movement of
- a. the sawdust in the heated beaker of water.
 - b. the oatmeal in the heated beaker of water.
 - c. the oatmeal and the food coloring in the heated beaker of water.
6. The interior of the earth is like the
- a. hot plate in the oatmeal, food coloring, and sawdust model.
 - b. the Bunsen Burner in the oatmeal, food, coloring, and sawdust model.
 - c. boiling of the water in the oatmeal, food coloring, and sawdust model.

True or False:

- True 7. When magma approaches the earth's surface it can force the lithosphere apart at mid-ocean ridges.
- ~~False~~ 8. When a heated fluid cools, it contracts or shrinks, becomes more dense, and sinks.

20/20
11-19-04

Pat Maloney
Meredith Dineen
Melissa McGowan
Michael Phizmeir

Team Presentation Rubric

	4	3	2	1
Group Participation	Each member contributed to the presentation, knew what to do, and when to do it. Showed confidence.	Each member contributed to the presentation	Majority of the members contributed to the presentation.	Only a few members contributed to the presentation.
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25/25 (A)

11-19-04



Name Michael Plosa Period 3 November 19, 2004

Science Notebook Quiz

1. On 11-9-04, we completed Investigation 4: The Movement of the Earth's Lithosphere, procedures 2-5. Using corrugated cardboard pieces and cereal box cardboard, which kind of plate boundary did we attempt to model?
 - a. a divergent plate boundary
 - b. a convergent plate boundary
 - c. a transform plate boundary
2. On 11-11-04, we were assigned Digging Deeper: The Earth's Lithosphere, pages 35-39. We found out that the lithosphere
 - a. consists of the crust and the upper, rigid part of the mantle.
 - b. is the outermost shell of the Earth.
 - c. takes part in mantle convection.
3. On 11-16-04, we were introduced to Investigation 5: Earthquakes, Volcanoes, and Mountains. What was the Key Question?
 - a. How are earthquakes, volcanoes, and mountains related?
 - b. Have the continents and oceans always been in the positions they are today?
 - c. Does the rock of the Earth's mantle move?
4. On 11-17-04, we used a world map to
 - a. plot worldwide subduction zones.
 - b. plot seismograph station results for five days.
 - c. ~~plot~~ crustal plate boundaries.
5. On 11-17-04, your group discussed the meaning of, and recorded definitions for the following terms:
 - a. latitude, longitude, magnitude, and depth
 - b. latitude, longitude, magnitude, and amplitude
 - c. latitude, longitude, amplitude, and depth

Name Michael Plasmeier

Period 3 Date 11/20



IES - Library Research - Earthquakes and Volcanoes

Log on internet

Type in: www.agiweb.org/ies

Click on Dynamic Planet

Click on Investigation 5

Scroll down and click on: 15 Largest Earthquakes in the U.S.

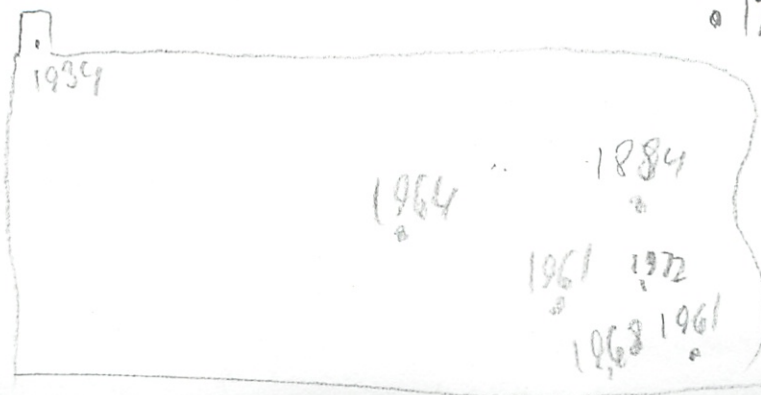
Scroll down to bottom of page and click on: U.S. Earthquake History State by State

Click on Pennsylvania

Click on Earthquake History of PA

Write a summary of what you read in the space below and include a map if you can.

