

10/23

Grand canyon rocks!

#2

AGENDA

- Powells research
- Rock Observations

Use the word bank to help you!

There is only 1 rock box per table today!

Learning
target:

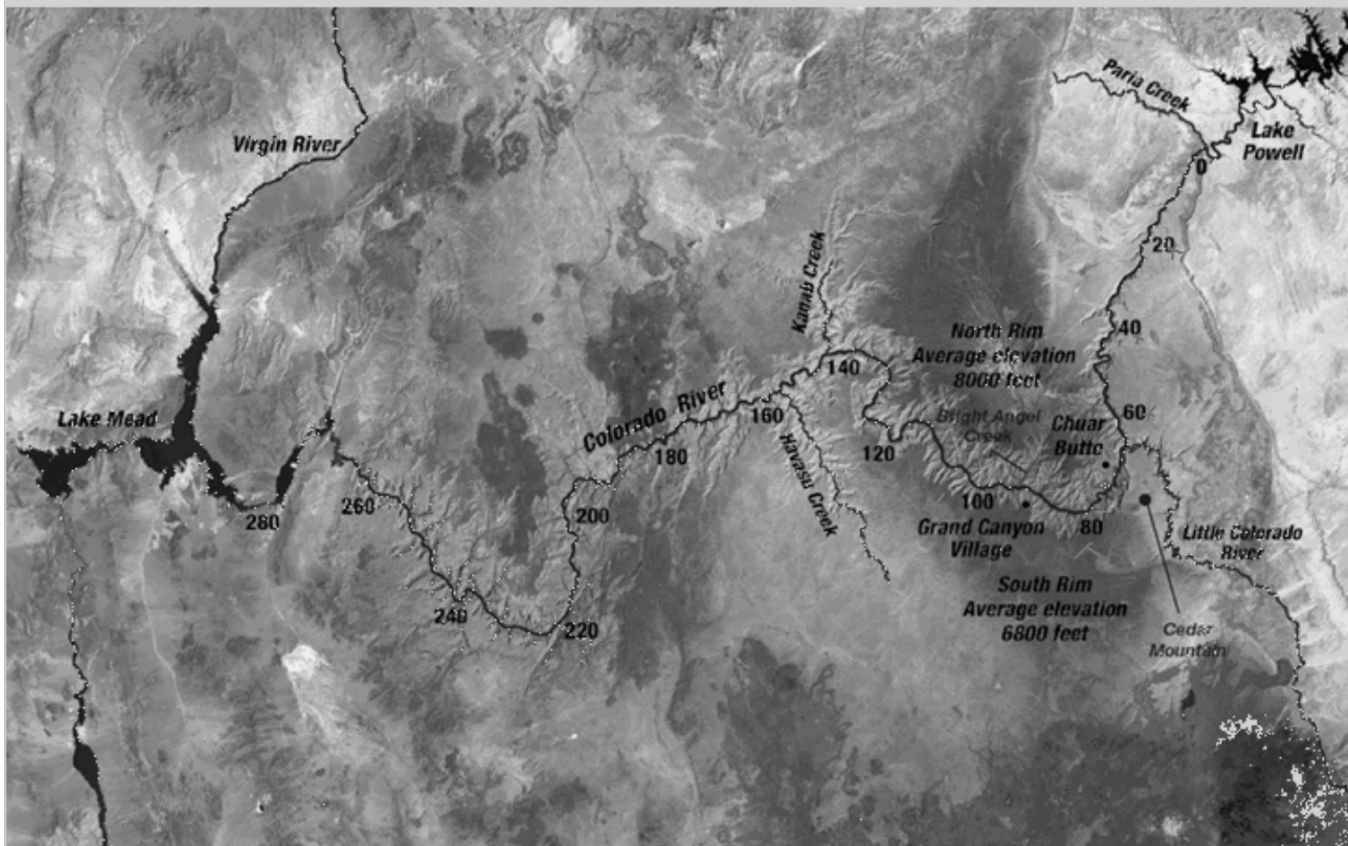
I can make detailed observations of rock samples
using the word bank.



