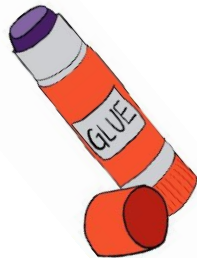




Glue this side into your notebook.



## GEOLOGIC RECORD

- CHECKLIST KEY**
- I could teach this.
  - I somewhat get it.
  - I've heard of it.
  - I need to learn this.

### THE THINGS I SHOULD KNOW BEFORE 8<sup>th</sup> GRADE:

- Igneous, metamorphic and sedimentary rocks form in different ways.
- Each type of rock can provide information about the environment in which it was formed.
- Rocks and fossils show how Earth has changed over time.
- Everything we know about Earth's history comes from the fossil record, rocks, ice cores and similar types of data.

### THE MOST BASIC IDEAS TO KNOW AFTER THE UNIT:

- The Earth is 4.6 billion years old.
- Earth is constantly changing and the evidence we have for these changes and Earth's past are in fossils, rocks, and ice cores.
- In general, older rocks are below younger rocks.
- All the processes in the past occur today (i.e. weathering, erosion, etc.).
- The geologic record is being added to as more data and evidence are found.

## I KNOW...

a.	<input type="checkbox"/> what uniformitarianism is  <input type="checkbox"/> how old the Earth is
b.	<input type="checkbox"/> the different methods and ways to determine the age of fossils, both using relative and absolute dating  <input type="checkbox"/> the role of index fossils, superposition, and crosscutting relationships in relative age  <input type="checkbox"/> the role of radiometric dating in absolute age
c.	<input type="checkbox"/> the different types of evidence to indicate a certain environmental or climate conditions were when a rock or fossil was formed

## I CAN...

a.	<input type="checkbox"/> create and understand a graphic demonstration of Earth's geologic history <input type="checkbox"/> connect processes today to similar ones in the past with evidence <input type="checkbox"/> use data ( <i>including from maps and cross-sections</i> ) to generate geologic maps of local or Ohio formations
b.	<input type="checkbox"/> use current and developing data and technologies to understand how our knowledge of the geologic record has changed <input type="checkbox"/> read a graph about half-life to explain how old an object is through absolute dating
c.	<input type="checkbox"/> interpret information from rock types, rock features, or fossils to describe environmental conditions at the time of formation <input type="checkbox"/> use concepts associated with uniformitarianism as well as data from fossils, ice core sampling, and evidence from the geologic record (maps and cross-sections) to interpret Earth's climates from the past to present-day <input type="checkbox"/> analyze and interpret data to draw conclusions to identify Ohio formations and explain what the environment was like them <input type="checkbox"/> relate evidence and information about historical climates to current climate issues using both ice core sampling and the geologic record

## VOCABULARY

<input type="checkbox"/> geologic record	<input type="checkbox"/> uniformitarianism	<input type="checkbox"/> uplifting	<input type="checkbox"/> isotope
<input type="checkbox"/> law of superposition	<input type="checkbox"/> unconformity	<input type="checkbox"/> igneous intrusion	<input type="checkbox"/> extinction
<input type="checkbox"/> relative age	<input type="checkbox"/> index fossils	<input type="checkbox"/> crosscutting relationship	<input type="checkbox"/> radioactive decay/radiometric dating
<input type="checkbox"/> relative dating	<input type="checkbox"/> outcrop	<input type="checkbox"/> cross-section	<input type="checkbox"/> bya/byo (billions of years ago/old)
<input type="checkbox"/> absolute age	<input type="checkbox"/> ice core	<input type="checkbox"/> fault	<input type="checkbox"/> mya/myo (millions of years ago/old)
<input type="checkbox"/> absolute dating	<input type="checkbox"/> erosion	<input type="checkbox"/> fossil	<input type="checkbox"/> half-life