CLOVERBUDS CONNECTION

August - September 2024

NEW YEAR!

The new year begins October 1st! There will be monthly classes and we are always looking for adult volunteers. Contact Kim if you would like to plan the new year!

4-H HIGHLIGHTS

Please enroll at https://4h.zsuite.org/
You must be active status to participate including your payment of $5 for the year.
Sign up for Remind! TEXT @4-hclover to 81010

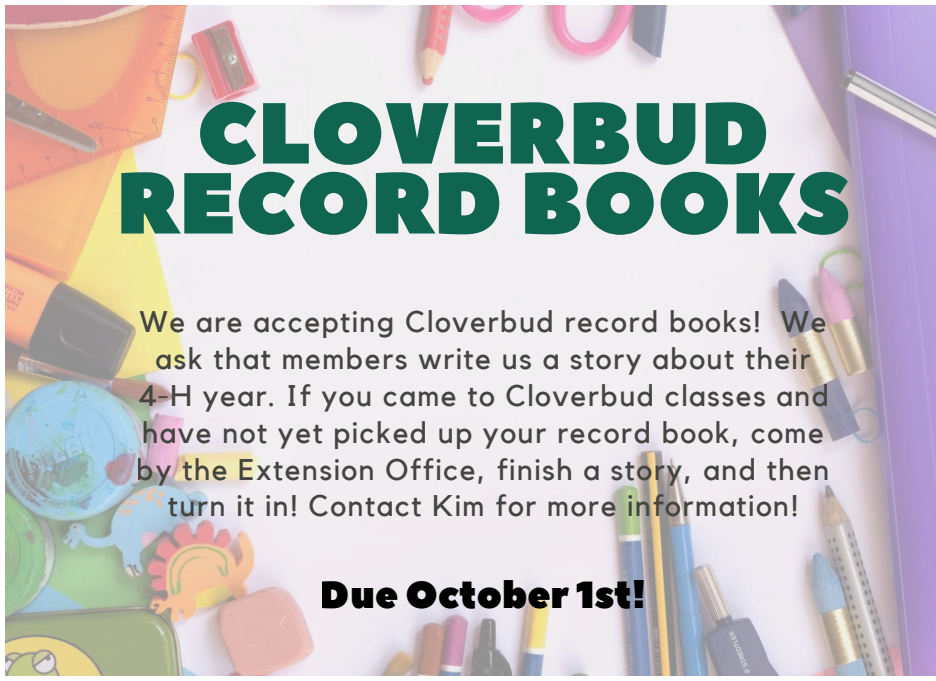
WE ARE DIGGING 4-H!

Hello Cloverbuds,

This newsletter covers Geology! Sometimes I do feel 'Older Than Dirt' with how long I have been around our 4-H program. Here in October, some of you will graduate out of cloverbuds and into being a full 4-H member. We wish you the best of luck. For those who have more time as a cloverbud, we will see you all so soon!

As we are wrapping up our new year, I wanted to take a moment and remind you all of the final pieces!