10/23

Type here **Grand canyon rocks!**

#2



Learning target: I can make detailed observations of rock samples using the word bank.

Powell's Technique:

A. Diagram the canyon wall where he wanted to collect rocks.

B. Collect and mark samples of rocks from the area he had sketched.

C. Record on his sketch where each rock had been collected.

Learning target: I can make detailed observations of rock samples using the word bank.



Decriptive word bank

Color

beige
rusty
tan ash gray
red speckled
Black
inky black
brick
graphite
creamy

Texture

nailfile
sleek Gritty
rustic porous
Jagged wrinkled
rounded dense
indented streak
grainy grainy
striped
Craggy sandpaper
mountainous

Features

flakey
rough
crystals
fossils
holes
compacted
sand grains
Veins



Learning target: I can make detailed observations of rock samples using the word bank.

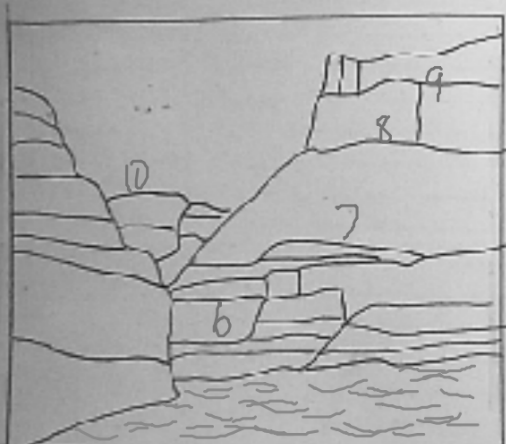
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Grand canyon rocks!



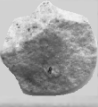


#2

10/22 Grand Canyon Rocks #2

North Canyon



River mile: 20
Elevation: 2925 ft
direction of flow:

Rock #	Color	Texture	Special Features
6			
7			
8			
9			
10			

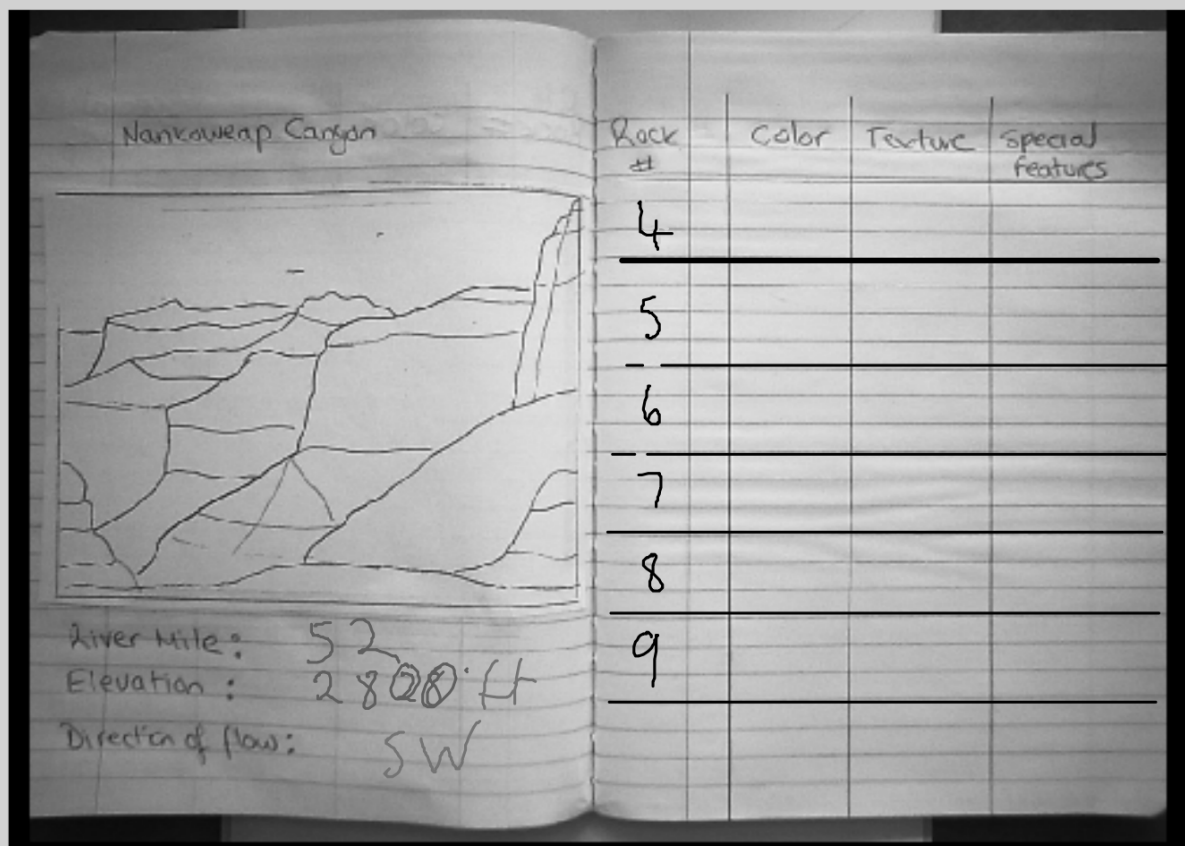
Learning target: I can make detailed observations of rock samples using the word bank.