Pennsylvania has had its share of Earthquakes, with some being reported in at least 1 part of the state almost every 10 years. The records seem to start in 1735, where an earthquake shook New York City and was felt here. An earthquake hit Allentown on May, 31, 1884. A major earthquake hit Erie on Oct. 29 1934 on Sep. 14, 1961 an earthquake shook Lehigh Valley, and on Dec 27, 1961 the same happened



in in Northeast Philadelphia on May 12, 1964, in Cornwall, Pa

earthquake was felt above and below
ground in mine tunnels. Another
small earthquake was felt around
here at Magnitude 2.5. The next
earthquake occurred in Bucks
county on Dec. 7 1972. Our region
has had the occasional small
earthquake.

Intensity $V = 5$ on Richter Scale

Michael Plasmeyer

Meredith O'Neill

Table #5

NEISSAMCATHY

19/20



12-1-04

Investigation #5

JULIANNE VECERE

Team Presentation Rubric

	4	3	2	1
Group Participation	Each member contributed to the presentation, knew what to do, and when to do it. Showed confidence.	Each member contributed to the presentation	Majority of the members contributed to the presentation.	Only a few members contributed to the presentation.
Organization	Organized, sequential, concrete, on topic	Organized, sequential, and on topic	Somewhat disorganized and off topic at times.	Disorganized, jumped from one idea to another.
Transitions	Transitions from one presenter to the next were successful and clear.	Transitions from one presenter to the next were evident.	Transitions not always apparent.	No transitions
Closing	Closing- concise, effective, and summaries the main idea.	Closing-clear, effectively brought to an end.	Closing-somewhat abrupt, short	No closing
Volume	Volume of the group-everyone could be heard and confident.	Volume of the group-everyone could be heard	Volume of the group-Majority of the group could be heard	Volume of the group-only a few could be heard

21/21
12-10-04

~~A. 27~~



Name Michael Plasmeier Period 3

Science Quiz
Investigation 6: Earth's Moving Continents

Each answer is worth 3 pts.

1. Looking at the map on page 52 (top) the best way to describe the match between the east coast of South America and the west coast of Africa is:
 a. The match is generally very good, although not perfect.
 b. There is no match.
 c. You cannot tell by looking at this map.

2. How old are the mountain chains pictured on the map on page 52 (bottom)?
 a. 1,000 years old.
 b. older than 250 million years.
 c. about 100 years old.

3. During the assembly of Pangea, we found that:
 a. There could only be gaps.
 b. There could only be overlapping.
 c. There will inevitably be some gaps and overlaps.

4. Based on the fossil evidence alone, the idea of a single continental mass in the past, is
 a. most likely true.
 b. still questionable.
 c. definitely true.
*What about North America + Eurasia
They don't need to be together
maybe would be 2 continents*

5. The "red line" drawn on the map of Pangea represents
 a. the limit of glacier ice.
 b. the area covered by the world's oceans in the past.
 c. where the fossils of the fern *Glossopteris* were found.

6. The dotted lines along the edges of the "continental cutouts" represent
 a. the extent of the continental slope.
 b. the extent of the continental shelf.
 c. the abyssal plain.

True or False 7. As more evidence becomes available, there is likely to be more changes to the model Pangea.

54/60

(B)

A. V

(D)

12/23/04

Name Michael Plasmeier Period 3 Date 12/27

Final Assessment - Dynamic Planet

Circle the letter of the choice that best answers the questions or completes the statement.

1. The part of the Earth that is made of high-temperature liquid iron is called the:

- a. outer core.
- b. inner core.
- c. mantle.
- d. asthenosphere.
- e. lithosphere.

