

Your Name: \_\_\_\_\_

HAND-IN- hard copy -- at class - April 2 / 4  
Observations of PATTERNS related to  
Landforms, Earth Materials and Earth Processes

CORE IDEAS of EARTH SCIENCE  
History of Planet Earth  
Role of Water on Earth's Surface  
Weather and Climate  
Tectonics

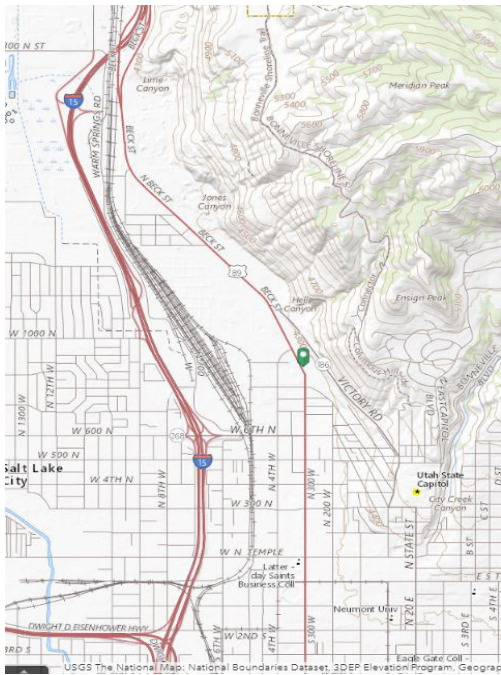
Essential info at: <http://www.earthscienceeducation.org/place-slcounty-warmspringspark-y19/>



Your assignment... practice curiosity about PATTERNS at Warm Springs Park - old Wasatch Plunge. Specifically...

- wonder about the gray / black boulders of the retaining wall on east side of parking lot.
- wonder about the melon size rocks in the pillars by the restroom north and east of parking lot
- wonder about the bedrock of the quarry that's visible from the highest places of the sidewalk loop
- wonder about the warm springs of the park.

Why? Being curious role models science practices... and may inspire others (students) to see JOY outside.



Location - across Beck Street from the Tesoro gas station at 965 Beck Street.

Google: Wasatch Springs Plunge (old name of old building).

This hand-in has four pages, one for each of the stops.

Goal: Practice curiosity. Yes, apply core ideas and be aware of sediments versus bedrock. Yes, figure out relative ages of some of the units. Yes, go to the website (<http://www.earthscienceeducation.org/place-slcounty-warmspringspark-y19/>) and have much more information... but above all, see this as an adventure that brings some people JOY to witness, think about, figure some things out... but embrace uncertainty.

ASSIGNMENT for Hand-in:

Take an image for each “stop.”

Sketch or label some aspect of PATTERN. Your choice... whatever scale, whatever pattern might interest you. Write at least 3 questions that relate to core ideas of Earth Science. Please: avoid “what” questions, such as, what is the type of rock, or what is the fossil... because the “answers” tend to close off inquiry.

Then... write a “first step” toward figuring out a bit about the “core” idea that applies to one of your questions... not an “answer”... just an idea, a first step.

For example, a question... “Where did the melon-size rocks in the pillars by the rest rooms come from?” A first step... I wonder whether they rolled down the hillslope... investigate the hillslope.

**AND... go to the website and read the assignment for April 2 / 4. This field experience is the major portion, but there's another part that prepares participants for the final project.**

Document a pattern associated with

**the gray /black boulders on the east side of the parking lot:**

Okay to sketch... or draw lines on an image... or both. Okay to describe verbally.

Examples of patterns: the boulder's pattern of horizontal layers; or how a boulder is weathering (physically or chemically falling apart) or the white crystals (calcium carbonate) lines through some of the rocks; or a fossil if you see one.

GOAL: Observe with a purpose... see patterns.

"If you can see patterns... you can be a scientist" or an artist, or detective...

Brainstorm three questions about any of these core ideas of Earth science... preferably how or why questions... (your questions don't have to be about the pattern/patterns you documented... but should be about those boulders of the retaining wall).

**Four Core Ideas:**

**History of Planet Earth**  
**Role of Water on Earth's Surface**  
**Weather and Climate**  
**Tectonics**

What might be a potentially INTERESTING first step to figure out ... investigate... model... obtain info about one of those questions.

Document a pattern associated with  
**the melon-sized rocks in the pillars by the restrooms.**

Okay to sketch... or draw lines on an image... or both. Okay to describe verbally.

Examples of patterns: the boulder's pattern of horizontal layers; or how a boulder is weathering (physically or chemically falling apart) or the white crystals (calcium carbonate) lines through some of the rocks; or a fossil if you see one.

GOAL: Observe with a purpose... see patterns.

Brainstorm three questions about any of these core ideas of Earth science... preferably how or why questions... (your questions don't have to be about the pattern/patterns you documented... but should be about the rocks of the pillars.

**Four Core Ideas:**

**History of Planet Earth**

**Role of Water on Earth's Surface**

**Weather and Climate**

**Tectonics**

What might be a potentially INTERESTING first step to figure out ... investigate... model... obtain info about one of those questions.

Document a pattern associated with  
**the bedrock of the quarry:**

Okay to sketch... or draw lines on an image... or both. Okay to describe verbally.  
GOAL: Observe with a purpose... see patterns.  
Breathe! Notice the world that surrounds us.

Brainstorm three questions about any of these core ideas of Earth science... preferably how or why questions... (your questions don't have to be about the pattern/patterns you documented... but should be about the bedrock (firm, coherent Earth materials continuously attached to Earth's crust))

**Four Core Ideas:**  
**History of Planet Earth**  
**Role of Water on Earth's Surface**  
**Weather and Climate**  
**Tectonics**

What might be a potentially INTERESTING first step to figure out ... investigate... model... obtain info about one of those questions.

Document a pattern associated with  
**the warm springs of the park:**

Okay to sketch... or draw lines on an image... or both. Okay to describe verbally.

GOAL: Observe with a purpose... see patterns.

“If you can see patterns... you can be a scientist” or an artist, or detective... or an historian. I wonder who came here 50, 100, 150, 1000, 10,000 years ago and what they did here? and what they wondered about?

Brainstorm three questions about any of these core ideas of Earth science... preferably how or why questions... (your questions don't have to be about the pattern/patterns you documented... but should be about those warm springs).

**Four Core Ideas:**

**History of Planet Earth**

**Role of Water on Earth's Surface**

**Weather and Climate**

**Tectonics**

What might be a potentially INTERESTING first step to figure out ... investigate... model... obtain info about one of those questions.

**FEEDBACK:**

How difficult was it to role-model curiosity at the four phenomena?

Where was it easiest to be curious... and curious about what?

And... why was it easy / difficult to be curious at one stop and not another?

**FEEDBACK to Genevieve and Peg, please.**

REMINDER - Because you've invested time with us, we (Peg and Genevieve) are delighted to invest time with you at your school grounds.

EVERY place in Utah has potential for Earth Science Outside.

Contact us ([genevieveatwood@comcast.net](mailto:genevieveatwood@comcast.net)) for a time in March such as a couple hours after school or what works for you. And, should you recruit another teacher to join in, awesome!!

The plan: go outside on your school ground and figure out what is most special geologically. PATTERNS of course!