Kimbly Fry



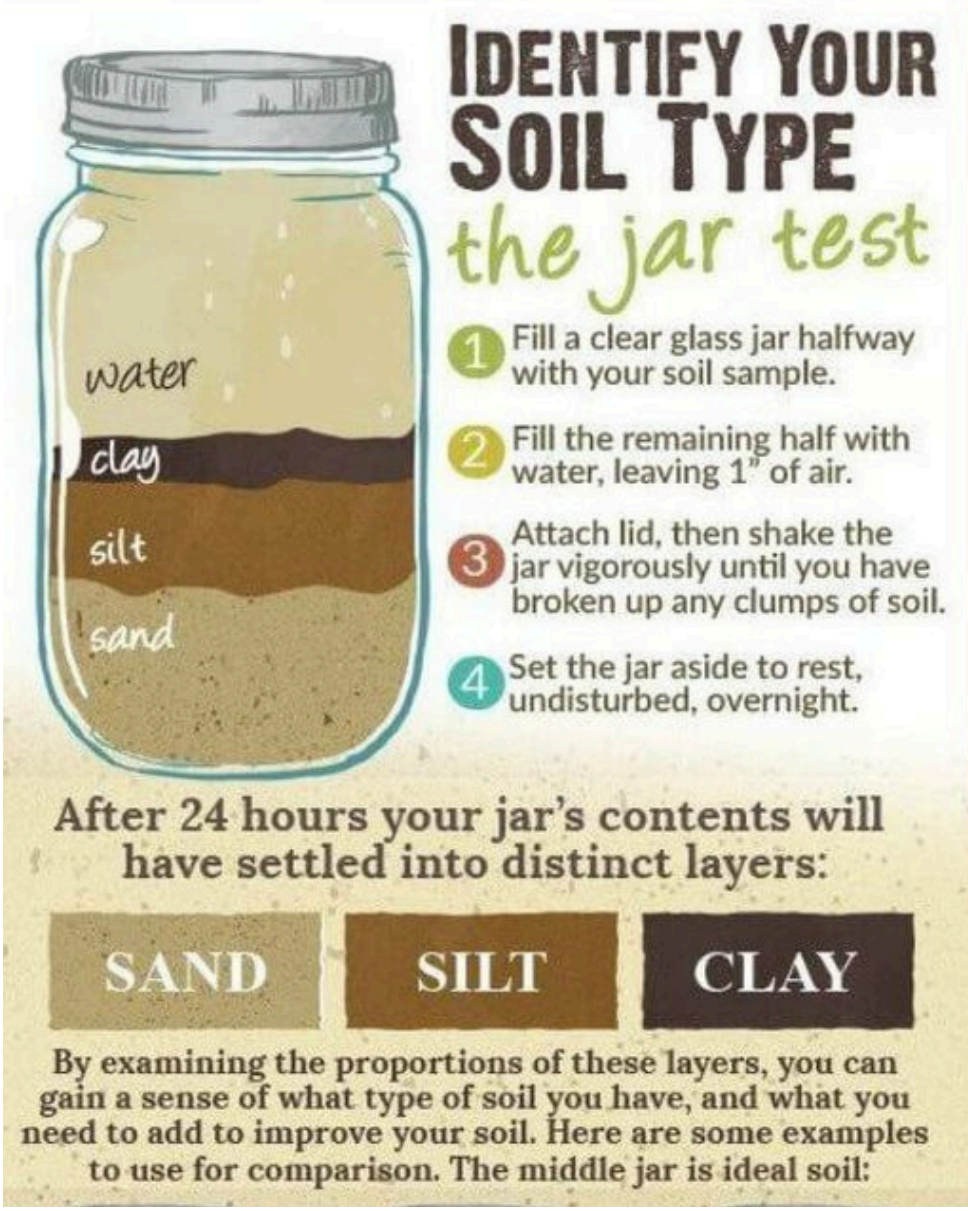
OLDER THAN DIRT

In more scientific terms, geology is the study of the Earth's origin, structure, composition and history, (including the development of life) and the nature of the processes which have given rise to the Earth as we know it today. Geology is the study of our planet, Earth. How it was made. What it is made of. How it has changed over time.

SHAKE, SHAKE, SHAKE

Did you ever wonder what type of soil you had? Loamy (the good stuff), or clay or sandy. There are all types of soil and mixes.

Supplies: clean jar and lid with straight sides, cup or two of soil, 1 tsp of non-foaming liquid soap, 1.Stir soil & put into clean jar. 2.Fill about 2/3 full of water and add 1 tsp soap. 3.Shake until well mixed. Let set 24-48 hours. 4.Check layers that have formed and measure each layer. 5.Add total and then divide to get percentage for each layer.



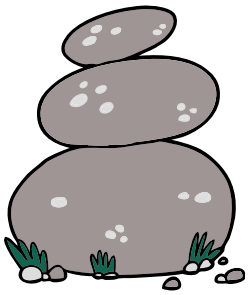
PLAY 'DIRT' DOUGH

Supplies: 2 cups of flour, 1 cup of salt, 2 cups water, 2 tablespoons of oil, 8 teaspoons of vinegar, coffee grounds, black washable paint

Parents are needed to help with this activity! Bring the water, oil and vinegar to a boil and then slowly stir it in to the bowl of dry ingredients. This will get HOT, so have parent help! Add in a 1 tablespoon of black paint. Once all of the ingredients are mixed and the dough has cooled, begin kneading, rolling and squishing. Now add in some coffee grounds, this is for fun, do not eat! Add some fun, bring in rocks or sticks to make your own Geological Elements!

