HANCOCK FIELD STATION
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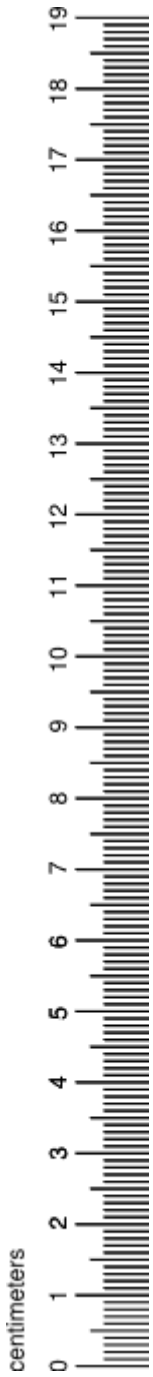
Oregon Museum of Science and Industry
2019

OMSI



AJM 01/19

HANCOCK FIELD STATION
OUTDOOR SCHOOL FIELD JOURNAL

OMSI

NAME:_____

GRADE:_____ **AGE:**_____

SCHOOL:_____

DATES:_____

WELCOME TO HANCOCK FIELD STATION!

We are so glad you're here! We hope you have fun and learn a lot. We've prepared this notebook to help you get the most out of your visit.

You'll find sections about what you study while you're here, sections you can complete during rest or recreation time, sections to write down things that happen while you're here, and places you can record the wildlife you see here. There are also some blank pages you may use however you'd like.

Thanks for coming! Stay safe and have fun!

