

ROCKS AND MINERALS

Class Notes

MINERALS:

- A mineral is natural and non-living. It's what makes up rocks.
- They are the building blocks of rocks!
- There are over 3000 kinds!
- Minerals have different “**properties**” (*a way to describe something*)



PROPERTIES OF MINERALS:

- **Color**-what color is it?
- **Hardness**- “scratch test”, Moh’s Scale
- **Luster**-shiny? metallic? dull? Glassy?
- **Streak**-powder color it leaves behind when scratched
- **Cleavage** (*not in your book!*)-how a rock splits

LET'S WATCH A VIDEO!

- Brainpop Mineral Identification

LET'S DESCRIBE SOME MINERALS



How would you describe this mineral's....

color?

luster?



• How about this mineral?



Or this one?

THE 3 TYPES OF ROCKS

- There are three categories of rocks
 - igneous
 - metamorphic
 - sedimentary
- The differences between them have to do with how they are formed.

IGNEOUS

- Igneous rock forms from magma that has cooled and hardened.
- Magma comes from either BELOW the earth's crust or from ABOVE the earth's crust (then its called lava!)

HOW DID THESE IGNEOUS ROCKS COOL? FAST OR SLOW?

- How fast it cools affects the texture:
 - ➡ If it cools quickly- small grains, small crystals, smooth texture
 - ➡ If it cools slowly-large grains, large crystals, rough texture
 - ➡ Identify the Igneous texture

SEDIMENTARY



- sediment -small pieces of rocks, minerals, soil, shells, bones, etc
- Wind and water form layers of sediment.
- Sedimentary rocks form when these layers of sediment are pressed together until they harden into rock.





Sedimentary Rock Facts:

- Usually the only rock that will contain fossils
- You can usually see sand, pebbles, or other stones in the rock
- Often soft and crumbles easily

METAMORPHIC ROCK

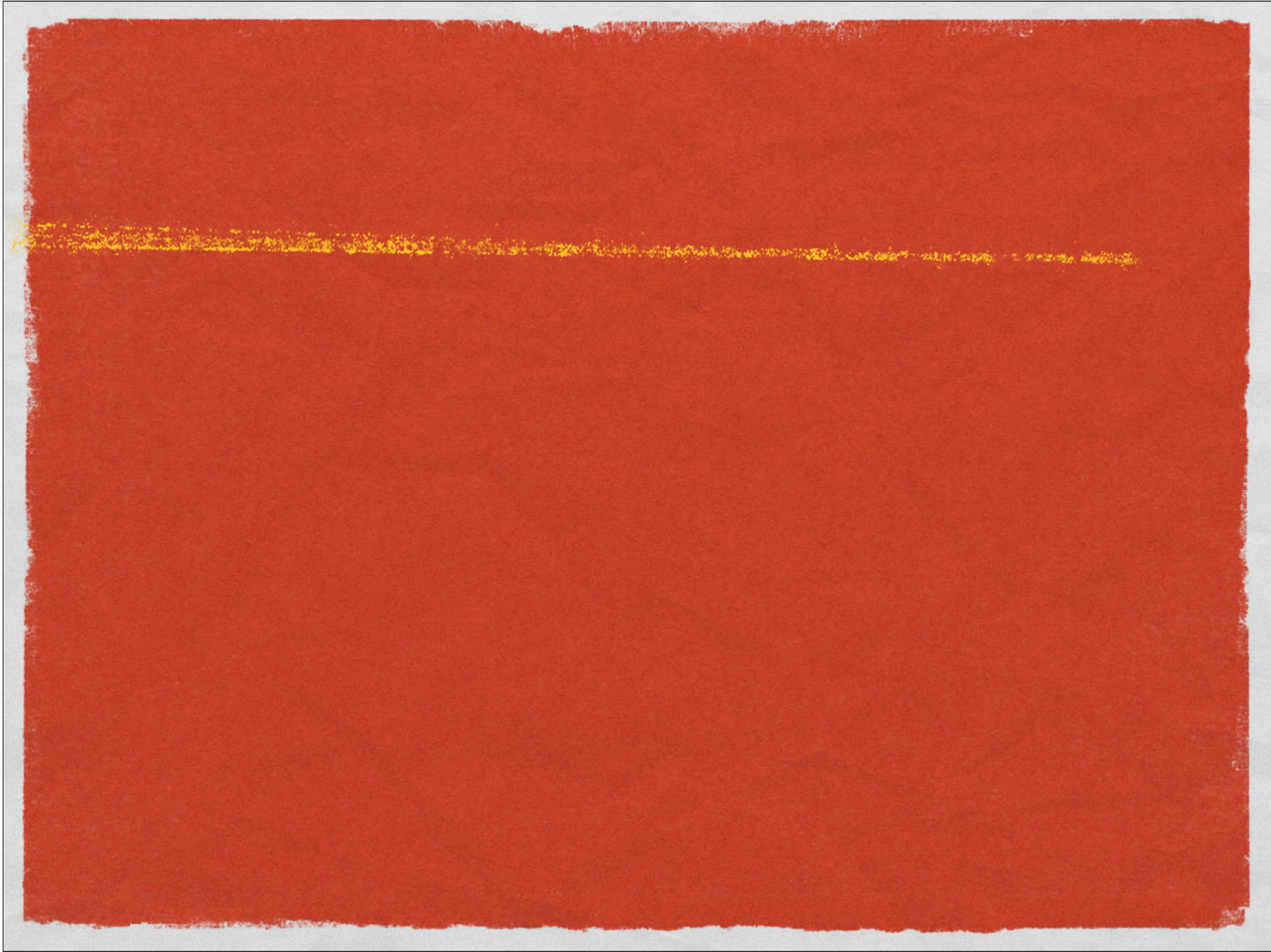
- starts as another type of rock and CHANGE because of EXTREME heat and pressure
- Metamorphic rocks can change into another metamorphic rock

THE ROCK CYCLE

- It is how Earth changes one type of rock into another type of rock.
- Rocks change due to heat, weathering/erosion, and cooling, and pressure
- Earth is like one big rock recycling machine!
- It takes MILLIONS of years for a rock to go through the rock cycle.

LET'S SEE WHAT THIS LOOKS LIKE:

- [The Rock Cycle \(interactive\)](#)
- [Study Jams Rock Cycle](#)
- [Rock Cycle Interactive](#)



VIDEO TIME!

- Let's watch a video to understand all of this a bit better.....
- Types of rock with FOOD