

A Brief History of the Earth - Note Taking

Name: _____

Taking notes from presentations, video clips, lectures, podcasts, or any other viewed/spoken media is an important skill. Although it is possible to replay many forms of media with today's technology, it is a time-consuming process. By taking notes you leave with a summary of the main ideas and useful examples; we call these *Key Understandings*. One you have the key understandings you can then *analyze* and *synthesize* the information and begin to form your own thoughts and opinions. We call this new thinking *transformation*.

Directions: During the multimedia presentation you are about to view, watch and listen for words and phrases that complete the key understanding below.

- Beliefs, ideas, and predictions are called _____.
- Scientists must provide _____ to support their hypotheses.
- _____ theory is a popular hypothesis of the formation of the _____, occurring approximately _____ years ago.
- A popular hypothesis of the formation of the earth is called _____.
Scientists believe the earth was formed approximately _____ years ago.
- Earth was growing and changing for the first 4 billion years of its life. This first period of the earth is called _____. The first life forms, _____ organisms appeared toward the end of this period.
- The next significant time period for the earth brought an "explosion of life," and is called the _____, lasting from approximately ____ to ____ million years ago. During this era there were ____ major periods, each ending with a significant climatic change that caused a mass extinction of many species of life.
 - During the _____ period temperatures started off _____ and gradually grew warmer, making the _____ a good place for life to emerge, but the land was barren _____ with no life on it. The huge explosion of life forms during this period were mainly _____, creatures without a backbone. A particularly plentiful species of this period was called a _____.
The only form of plant life was simple _____.

- The _____ period saw more variety of life in the sea, such as mollusks, sponges, corals, and primitive fish with _____ (vertebrates). The first true plants began to emerge as _____ along shorelines. Fungi and algae combined to form _____ that grew on the rocks along shorelines. Lichens are able to break down rock into fine particles which, when combined with plant matter, creates _____.
- Most of the world's large land masses were connected during this period into a supercontinent that scientists call _____.
- During the next two periods, the _____ and _____ periods, plant and animal life continued to evolve and become more complex, and in the _____ period early amphibians began to live more on land than in the water. These creatures would eventually evolve into _____. Giant _____ were unique to this time period.
- As temperatures continued to rise, into the _____ period, the climate became drier and _____ struggled to survive. A new species called _____ emerged; part _____, part _____. This period ended with the greatest mass extinction of life the world has ever seen, with _____% of all life being wiped out. All life on earth today is a descendant of the _____% that survived.
- The _____ era, approximately _____ to _____ million years ago began with temperatures much higher than ever before. All of the major landmasses were now connected to form the supercontinent _____. During the _____ period the pelycosaurs that survived the mass extinction of the Permian period began to evolve into reptiles called _____; these were not dinosaurs, but they evolved into the dinosaurs that ruled the _____ and _____ periods. Scientists believe the Mesozoic era ended when a massive _____ collided with the earth, resulting in the mass extinction of the large reptiles; they called this the _____ event.

- Beginning approximately _____ million years ago Earth entered the _____ era. The first period of this era, called the _____ period, began much warmer and wetter than today's climate, with most of the world being _____ or _____. The previous supercontinents were beginning to split apart and as ocean currents began to change the climate began cooling. By the end of the first period much of the tropical rainforest had been replaced with open _____ and _____ as the climate continued to get _____.
- The _____ period brought big changes to the planet. As the climate continued to get cooler and more grasslands opened up animals had to _____ or face extinction. A significant event that is believed to have shaped human history is the collision of tectonic plates between _____ and _____, creating the world's largest and highest mountain range, the _____. This mountain range, along with others, changed global climate patterns that eventually led to conditions that allowed some species of life to thrive, while others became extinct. Our search for early humans begins _____ million years ago in Africa where the conditions were just right for our early ancestors to survive.