Outdoor Science Education, OMSI



NOTES

TABLE OF CONTENTS

MY CABIN:_____

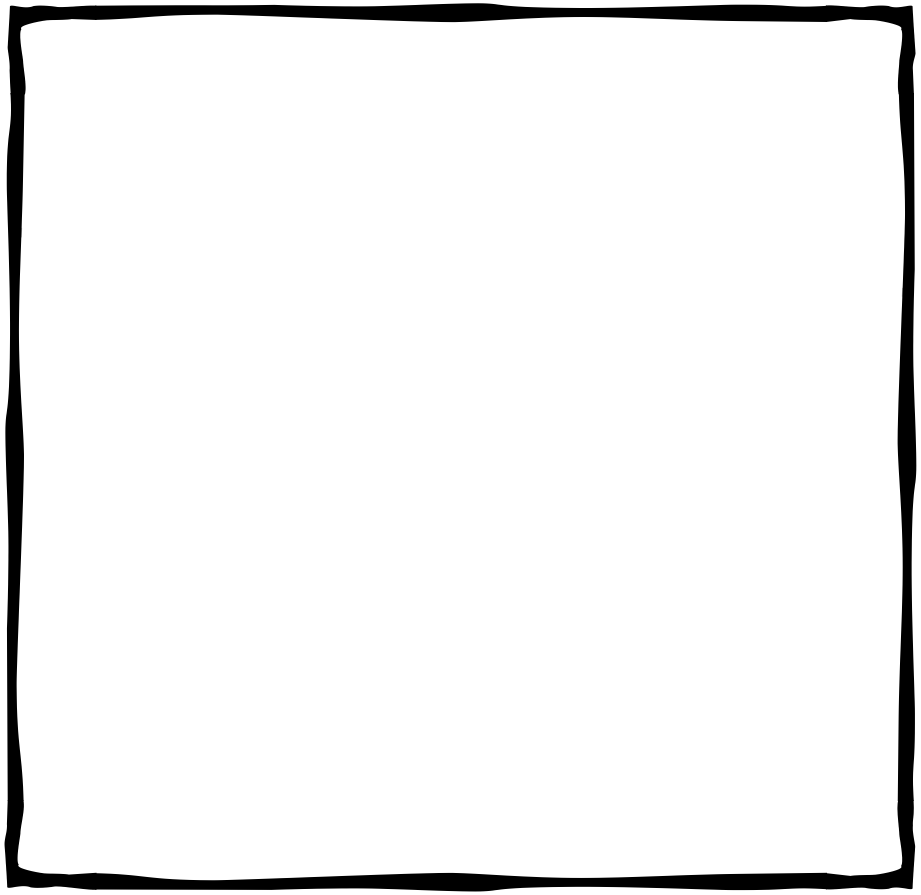
CHAPERONES:_____

CABIN MATES:_____

_____

_____

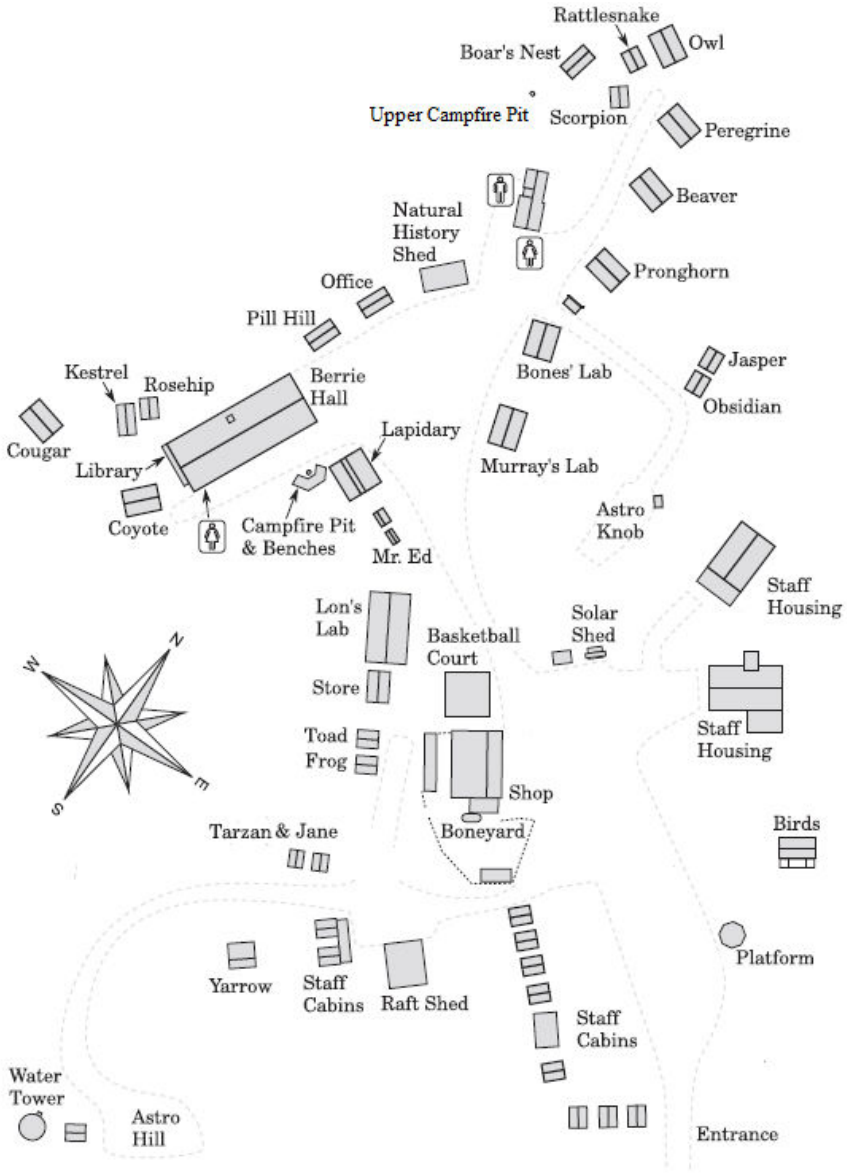
Draw your cabin, or what it’s named after.



NOTES

MAP OF HANCOCK FIELD STATION

Find and circle your cabin, Berrie Hall, the Bleachers, and the nighttime and daytime restrooms.



To make sure everyone can have a positive, safe experience at outdoor school here at Hancock Field Station, we ask that everyone follows some simple rules. Here's an acronym to help you remember.

RESPECT

R = Respect for yourself, others, and the environment

E = Equipment Bring your standard field gear to all lessons, and be careful when using equipment that belongs to Hancock Field Station.