2. What is the term used for molten rock within the Earth?

- a. granite
- b. pumice
- c. lava
- d. magma

3. One plate slides past another horizontally at:

- a. transform fault boundaries.
- b. convergent plate boundaries.
- c. subduction zones.
- d. divergent plate boundaries.

4. The Earth's lithospheric plates move at speeds that average:

- a. 5 meters per year.
- b. 5 centimeters per year.
- c. 50 meters per year.
- d. 5 kilometers per year.

5. The bending of a wave due to changes in its velocity is called

- a. reflection.
- b. refraction.
- c. declination.
- d. convection.

6. The fastest kind of seismic wave is a

- a. long wave (L wave).
- b. shear wave (S wave).
- c. compressional wave (P wave).
- d. tidal wave.

7. The Earth's crust and mantle:

- a. have the same chemical composition.
- b. have the same thickness.
- c. have different densities.
- d. have no boundary between them.

8. An earthquake on the sea floor can produce:

- a. magma.
- b. subduction.
- c. tsunamis.
- d. tornadoes.

9. New crust is formed and spreads apart at:

- a. transform fault boundaries.
- b. convergent plate boundaries.
- c. subduction zones.
- d. divergent plate boundaries.

10. Most earthquakes occur:

- a. in the middle of plates.
- b. at the poles.
- c. very deep within the Earth (>900 km deep).
- d. along plate boundaries.

11. A conceptual model is

- a. a structure /model a scientist builds to represent something else.
- b. a mathematical equation that describes how some process works.
- c. the same as a numerical model.
- d. a model that a scientist develops in his or her mind.

12. The oceanic crust is _____ than the continental crust.

- a. thicker
- b. thinner
- c. less dense
- d. smaller in area

13. The San Andreas Fault in southern California is an example of a boundary between:

- a. two plates that are colliding.
- b. two plates that are moving apart.
- c. two plates that are sliding past one another.
- d. continental lithosphere and oceanic lithosphere.

14. What name did Alfred Wegener give to his theory of horizontal movement of the Earth's crust?
- a. Continental drift.
 - b. Isostasy.
 - c. Plate tectonics.
 - d. Sea-floor spreading.
15. What name did Wegener give to his proposed single supercontinent?
- a. Eurasia
 - b. Gondwanaland
 - c. Panthalassa
 - d. Pangea
16. Which of the following kinds of evidence did Wegener use to support his theory?
- a. Distributions of fossil plants and animals in the ocean
 - b. Geographic fit of the continents
 - c. Pattern of earthquakes and volcanoes along the "Ring of Fire"
 - d. Presence of a large volcanic mountain range which he called the mid-ocean ridge
 - e. All of the above
17. Why did most scientists of the 1920s reject Wegener's theory?
- a. The concentration of continents in the Northern Hemisphere.
 - b. Lack of a mechanism (force) for continents to plow through oceanic crust.
 - c. The Earth was thought to be too young for such movements.
 - d. Wegener was not a geologist by training and so his ideas were ignored.
18. According to plate tectonics, new lithosphere is added to plates at a boundary between:
- a. two plates that are no longer moving.
 - b. two plates that are moving apart.
 - c. two plates that are sliding past one another.
 - d. continental lithosphere and oceanic lithosphere.
19. The process that consumes ocean crust where two plates meet, is called:
- a. convection.
 - b. subduction.
 - c. refraction.
 - d. trenching.
20. A physical model is
- a. a structure a scientist builds to represent something else.
 - b. a model a scientists constructs in his or her mind.
 - c. a mathematical equation that describes how some process works.
 - d. none of these.

21. Mantle ____ plays an important role in moving Earth's lithospheric plates:

- a. conduction.
- b. convection.
- c. refraction.
- d. liquefaction.

