

Possible Topics (or come up with your own)

Astronomy/Space Science Topics

Was there water on Mars?
Why isn't Pluto a Planet?
Halley's comet
What are potentially hazardous asteroids?
What killed the dinosaurs?
What causes the auroras?
What is a supernova?
How did we get to the Moon?
Why are there Moon Phases?
The moons of Jupiter
Probes that have explored Mars
Fusion on the Sun
Space Shuttle Program
Animals in the Space Program
Why are there tides?
The Tunguska Event
Spectral Analysis
The Contributions of Galileo (or other scientists)
Apollo Missions

What is a black hole?
Elliptical Orbits
What are comets?
The Asteroid Belt
What is the Oort Cloud?
What is a meteor shower?
The International Space Station
Geostationary Satellites
The Milky Way
The Big Bang
Solar Cycle (Sunspot Cycle)
Planets Beyond the Solar System
Mercury, Gemini, or Apollo Programs
How do telescopes work?
Why do eclipses happen?
Scale Model of the Solar System
Radio Astronomy
What causes seasons?
The shapes of orbits (planets, comets, etc.)

Geology Topics

Geology of Mt. Helena
Leonard the Mummified Dinosaur
What happened at Lake Nyos?
Mass Wasting in the Gates of the Mountains
Formation of the Madison Limestone
Helena area faults and earthquakes
East Helena Superfund Site
Egg Mountain Fossil Site
Ashfall Fossil Site in NE
Belt Meteor Crater and other sinkholes
Glacial Lakes of Montana

The ancient Elkhorn Volcano
Formation of the Little Rockies
What goes on at Ash Grove?
Montana during the Cretaceous Period
How did the Helena Valley form?
East Helena Lead Smelter
The Boulder Batholith
Mammoth Fossil Site in SD
Labrea Tar Pits
How do varves form?
Floods of Glacial Lake Missoula

Why does Montana have so much coal?
What's so unusual about Chief Mountain form?
Copper Mining in Butte during the early 1900's
Principle of Cross-Cutting Relationships
Mt. Mazama's Ash in Montana
What is paleomagnetism?
Greatest Pre-historic Eruptions
Past Eruptions of Yellowstone
Frost Wedging
The Alaskan Pipeline
How does porphyry form?
Types of Fossils
Seismic Waves
Helena Quakes of 1935
The Cascadia Earthquake of 1700
Are granite counter-tops really granite?
Refraction of Seismic Waves

Meteorology Topics

Why are Chinook winds warm?
What are microbursts?
Super-Cooled Water
What's a dew point?
What causes wind? (convection)
What is a tornado?
What is the greenhouse effect?
Snowball Earth
The Carbon Cycle
Why is Livingston so dang windy?
Tree-Ring Analysis
Japanese Balloon Bombs of WWII
How does RADAR work?
What is a storm surge?
The Contributions of Fujita (or other scientists)

Where does electricity come from?
Lewis and Clark Caverns
How do gold deposits form?
How do unconformities form?
The K-T Boundary
Tsunamis
Did Toba cause a volcanic winter?
The Bodies of Pompei
Chemical Weathering
Pipelines in Montana
Helena's Famous Brownstone (rhyolite)
What is limestone used for?
Madison Canyon Landslide
Helena Area Liquefaction Concerns
Volcanoes of the WA/OR
Alfred Wegener (or other geologists)
Native American Use of Boiling Stones

How do clouds form?
Tornadoes in Montana
How do barometers work?
How does a psychrometer work?
What is a temperature inversion?
Cold Fronts and Warm Fronts
The Recent Ice Age
Climate Feedback Cycles
How do wind generators work?
Lake sediment cores
What do ice cores tell us?
Weather Balloons and the Jet Streams
Weather Satellites
Why does it get colder as you go up?

Hydrology Topics

Montana Drainage Basins

The Helena Valley Aquifer

How do septic systems work?

Giant Springs: An Artesian Situation

What is a watershed?

Removal of the Milltown Dam

Coal-bed Methane Concerns

How do dams generate electricity?

Where does your water come from?

What is hard water?

Oil Spill on the Yellowstone River

The Mississippi Delta

The Helena Valley Watershed

Floods of 2011

Thermal Pollution

What causes saline seep?

Tailings and Acid Mine Drainage

The Berkeley Pit

How does fracking affect groundwater?

Salmon Migration on the Columbia

Sewage Treatment in the Helena Area

Montana's Snotel System

Nitrate Contamination of Groundwater

Montana's Deadly Flood of 1964

Oceanography Topics

What is El Nino?

Why is the Oceanic Conveyor Belt important?

Western Interior Seaway

What if the conveyor belt stops?

Tsunami Debris Headed Toward USA

Tsunami Warning System

What is La Nina?

Density Currents

El Nino's impact on Montana

The Coriolis Effect

The Significance of Upwelling

Ocean Acidification

IMPORTANT

You can choose a topic from the list, or you can come up with your own. Possible sources for topics include the Internet, your text book, and www.formontana.net.