S = Safety Make choices that will keep you and others safe while you're here: walk or skip instead of running, keep your feet on the ground, keep rocks and sticks on the ground, and stick with a buddy. Follow the safety protocol for wildlife that could hurt you.

P = Positivity You get out of outdoor school what you put into it and a positive attitude makes things more fun. Encourage your friends to stay positive too.

E = Eating Eat what you take and take what you need. We'll be measuring wasted food (we call it ort). Ort is a personal choice and a personal challenge. Food is a resource, we try to waste as little as possible.

C = Cabins and community responsibility Cabins are places to rest and store stuff. Only go into your own cabin. Keep community spaces clean. Help with community responsibilities such as Kitchen Party and Scrub Club.

T = Time Be on time to activities, and also be present in the moment during activities.

LET THE FUN CONTINUE!

Thank you for coming to outdoor school at Hancock Field Station. We hope you had a great time!

The fun doesn't have to stop here! You're invited to science and adventure camps this summer!

Learn the skills you need to survive in the wilderness; spend an entire week learning about space and looking at the clear, dark night sky; dive into paleontology and excavate ancient fossils.

If adventure challenges are more your style, join a team of rafters and journey down the Deschutes or Grande Ronde river; or hop on a bike to explore eastern Oregon or the Columbia River Gorge.

No matter what you choose, you'll have plenty of time to make new friends. Play campwide games, dine in style with cookout dinners and pajama breakfasts. cool off with a dip in the John Day River, and sing songs around the campfire.

Visit omsi.edu/camps-and-classes to explore all the camps we offer, find out more about them, and sign up! We can't wait to see you again!

WORD SEARCH

Words can be in any direction including backwards. Some words are joined together.

I Y T R A P N E H C T I K G
G L L A H E I R R E B Q R D
N A B P J T S A F K A E R B
I H S R E D I P S I A K A C
M A G M A Q X K C T R S H A
B R W J P W C R H Q A Y L M
R C A R A P T O R L L D W P
I I T B H E R O T S G O D F
T W E V P N C S R R D N E I
E C R E E K A X A A T O S R
D O B D G D B Z H V Z I E E
A C O N C H I S N E M P R K
T W T U Y F N T E N G R T A
L E T F O I A L I S S O F N
A V L B A U H A N C O C K S
T N E R F L I Z A R D S M E
L O N S L A B X T I B B A R

Word bank

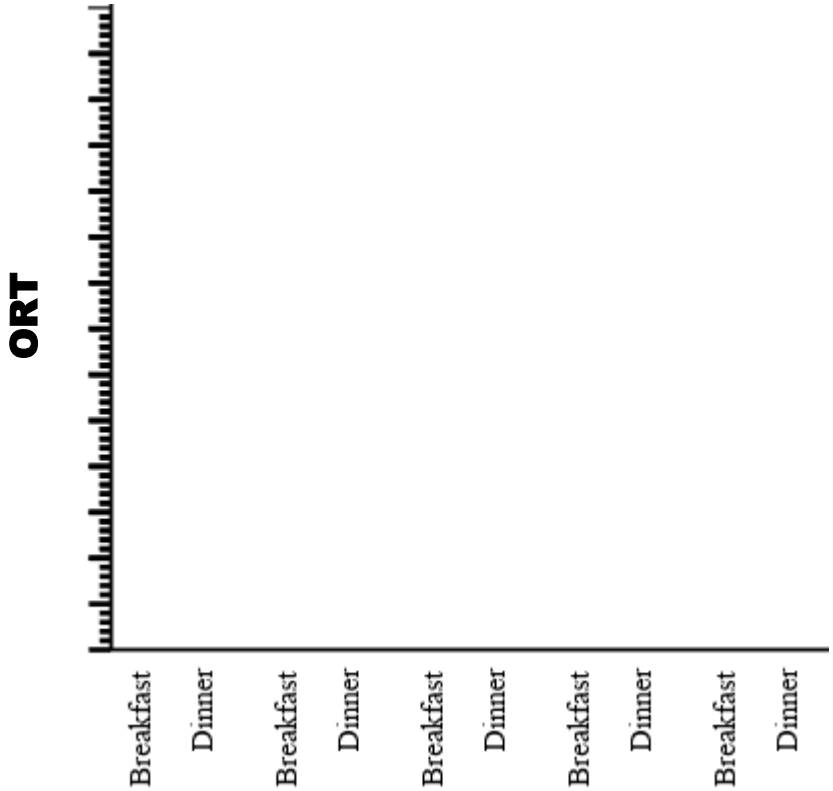
Scorpion
Fossil
Hancock
Lizard
Raptor
Cabin
Creek
Ignimbrite
Rabbit
Lon's Lab
Atlatl
Conch
Rainshadow
Raven
Lahar
Waterbottle
Spiders
Breakfast
Campfire
Kitchen Party
Berrie Hall
Magma
Snake
Great horned owl