22. Seismic waves that cannot travel through liquids, are called:

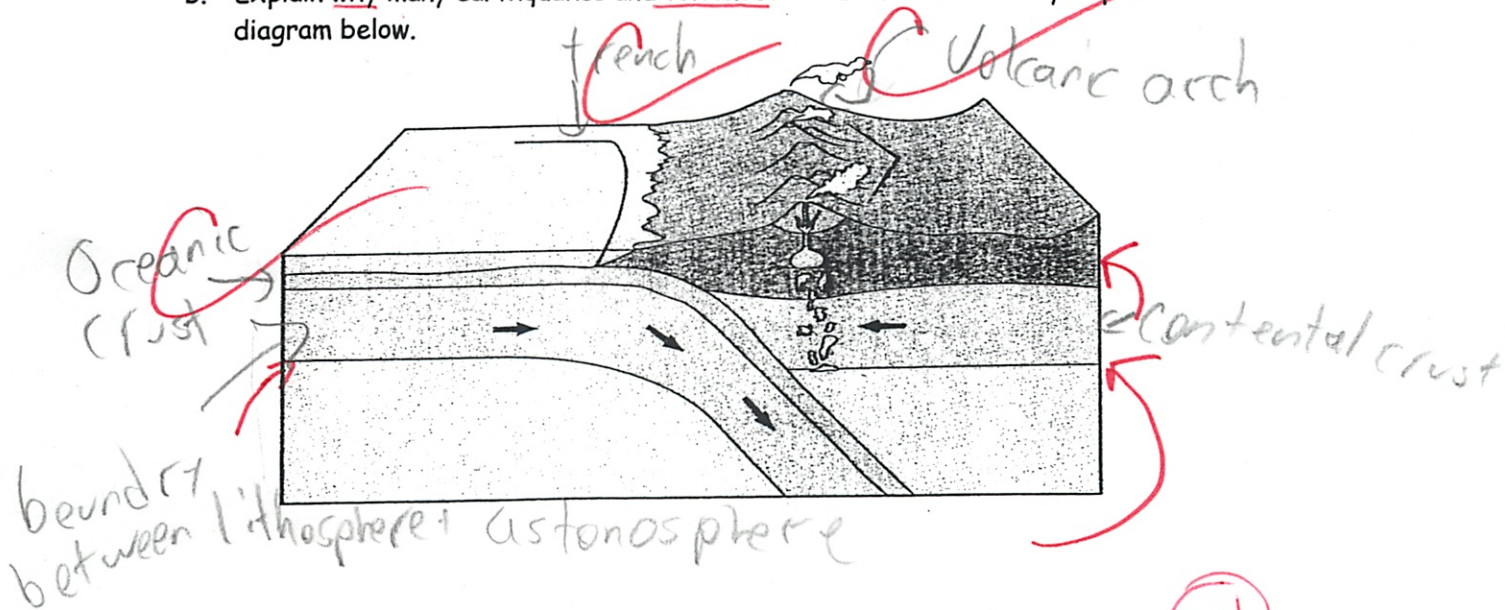
- a. long waves (L waves).
- b. shear waves (S waves).
- c. compressional waves (P waves).
- d. tidal waves.

23. The ____ of an earthquake is the point on the Earth's surface directly above the

- _____:
- a. epicenter / focus.
 - b. focus / epicenter.
 - c. refraction / epicenter.
 - d. refraction / focus.

24. Refer to the diagram below to answer the following questions:

- Using arrows, label the following features on the diagram: **trench**, **oceanic crust**, **continental crust**, **volcanic arc**, **boundary between lithosphere and asthenosphere**.
- Explain why many earthquakes and volcanoes occur at the boundary depicted in the diagram below.



many earthquakes and volcanoes occur here because this is a subduction zone. The oceanic crust subducting under the continental crust causes the pressure to build up and is released during an earthquake. The plate subducting causes it to heat up which forms

magma and
volcanos in hot spots
in the continental crust's
surface.

