

A \_\_\_\_\_ is a solid material made up of one or more minerals.

There are 3 types of ROCKS:

1. \_\_\_\_\_

- Was once \_\_\_\_\_, but it has cooled and hardened.
- The melted materials is called \_\_\_\_\_.
- They may be \_\_\_\_\_ with crystals of different types of minerals in them.
- Example: \_\_\_\_\_

2. \_\_\_\_\_

- Usually made up of pieces of rock called \_\_\_\_\_ that have been pressed and cemented together.
- Some may contain pieces of animals, shells, or plants, called \_\_\_\_\_.
- Example: \_\_\_\_\_ and \_\_\_\_\_

3. \_\_\_\_\_

- Was once another type of rock deep inside Earth, but \_\_\_\_\_ and \_\_\_\_\_ caused the minerals to CHANGE.
- Rocks that were pressed down could have the minerals line up in \_\_\_\_\_.
- Sometimes \_\_\_\_\_ just changes the size of the minerals crystals.
- Example: \_\_\_\_\_ and \_\_\_\_\_

---

There are 4 types of SOILS:

1. \_\_\_\_\_

- A soil that is made up of \_\_\_\_\_ of once-living organisms.
- It is \_\_\_\_\_, soft, and very crumbly.

2. \_\_\_\_\_

- A soil that has \_\_\_\_\_ grains and large spaces between the grains.
- This lets water leave it quickly. It feels \_\_\_\_\_.

3. \_\_\_\_\_

- A soil that has very small \_\_\_\_\_ and holds water easily.
- This is sticky when wet, but when it dries, it becomes \_\_\_\_\_.

4. \_\_\_\_\_

- A soil that has pieces that are smaller than \_\_\_\_\_.
- It feels like \_\_\_\_\_.

\*Some soils are combinations of these soil types. For example, \_\_\_\_\_ has large and small grains with lots of humus. This makes it dark and rich soil for plants.

\_\_\_\_\_ are solid, formed in nature, have never been alive, and have properties by which they can be identified.

Examples of PHYSICAL PROPERTIES:

- I. \_\_\_\_\_
  - Refers to whether the mineral can be \_\_\_\_\_ or can \_\_\_\_\_ something else.
  - The harder the mineral, the \_\_\_\_\_ things can scratch it.
  - The hardness is numbered \_\_\_\_\_, with 1 being the \_\_\_\_\_ and 10 being the \_\_\_\_\_. \_\_\_\_\_ is the hardest mineral.
2. \_\_\_\_\_
  - Since many minerals have the same color, it cannot be used as the \_\_\_\_\_ property for identification.
  - Color can be used along with other properties to help identify a mineral.
3. \_\_\_\_\_
  - How a mineral reflects light.
  - Some minerals can be very shiny, pearly, or glassy and other minerals are dull.
4. Special Properties
  - If an acid (like vinegar) is placed on a mineral, it may bubble or fizz.
  - Some minerals split into thin sheets.
  - Some minerals have magnetic properties.

\*A mineral identification key is a chart that will give information about the properties of the minerals listed on the key. (Page 82 of PASS Coach)

---

A \_\_\_\_\_ is the remains of a living thing that lived long ago that has turned to rock.

There are 3 types of Fossils:

- I. \_\_\_\_\_
  - A \_\_\_\_\_ or opening in a rock shaped of once living thing.
  - Fossil \_\_\_\_\_ of leaves, wings, feathers, & footprints are also molds.
  - The leaves or animal parts \_\_\_\_\_ away long ago.
2. \_\_\_\_\_
  - A mold that has been filled in with sediments which harden and take the shape of the once living thing.
3. \_\_\_\_\_
  - Actual parts of the living thing such as shells, bones, or teeth that have turned to \_\_\_\_\_.
  - For example, insects long ago trapped in tree sap, which hardened into rock called \_\_\_\_\_. The insect was \_\_\_\_\_ in the amber stone.