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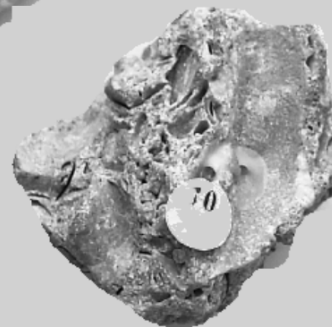
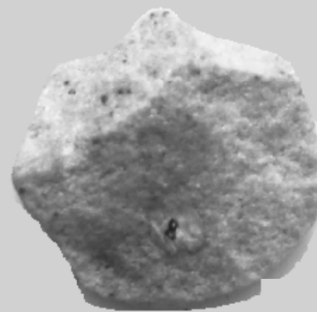
Learning target: I can make detailed observations of rock samples using the word bank.

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North Canyon



Learning target: I can identify the research methods used by Powell and use similar methods in my own observations of rock samples

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Nankoweap

Ca

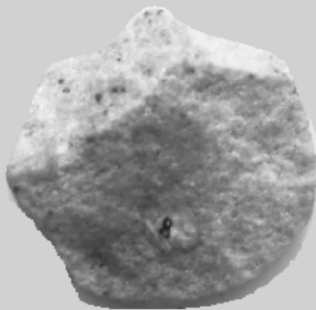


Learning target: I can make detailed observations of rock samples using the word bank.

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Learning target: I can make detailed observations of rock samples using the word bank.

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Grand canyon rocks!

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Make a T chart in your journal:
record any similarities and differences between the
2 canyons?

Similarities	Differences

Learning target: I can use my observations to compare the rock samples from the two canyons.



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Just as you are now noticing, John Wesley powell noticed that as he rowed down river the rocks were in horizontal bands along the rock wall. The rock he collected at location 7 In the North Canyon was in the the same rock band he collected from the Nankoweap canyon!

Powell organised his rocks into rock columns, one column for each canyon, so he could get a better view of the area he had travelled. He created a conceptual model of the rock wall of the Grand Canyon.

Learning target: I can use my observations to compare the rock samples from the two canyons.



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A model is a representation of a system that can not easily be understood.

Making a model of the canyon walls, Powell can see the whole stretch of the Canyon that is actually 30 miles long and about a mile high!

Now your turn!

Learning target: I can use my observations to compare the rock samples from the two canyons.



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Key	

**North Canyon
Mile 20**

Rock-Layer Name	Rock ID
	10
	9
	8
	7
	6
Colorado River	

Elevation of river: 2925 feet

**Nankoweap Canyon
Mile 52**

Rock ID	Rock-Layer name
9	
8	
7	
6	
5	
4	
Colorado River	

Elevation of river: 2800 feet



Learning target: I can organise the rock samples into rock columns and create a conceptual model of the canyon walls.

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Learning target: I can organise the rock samples into rock columns and create a conceptual model of the canyon walls.



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Learning target: I can organise the rock samples into rock columns and create a conceptual model of the canyon walls.