ORT: Noun *\ôrt\: a morsel of food leftover after a meal*

Follow along with the Ort Report and collect data like a scientist! Label units of measurement and use this as a bar graph.

Wasted food is wasted money, time, and energy. Here are some tips to minimize how much food we throw out at meals:

- Take small portions; get more if you're still hungry.
- Start with a taste in case you don't like something.
- Cut servings in half if they are too big.



STANDARD FIELD GEAR

Bring these things every time you meet your instructor for a program.

Long pants that cover your ankles 

Closed shoes 

Extra layers including rain layers 

 A full water bottle

Sun protection: long sleeves, a hat, and sunglasses; apply sunscreen every two hours 

 This notebook and a pen or pencil

A backpack to keep everything in 

An empty bladder (use the restroom before class)

Make sure you pack your lunch for field study!

HIGH DESERT PLANTS

Draw a plant from the high desert. Label characteristics of the plant. How do they help the plant survive in the desert? Think about a plant from a wetter environment. What differences make one plant more suited to a dry environment, and one more suited to a wet environment?

Do plants and animals have similar strategies for surviving in arid environments? Do they have different strategies?

HIGH DESERT ANIMALS

Draw some of the animal signs you've seen — tracks, scat, bones, feathers, fur, or anything else. Use a scale to indicate size. What kind of animal do you think left them? What can you tell about the animal from its signs? What do the animal signs tell you about the behavior of the animal? What adaptations do they show the animal has for living in an arid environment?

USE YOUR SENSES!

Describe the things you experience.

See: ***colors, light, patterns***

Smell: ***juniper, sage, dust, wet***

Feel: ***texture, temperature***

Hear: ***loud, quiet, birds, students***

Taste: ***food, plants (ask an adult before tasting anything that isn't food)***

ANIMAL SIGHTINGS

Check off the animals as you see them or their signs.

Mammals
- □ Mule deer
- □ Pronghorn
- □ Cottontail rabbit
- □ Coyote
- □ Bat
- □ Mouse
- □ Porcupine
- □ Beaver
- □ Badger
- □ Raccoon

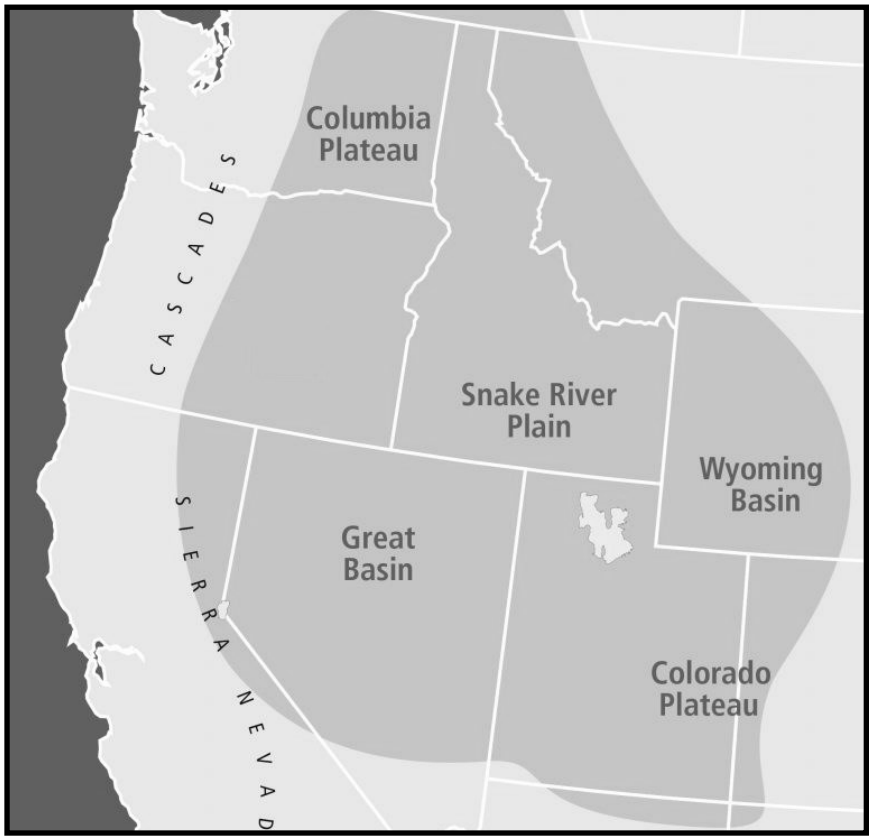
Insects and arachnids
- □ Field cricket
- □ Darkling beetle
- □ Praying mantis
- □ Grasshopper
- □ Jerusalem cricket
- □ Black widow
- □ Wolf spider
- □ Scorpion

