Tellus Trip N,D,P

1. **Mineral Gallery**
2. What gemstone/mineral occurs in the magnificent **geode** in the entryway? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ How was the cavity formed?
3. What type (class) of **meteorite** landed in Cartersville in 2009?
   1. Iron b. Stony-iron c. Stony
4. Are **tektites** a type of meteorite? Explain.
5. What is the thickness (radius) of the Earth? \_\_\_\_\_\_\_\_\_\_\_\_ miles
6. Which of the following are examples of **rocks** (not minerals)? Circle the rocks below:

Obsidian, pyrite, quartz, granite

1. Name the 3 rock families, **and** briefly describe how each forms (origin):
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Unlike most volcanoes, Hawaii does not occur at a plate boundary. Instead, the islands of Hawaii formed over a \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_.
3. Checkout the USGS Earthquake display. What is the location of the **largest earthquake** today?
4. Which of the following rocks and minerals occur in **bread, cookies and cake**? Circle the correct answers below:

Quartz, Rutile, Niter, Diatomite, Marble, Halite, Sulfur, Hematite, Trona

1. In which Georgia city is **barite** mined? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is **barite** used for? (list 3)

1. Discovered in 2010, what is the name of the most recent **element** in the periodic table?
2. What is the **crystal shape** of quartz? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Which mineral is **number 7** on Moh’s scale of hardness? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What are 2-3 characteristics of a **sulfide** mineral?
5. Which is the most abundant class (family) of minerals?
   1. Carbonates b. Silicates c. Oxides d. Sulfides

What **2 elements** do all of these minerals contain?

1. What is Georgia’s official **state mineral**?
2. Check out the case of birthstones? What is your **birthstone** (list the members of your group and the birthstone of each)?
3. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a mineral that is rare, durable, natural, and has great beauty.
4. What shiny **mineral** is found in Huaron, Peru, Elba, Italy, AND Zacatecas, Mexico?
5. **Fossil Gallery**
6. Checkout the ***Apatosaurus*** in the main lobby. When was it discovered and where?
7. What are the **most common** types of fossil regardless of age?
8. What **era** are we currently in?
   1. Mesozoic b. Cenozoic c. Paleozoic d. Precambrian
9. Name the 3 periods that make up the **Mesozoic Era**:
10. Did the Pteranodon have wings? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Did they have teeth? \_\_\_\_\_\_\_\_\_\_\_\_
11. What type of feeders were **Mosasaurus**?
    1. Carnivore b. Herbiore c. Omnivore
12. (true or false) **Passenger pigeons** lived in Georgia. Explain.
13. What type of animal was the **Megalodon**?
14. What creature will most likely **end** the Cenozoic Era?
15. **Transportation Gallery**
16. Find the **moon rock (**back corner of the exhibit). What is this moon rock made of (what rocks/minerals)?

Tellus Trip KEY N,D,P

1. **Mineral Gallery**
2. What gemstone/mineral occurs in the magnificent **geode** in the entryway? Amethyst

How was the cavity formed? trapped gas bubble in lava/magma

1. What type (class) of **meteorite** landed in Cartersville in 2009?
   1. Iron b. Stony-iron c. Stony
2. Are **tektites** a type of meteorite? Explain.

No—they form when a meteorite hits and ejects material that was on earth (the material melts and hardens)

1. What is the thickness (radius) of the Earth? About 3960 miles
2. Which of the following are examples of **rocks** (not minerals)? Circle the rocks below:

Obsidian, pyrite, quartz, granite

1. Name the 3 rock families, **and** briefly describe how each forms (origin):
   1. Igneous—from lava/magma
   2. Sedimentary—forms in layers (usually underwater)
   3. Metamorphic—changed due to heat and/or pressure
2. Unlike most volcanoes, Hawaii does not occur at a plate boundary. Instead, the islands of Hawaii formed over a hot spot.
3. Checkout the USGS Earthquake display. What is the location of the **largest earthquake** today?
4. Which of the following rocks and minerals occur in **bread, cookies and cake**? Circle the correct answers below:

Quartz, Rutile, Niter, Diatomite, Marble, Halite, Sulfur, Hematite, Trona

1. In which Georgia city is **barite** mined? Cartersville

What is **barite** used for? (list 3) brakes, shoes, golf balls, bowling balls, medical imaging

1. Discovered in 2010, what is the name of the most recent **element** in the periodic table?

Ununseptium (Uus)

1. What is the **crystal shape** of quartz? hexagonel
2. Which mineral is **number 7** on Moh’s scale of hardness? quartz
3. What are 2-3 characteristics of a **sulfide** mineral? metallic luster, high density, dark color
4. Which is the most abundant class (family) of minerals?
   1. Carbonates b. Silicates c. Oxides d. Sulfides

What **2 elements** do all of these minerals contain? silicon and oxygen

1. What is Georgia’s official **state mineral**? staurolite
2. Check out the case of birthstones? What is your **birthstone** (list the members of your group and the birthstone of each)?
3. A gem/ gemstone is a mineral that is rare, durable, natural, and has great beauty.
4. What shiny **mineral** is found in Huaron, Peru, Elba, Italy, AND Zacatecas, Mexico?

pyrite

1. **Fossil Gallery**
2. Checkout the ***Apatosaurus*** in the main lobby. When was it discovered and where?

1901 in Wyoming

1. What are the **most common** types of fossil regardless of age?

seashells and marine invertebrates

1. What **era** are we currently in?
   1. Mesozoic b. Cenozoic c. Paleozoic d. Precambrian
2. Name the 3 periods that make up the **Mesozoic Era**:

Triassic, Jurassic, Cretaceous

1. Did the Pteranodon have wings? Yes Did they have teeth? No
2. What type of feeders were **Mosasaurus**?
   1. Carnivore b. Herbiore c. Omnivore
3. (true or false) **Passenger pigeons** lived in Georgia. Explain.

Bones found (in Cartersville)

1. What type of animal was the **Megalodon**? shark
2. What creature will most likely **end** the Cenozoic Era? humans
3. **Transportation Gallery**
4. Find the **moon rock (**back corner of the exhibit). What is this moon rock made of (what rocks/minerals)?