MAKE YOUR OWN 'ROCK' BAND

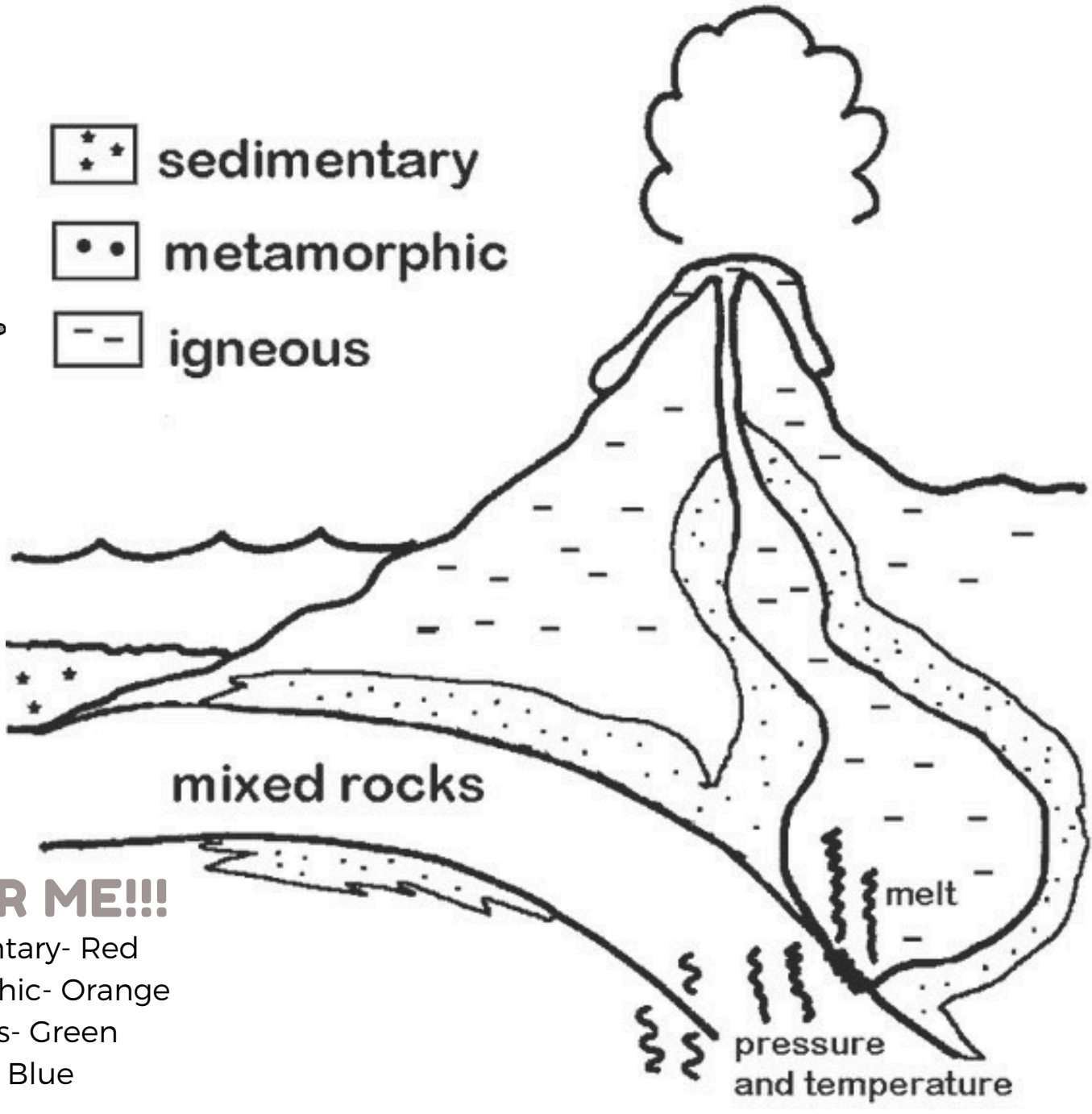
First thing you will need is ROCKS! Go outside and gather them with a variety of shapes and sizes. Then gather different containers from recycling that are made of different materials, they all need lids that attached securely. Then put rocks in the containers and make music! Start by practicing being very quiet. Listen to each instrument individually and then put them together. Don't forget to add in some dance moves!



sedimentary

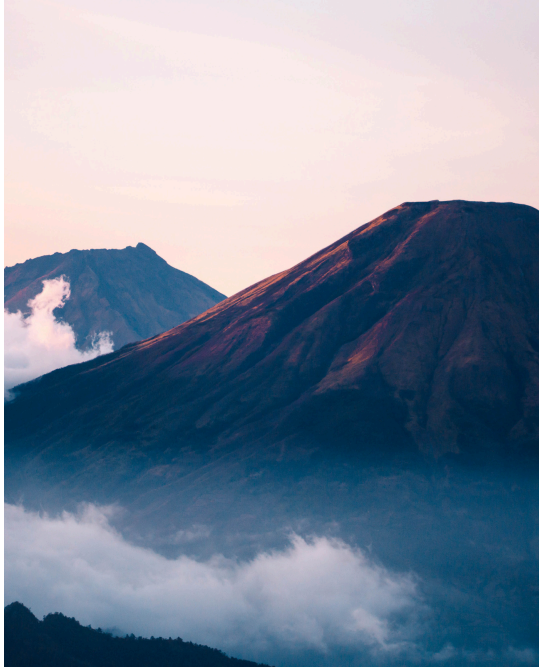
metamorphic

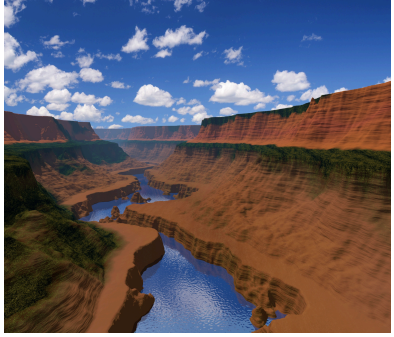
igneous

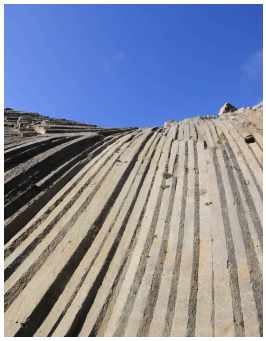


COLOR ME!!!