1. Explain why many earthquakes and volcanoes occur at the boundary depicted in the diagram below.
2. Explain why many earthquakes and volcanoes occur at the boundary depicted in the diagram below.
3. Using arrows, label the following features on the diagram: trench, volcanic arc, continental crust, volcanic arc, boundary between lithosphere and asthenosphere.



Handwritten notes and diagrams below the main diagram, including a circular diagram with the letter 'A' inside, and several lines of illegible handwriting.

Science – Grade 8
Second Quarter Project: Alphabet Book
Due Date: January 14, 2005
Ms. D'Andrea

Directions:

1. Complete **Alphabet Letter Sheet** enclosed (there is a sample as well). You will write one word from the textbook: Our Dynamic Planet, that starts each letter of the alphabet.
2. Design a Cover that compliments your alphabet letter sheet and include your name, homeroom, science, period you have science, and the above due date.
3. Design a page for each letter of the alphabet with the words you chose. You may use loose leaf, construction paper, or computer paper. Write a full paragraph about the word chosen, including why you chose the word, a graphic, and a sentence using the word correctly. Finally, highlight the alphabet word used in your sentence.
4. When completed, assemble the alphabet book as follows:
 - Cover
 - Alphabet Letter Sheet
 - A – Z pages
 - Scoring Rubric

capit'nd
for extra
pts.

Grading: See Rubric attached.

Good Luck Everyone ☺ I hope you enjoy this project.

Notes:

*3 class periods will be used to work on this project, with the rest of the work being done on your own, at home.

*Any questions, do not hesitate to ask.

Alphabet Letter Page

Dynamic Planet

A sthenosphere

Between Plates

~~Mid Ocean Ridge~~

Convection

Density

Earthquake

Fault

Geosphere (Description)

Hazard (Invest 7)

Innner Core (+ Other layers)

Juan de Fuca Plate
(San Andreas Fault)

Ka-Boom

Continental-Continental Collision

Lithosphere

Magma

New Crust

Oceanic Crust

Plate

Questions remain

Refraction

Subduction
Upper Contact
(Pangea)

Tectonic plates
Trenches (Ridge?) The continental drift

Under Earth's Surface theory

Volcanos

Waves

X-Ray (2A Background)

Years and Years

Zone of Subduction

09/11/17

17475

Sample

Alphabet Book

Chapter 4: Acceleration and Momentum

A action Force	N Newton, Sir I
B balance	O object
C conservation of momentum	P power
D decelerate	Q eQual
E effect	R reaction force
F force	S speed
G gravity	T time
H higher speed	U unbalance
I inertia	V velocity
J jet	W weight
K kilogram	X e xertion
L laws	Y yoke (part of an airplane)
M motion	Z zero (free-fall)

Scoring Rubric

Name/s _____

Alphabet Book - Dynamic Planet

Ms. D'Andrea - Grade 8 Science - Gray Wolves

CATEGORY	20 points	Actual Points obtained
Content	You will get 20 points for content if you write atleast a full paragraph and explain in great detail the significance of why you chose the word that you did for each letter, and use the word in a complete statement correctly.	
Letters of the Alphabet	To obtain 20 points in this category you must have a page for each letter in the alphabet, 26 in all.	
Art	To obtain 20 points in this category you must have a picture for each letter of the alphabet.	
Creativity	To obtain 20 points in this category you must show creativity throughout this project.	
Neatness	To obtain 20 points in this category you must have your project in some kind of binder, if just construction paper stapled together.	

Extra Credit – Third Quarter – Science – Ms. D’Andrea

Assignment: The Element Mercury

On one sheet of construction paper design an information sheet on the element Mercury, by answering the questions below. You may add any other information you find. You may share this with the class for additional points.

The chemical symbol for mercury is Hg. Find out the origin of this symbol.

Minimata Disease is related to the element mercury. Explain how.

Suppose you could transport a container of mercury safely to the planet Mercury. The planet has a surface temperature of 467°C (872°F) during the day and -183°C (-300°F) at night. Would the mercury metal remain a liquid? Explain.