Reptiles
- □ Western fence lizard
- □ Alligator lizard
- □ Western skink
- □ Gopher snake
- □ Western rattlesnake
- □ Racer
- □ Whipsnake
- □ Night snake

Amphibians
- □ Long-toed salamander
- □ Pacific treefrog
- □ Western toad
- □ Spadefoot toad

Birds
- □ Chukar
- □ Killdeer
- □ Meadowlark
- □ Bald bagle
- □ Red-tailed hawk
- □ Turkey vulture
- □ Raven
- □ Common nighthawk
- □ Kestrel
- □ Great horned owl
- □ Screech owl
- □ Flicker

Others
- □_____
- □_____
- □_____
- □_____
- □_____
- □_____
- □_____
- □_____



WHAT IS THE HIGH DESERT?

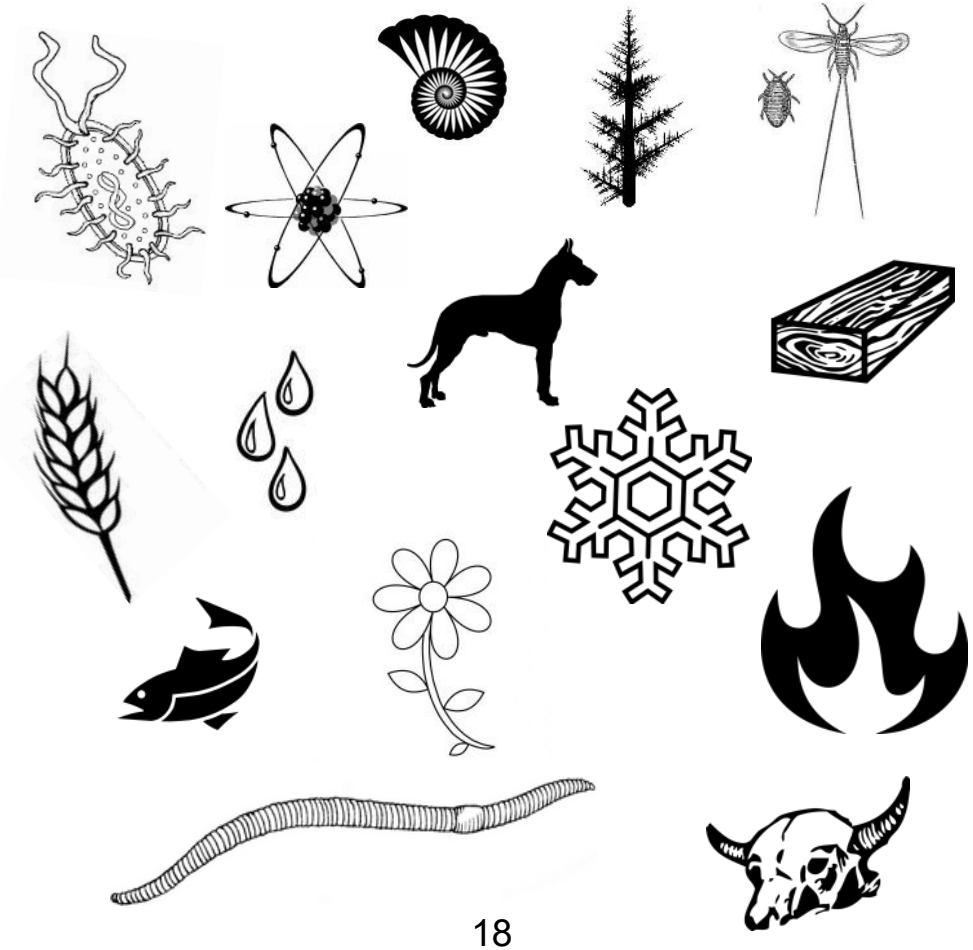
It's an area of low rainfall east of the Cascade Mountains. It gets an average of 12 inches of precipitation every year. It's not technically dry enough for scientists to classify it as a desert ecosystem — it's a semi-arid environment, sometimes called a steppe or scrubland.