Sedimentary- Red
Metamorphic- Orange
Igneous- Green
Sky- Blue








Wyoming 4-H

CAMPBELL COUNTY EXTENSION
412 S. Gillette Ave
Gillette, WY 82716

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UW | Wyoming 4-H

GEOLOGY

WHAT'S IT ALL ABOUT?

Did you find a rock at the park and don't know what kind it is? What about fossils? If you would like to learn more about rocks, minerals and fossils, then dig into the geology project! Discover the types of minerals, rocks and fossils that can be found where you live.

HERE'S WHAT YOU CAN LEARN...

STARTING OUT

- Learn how the earth was formed and its three main parts
- Learn the difference between a rock and a fossil
- Collect, clean, identify and label rocks, minerals and fossils
- Learn the types of erosion and their impacts

LEARNING MORE

- Use different tests to identify minerals by hardness and color
- Learn how to identify fossils
- Learn to display and evaluate geology exhibits
- Learn how mountains are formed
- Discover the impact of glaciers

GOING FURTHER

- Learn to measure specific gravity
- Read and use a topographic map
- Measure formation thickness
- Test to determine chemical properties of minerals
- Locate sites on a plat map
- How to prepare for geology careers

RESOURCES

- Discover 4-H Geology Clubs *(http://utah4h.org/discover/)*
- Kansas 4-H Geology Project Leader Notebook *(uwyo.edu/4-h)*

TAKE IT FURTHER!

- Take a field trip with a purpose. Look for hills, canyons, cliffs, valleys, lakes, rocks, soils, or other natural resources
- Visit a lapidary (rock) shop in your area
- Read an article, story or a chapter from a book about rocks, minerals or geology
- Visit the University of Wyoming Geological Museum on campus in Laramie
- Visit the Tate Geological Museum in Casper
- Look for fossils around your house or visit southwest Wyoming which has a rich history in fossil col-lection including the Fossil Butte National Monument
- Do a home search to find the minerals and metals that are used in your home
- Find out more about the Wyoming State gemstone and where it is found
- Make your own rock tumbler

ENHANCE YOUR COMMUNICATION SKILLS

Give a presentation about a field trip you took in Wyoming to study geology

Give a talk to your club about different types of birthstones and where they are found

GET INVOLVED IN CITIZENSHIP AND SERVICE

Take your rock and mineral collection to a local elementary school and share your collection with them

Create jewelry with rock you find and donate them to a local charity or sell them and donate the money to a local charity

LEARN ABOUT LEADERSHIP

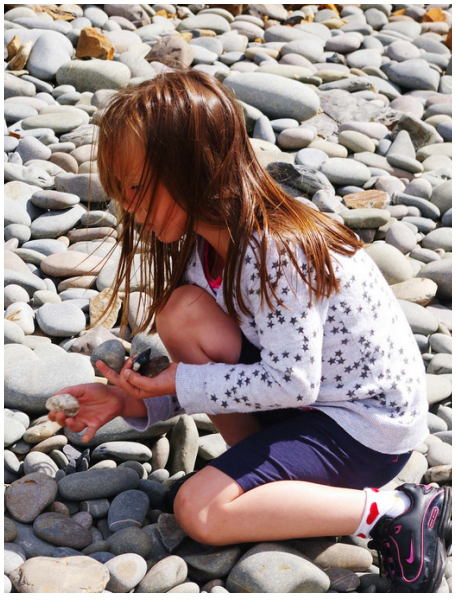
Lead a craft with your club members or Cloverbuds making rock creatures or rock art

Invite club members to take a geology field trip, create a scavenger hunt so members know what to look for related to geology

Host a rock and mineral identification contest for your club members

EXHIBIT IDEAS

- Create an exhibit to show the geology specimens you have collected. Be sure to label the specimens with the correct names
- Explain the rock cycle using words and pictures
- Display rocks from three major types of rocks: igneous, sedimentary and metamorphic
- Create a poster showing how rocks change
- Create a rock creature or rock art
- Make your own rock crystals for display
- Make a poster or display about rock textures
- Create a display about erosion or the effects of erosion in Wyoming
- Make a display about what different types of minerals are used for



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