Mercury was the Roman god of speed and commerce. In ancient Rome, coins typically featured a picture of a Roman god or goddess on one side. Research these deities. Then, select only one to illustrate your own “Roman coin.”

Name Michael Plasmeier Period _____

This Week in Science
Ms. D'Andrea

Monday, 1/124/05

Begin 3rd Quarter Classes Today!

1. Sharing of Alphabet Books (optional – extra credit for 3rd Quarter)

Homework: Complete Physical Properties of Matter Packet for Friday, 1/28/05

A physical property is a characteristic that a sample of matter possesses and can be observed or measured with changing its identity.

Tuesday, 1/25/05

1. The Properties of Water
 - a. Sketch of a water molecule
 - b. Properties of Water Worksheet

Homework: See Monday night.

Wednesday, 1/26/05

1. Textbook (SciencePlus) page 96: Testing Your Understanding

Homework: Each table will be responsible for bringing in a box of toothpicks and 5 different colors of modeling clay for tomorrow's class.

Thursday, 1/27/05

Report Cards today!

1. Textbook (SciencePlus) page 97: Even More Models
 - a. Student groups will assemble/construct model molecules and share with the class for discussion.

Homework: See Monday night.

Friday, 1/28/05

1. Physical Properties of Matter Packet
 - a. Groups will make presentations to the class.

Homework: More on the Particle Theory Packet for Tuesday, 2/1/5

Name Michael Plasmer Period 2
This Week in Science
Ms. D'Andrea

Monday, 1/17/05
No Classes – Martin Luther King Day of Service

Tuesday, 1/18/05
1. Recap: Exploration 1: Making the Case
2. Chapter 5: Lesson 2 – The Hidden Structure of Matter
a. Discuss page 92
b. Notes
c. New Terms

Homework: None Assigned

***Wednesday, 1/19/05**
Current Events – Entry #7
*Alphabet Book Presentations (optional)
Homework: None Assigned

***Thursday, 1/20/05**
2nd Quarter Ends Today
1. Chapter 5: Lesson 2 – The Hidden Structure of Matter
a. Making a Water Molecule
b. Page 93
1. Flowchart (John Dalton)
2. Time Out for Discovery
*Alphabet Book Presentations (optional)
Homework: Quiz tomorrow on ScienceLog/Portfolio

Friday, 1/21/05
1. Quiz on ScienceLog/Portfolio
2. Time Out for Analysis
Homework: None Assigned

Congratulations to all for a job well done on the Second Quarter Project: Alphabet Book –Dynamic Planet. All Books will be returned on Monday, 1/24/05. ☺

Name Michael Plasmeior Period 3

This Week in Science
Ms. D'Andrea - Grade 8

Monday, 1/10/05

Exploration 1: Making the Case

- a. Groups will **begin** Laboratory Packet: Exploration 1: Making the Case
 1. Part I: A Thought Experiment
 2. Part II: Seeing Red
 3. Part III: Pour Judgment
 4. Part IV: When $1 + 1 \neq 2$

Homework: None Assigned

***Tuesday, 1/11/05**

Exploration 1: Making the Case

- a. Groups will **finish** Laboratory Packet: Exploration 1: Making the Case
- b. Groups will present data to class

***Period 5: Assembly in Auditorium at 11:45 - History Research Paper**

Homework: Portfolio/ScienceLog Quiz on Friday, 1/14/05

Wednesday, 1/12/05

Alphabet Book: Dynamic Planet - Work Day 4

Homework: Work on Alphabet Book at home

Portfolio/ScienceLog Quiz on Friday, 1/14/05

Thursday, 1/13/05

Alphabet Book: Dynamic Planet - Work Day 5

Homework: See Wednesday Night's Homework

Friday, 1/14/05

1. Portfolio/ScienceLog Quiz
2. Finish Alphabet Book: Dynamic Planet and submit at end of class.

Homework: None Assigned