How the Earth was Made

1:09 Geology is a profession that is only about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years old.

2:25 Who is considered the “father” of modern geoloy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5:37 The early Earth was formed by continuous \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ collisions.

8:08 In 1911 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ used radioacivity to estimate an accurate

age of the Earth. This is called radiometric dating.

8:33 Radioactive uranium decays to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

9:26 The current scientific age of the Earth is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3:57 Many geologists now believe that much of the Earth’s water came from

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rather than out of gasses from volcanic activity.

5:40 By 4.0 b.y. ago \_\_\_\_\_% of the Earth was covered with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1:10 Around 3.4 b.y. ago the rock \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_was forming the continents.

3:54 Stromatalites on Earth added \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the atmosphere.

7:23 As the iron left the waters, the color changed from \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_.

0:23 By 1.5 b.y. ago the continents cover \_\_\_/\_\_\_ of the Earth’s surface and are moving 0:45- a theory we call \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2:15 In 1912, the meteorologist \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , proposed the theory of continental drift based upon the evidence……

1. 2.

5:15 Oceanic floor is continually being \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6:16 The island of Iceland is located on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

8:15 The fissure canyons of Iceland are opening at a rate of \_\_\_\_\_\_\_\_\_cm or

\_\_\_\_\_\_\_ inch/year.

0:50 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ activity was splitting Rodinia apart, (1:14) and the Earth’s atmosphere was briefly warmed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2:09 \_\_\_\_\_\_\_\_\_\_\_levels in the seas increased.

2:25 The \_\_\_\_\_\_\_\_\_ Shale in Canadian Rockies is a treasure trove of fossils.

6:55 The increase of oxygen in the atmosphere allowed the formation of the

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ layer (7:12) which became a shield for what radiation? \_\_\_\_\_\_\_

8:32 The Carboniferous, was a time of widespread \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that created

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

0:24 250 m.y. ago a rare \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ plume in Siberia caused enormous

volcanic eruptions resulting in Earth’s greatest extinction (1:18) with \_\_\_\_\_\_\_% of

plants and animals dying off.

1:35 240 m.y. ago the continents were re-assembled into a second super continent

called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1:50 The high levels of oxygen and CO lead to the rise of the \_\_\_\_\_\_\_\_\_\_\_\_\_ .

4:43 Dinosaur means \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6:43 180 m.y. ago Pangea was split apart by an increase in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

that put large amounts of CO in the atmosphere.

2:37 The diamonds of Kimberly occur in vertical features which were ancient

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4:35 65 m.y. ago saw an extinction rate of \_\_\_\_\_\_\_% and is believed to be due to a

(6:35)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_impact on the north end of the Yucatan Peninsula in

(6:44) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

8:01 In India, evidence of ancient lava flows from massive\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ were

adding dust and gasses to the atmosphere.

9:06 The death of the dinosaurs lead to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as the new dominant

life form.

1:45 The Alps are made from the collision of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ continent and the

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ continent.

3:32 The top of the Matterhorn has rocks from \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4:09 \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are responsible for all the Earth’s mountain ranges.

4:52 The height of mountains is a determined by what two major processes?

1. 2.

2:18 Glaciers move like slow moving \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4:25 What major American city was once covered by a massive glacier?\_\_\_\_\_\_\_\_\_\_\_\_\_

6:45 Huge depressions carved by the glaciers form the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lakes.

Do geologists think there will be another advance of the ice caps and glaciers?