Use another map to find where your home is, and add it onto the map. Add Hancock Field Station to the map too.

BIOTIC AND ABIOTIC

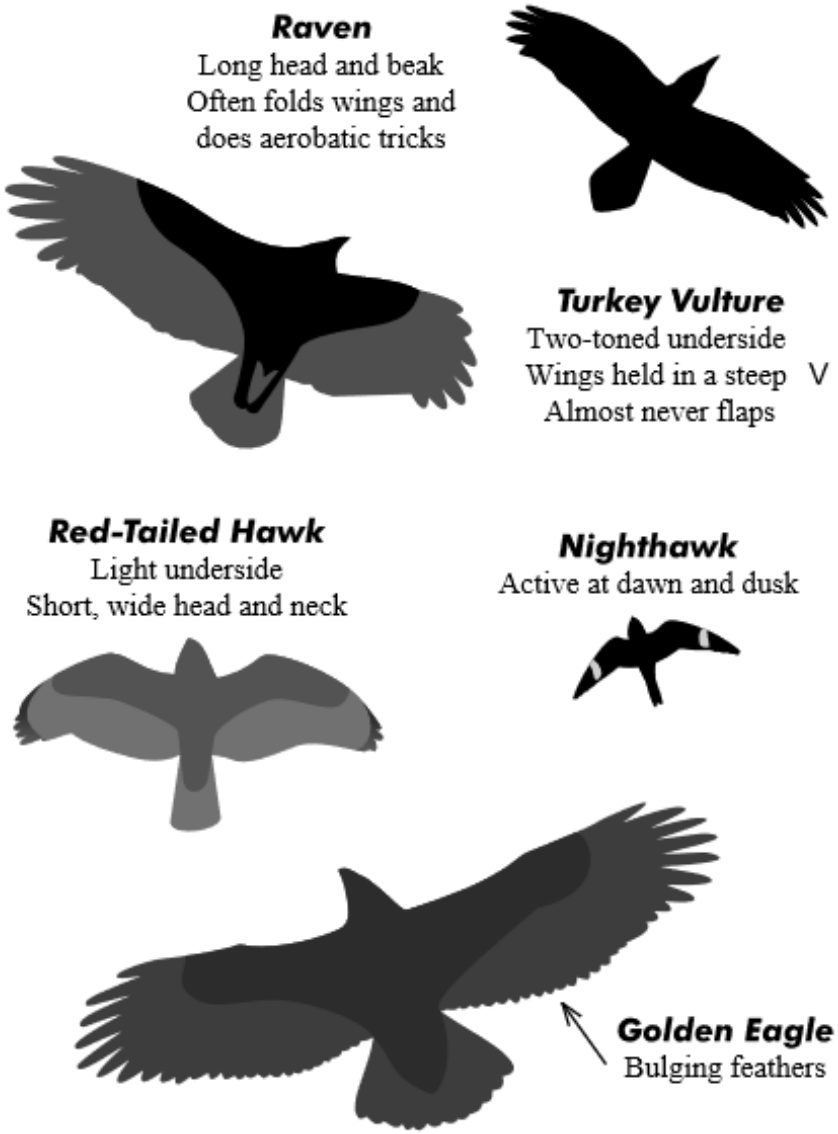
"Bio" means "life". Something biotic is, or once was, alive. You are biotic, a tree is biotic, a wooden plank is biotic, a bone is biotic. The prefix "a-" means without. *A*biotic things were never alive. Rocks, minerals, the sun, air, and water are all abiotic.

