**Activity 1: Types of Rocks – #FindYourPark Activity**

|  |  |
| --- | --- |
| Observation #1  Park Name:  Circle Rock Type: Sedimentary / Igneous / Metamorphic  1-sentence Description:  Draw an example: | Observation #2  Park Name:  Circle Rock Type: Sedimentary / Igneous / Metamorphic  1-sentence Description:  Draw an example: |
| Observation #3  Park Name:  Circle Rock Type: Sedimentary / Igneous / Metamorphic  1-sentence Description:  Draw an example: | Observation #4  Park Name:  Circle Rock Type: Sedimentary / Igneous / Metamorphic  1-sentence Description:  Draw an example: |

**Activity 2: Geologic Wonders Bucket List**

|  |  |  |  |
| --- | --- | --- | --- |
| **Check**  **Box** | **Geologic Wonder Location** | **Must See Geology Found Here** | **Adventure Notes** |
| Example | Yellow Stone National Park | Yellowstone Caldera, Old Faithful Geyser | Contains over half of the 1,000 or so known geysers in the world! |
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**Activity 3: Ancient Rocks**

Congratulations for completing Activity 3: Ancient Rocks!

The National Park Service preserves some of the oldest rocks in the world. These **ancient rocks** tell us a story about our past and gives scientists clues to the development and change of our environment, plants, and animal species.

**Reflection:** After viewing some of the Precambrian Geology Park sites, what surprised you the most about these ancient rocks? How old were there some of the rocks that you found? Which were some of your favorite ancient rock landscapes? Provide your answer to these reflection questions below.

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**Draw a picture:** Scientists often draw their first observations in a non-formal way! As a budding Geoscientist, practice your drawing and observational skills by drawing your favorite scenic view or ancient rock below.

**Activity 4: What happened at Widewater?**

Water erosion is a natural process that shapes our environment and impacts our local waterways. After visiting the Kids and Youth Widewater page and examining the diagram. Reflect on the following questions:

You learned that the builders of the C&O Canal decided to use an ancient, abandoned channel of the Potomac for this portion of the Canal, which saved them the trouble of digging.

**What it *really* means?**At 400 feet wide, it is much wider than most sections, which averaged 50-80 feet. See the following conversions:

* Average length of a school bus = 9 feet
* Average length of an elephant = 20 feet
* Maximum Canal boat length in C&O Canal = 90 feet

**Directions:** Using math and the help of a family member or friend, divide the width of Widewater = 400 feet by the different lengths above.

1) How many school buses does Widewater equate to? Answer = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ school buses  
  
Example =

|  |  |  |
| --- | --- | --- |
|  | 400 feet | 🡨 Width of Widewater |
| ÷ | 9 feet | 🡨 Average length of school bus |
|  |  | 🡨 Write answer |

2) How many elephants does Widewater equate to? Answer = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ elephants  
Example =

|  |  |  |
| --- | --- | --- |
|  | 400 feet | 🡨 Width of Widewater |
| ÷ | 20 feet | 🡨 Average length of elephants |
|  |  | 🡨 Write answer |

3) How many Canal boats does Widewater equate to? Answer = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Canal boats

Example =

|  |  |  |
| --- | --- | --- |
|  | 400 feet | 🡨 Width of Widewater |
| ÷ | 90 feet | 🡨 Max length of Canal boats |
|  |  | 🡨 Write answer |

**Activity 5: Geodiversity**

**Reflection:**

1. What were the biggest similarities among the three regions?

2. What were the biggest differences?

**Activity 6: Geologic History**

🡪 Looking at the Geologic Time Scale diagram on Activity 6, answer the following questions:

1) During which era did the Appalachian Mountains form? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) During which era did the Atlantic Ocean begin to form? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) During which era did the first land plants emerge? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

🡪 Visit any of the Rock Talk locations and reflect on your trip. Use the discussion questions for each location as a starter!

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| --- |
| Rock Talk Location:  Description of Geology:  Answers to discussion questions: |
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**Congratulations!**

You completed the Junior Geoscientist program.

Return to the Junior Geoscientist Main Page to claim your completion certificate.

