ES104 Video Exercise – Earth Revealed “Down to Earth” Introduction

<https://www.learner.org/series/earth-revealed/1-down-to-earth/>

Watch the video and answer the following review questions. Draw sketches or include digital images where required.

1. What is the amazing fact about the surface temperatures of Venus and Mars? What are they, and what are their atmospheres composed of?
2. Which planet in our solar system is just the right size and distance from the Sun, with the best temperature and atmosphere conducive to life? Including us?
3. Why is Earth the ideal habitat for life?
4. What is the goal of geologic research?
5. List and discuss the two heat sources for planet Earth. Describe the sources of these two heat engines.
6. How does solar energy drive the water cycle? What are the effects on the Earth’s surface?
7. True or False: the Earth’s surface is very static and non-changing.
8. List three natural resources that humans derive from the Earth that are essential for our survival.
9. Explain how seismology is used to locate petroleum deposits inside the Earth.
10. Briefly describe the term “remote sensing” and list some examples of what the technique is used for.
11. True or False: fresh surface water on the Earth is much more abundant in volume compared to groundwater inside the Earth.
12. Why is it important for geoscientists to study volcanic activity and earthquake phenomena?
13. Discuss the significance of hillslopes with respect to human safety and land development.
14. True or False: landslides are a natural phenomena that can be very hazardous to human habitation.