Below, circle the abiotic things with one color and the biotic things with another color; or write "a" for abiotic and "b" for biotic next to each image.



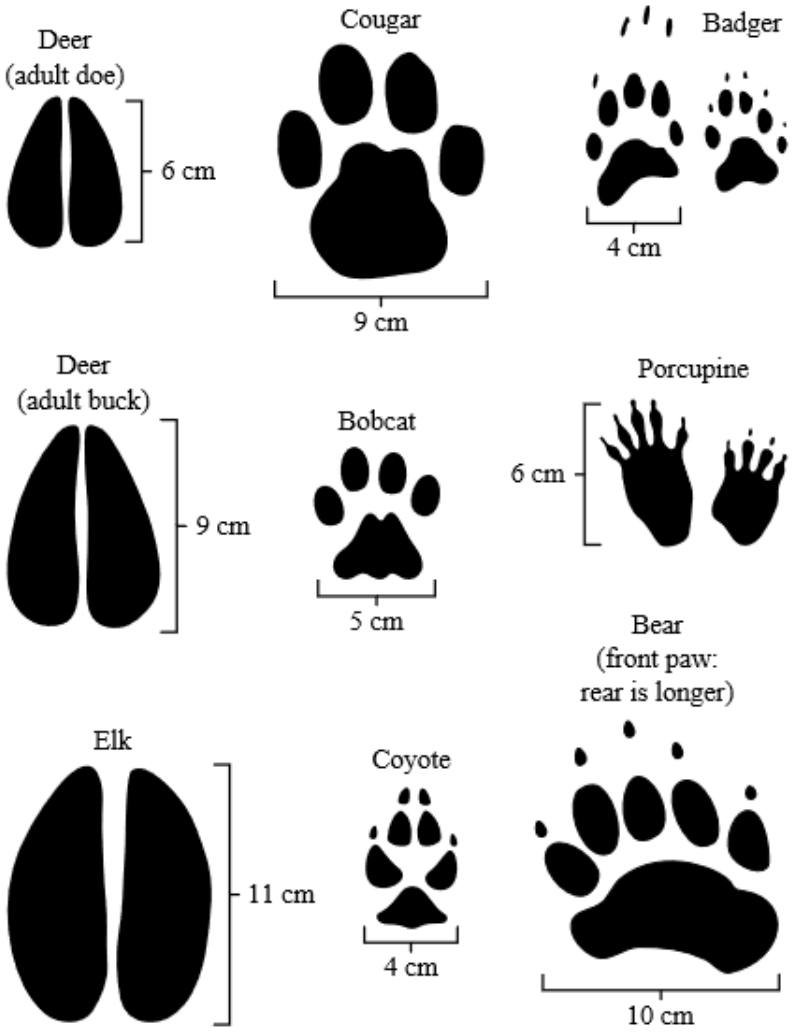
BIRD IDENTIFICATION

Use this chart to identify birds you see overhead.



ANIMAL TRACKS

When you are looking at a print, examine the shape carefully. Count the toes, look for claw marks, compare the sizes of different parts of the print.



STRATIGRAPHY: CLARNO ROCK LAYERS

The land around HFS is made of layers created by different geological processes. Label each layer, or draw a line from the description to the layer. Draw what one might find in each layer. Write in the age in MYA (millions of years ago).

Columbia River Basalts (CRBs)

- Youngest layer
- Huge lava flows that oozed out of cracks in the earth, travelling from Idaho to the Pacific Ocean
- Formed 17 to 6 MYA

John Day Formation

- Formed 17 to 37.5 MYA
- Formed over millions of years when dustings of ash from nearby volcanoes settled across the land
- Deposited after the Ignimbrite Rim; continued until the Columbia River Basalt flows began

Ignimbrite Rim

- Formed 37.5 MYA
- Pyroclastic flow of superheated ash and steam from a volcanic explosion
- Destroyed everything in its path
- Ash particles melted together into igneous rock called welded tuff

Clarno Formation

- Oldest layer at 65 MYA
- Formed over millions of years by many lahar mudslide events
- Lahar is a mixture of rock, ash, organic material, and everything else the mud flow washes away with it
- Ignimbrite Rim put an end to the lahar events

WEATHER AND TEMPERATURE

Record weather data here and watch for trends. With permission, follow the weather here from home

www.wunderground.com/personal-weather-station/dashboard?ID=KORFOSSI10#history

	Outside Temperature	Barometric Pressure	Observed Weather	Notes
@ Snack				
@ Dinner				
@ Breakfast				
@ Snack				
@ Dinner				
@ Breakfast				
@ Snack				
@ Dinner				
@ Breakfast				
@ Snack				
@ Dinner				
@ Breakfast				

The weather is... (circle all that apply)

Sunny	Foggy	Cold	Rainy
Cloudy	Thunder	Hailing	Snowy
Windy	Lightning	Frosty	Smoky
Clear	Hot	Dusty	Rainbow

FOSSILS

Draw a fossil leaf here

Draw a living leaf here

What are some similarities and differences between the leaves? What can you learn from them?

_____

_____

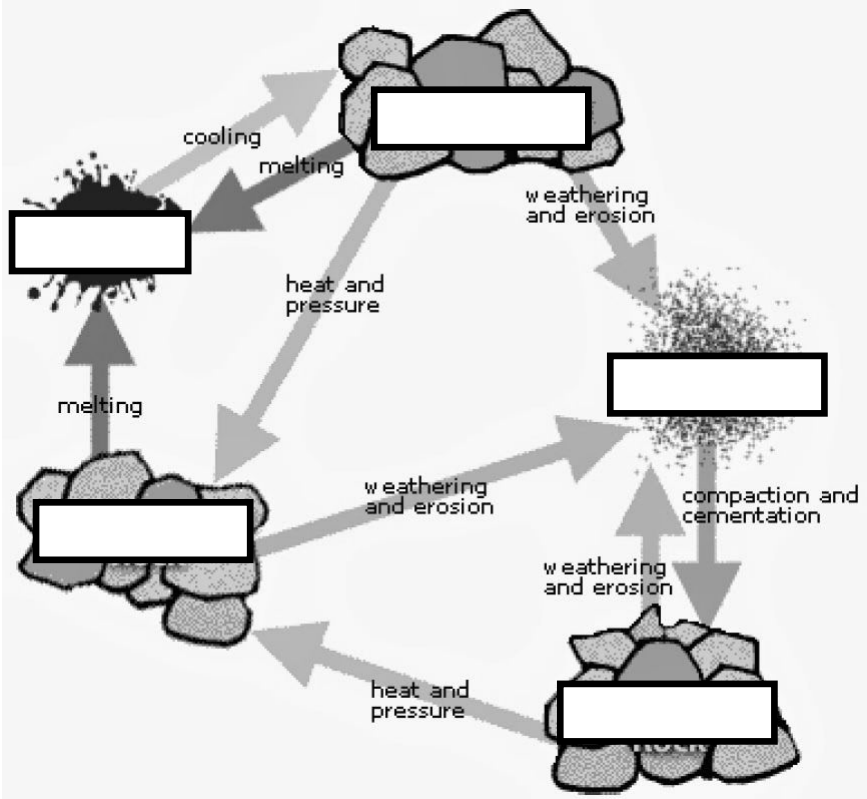
_____

_____

_____

ROCK CYCLE

Use the word bank to fill in the blanks. Include the intermediate states between rock types.



WORD BANK

Igneous rock	*Metamorphic rock*	*Magma*
Sediment		*Sedimentary rock*

What processes create…

Sedimentary rock? _____

Igneous rock?_____

Metamorphic rock?_____