This assignment will require the use an android or apple smart phone/tablet that has a working camera. If you do not have access to this technology iPads are available for checkout on campus at [https://library.sjsu.edu/student-computing-services/equipment-loans  (Links to an external site.)Links to an external site.](https://library.sjsu.edu/student-computing-services/equipment-loans)If you do not wish to use this technology for any reason or need Accessibility accommodation, please email me for an alternate assignment.

Please note: Both apps required in this assignment are free of charge.

\*\*\*There is hand drawing required of this assignment. You can either print & draw directly on this worksheet or use any paper of your choice. Once finished, take pictures of your sketches and include them in your digital submission to Canvas.\*\*\*

**Part 1: Inside Planet Earth**

A. Start by downloading the free app Jig Space [https://jig.space (Links to an external site.)Links to an external site.](https://jig.space/)

B. Then, choose “Inside Planet Earth” from the library. Explore the planet and it’s layers.

C. Draw by hand & label the following onto this worksheet in the space below:

* Crust
* Lower mantle
* Upper mantle
* Outer core
* Inner core

D. What is the inner core made of?

**Part 2: WWF Free Rivers :**Start by downloading the WWF Free Rivers app, which is free of charge, in your phone’s app store, more information can be found at [https://www.worldwildlife.org/pages/explore-wwf-free-rivers-a-new-augmented-reality-app   (Links to an external site.)Links to an external site.](https://www.worldwildlife.org/pages/explore-wwf-free-rivers-a-new-augmented-reality-app)

[(Links to an external site.)Links to an external site.](https://www.worldwildlife.org/pages/explore-wwf-free-rivers-a-new-augmented-reality-app)Then, explore the AR world of free flowing rivers and answer the following questions. **There is sound, so make sure your phone is off silent mode before you begin.**

A. Define, in your own words, a free flowing river.

B. sketch by hand a river system from mountains though floodplains to ocean. Label each area and include one reason it is important.

C. Describe the steps, in order, of the water cycle, beginning with water evaporating from the ocean into clouds.

D. What is a floodplain and why is it important to humans?

E. List some of the pros and cons of building a dam.

F. Name two of the sustainable build options discussed in the app

G. Thoughts on Augmented Reality. Think back over your experience with the two AR apps. Did you find them helpful for learning? Interesting? Fun ? Boring? Hard to understand? There is no right or wrong answer here. Exploring and implementing emerging technologies can be challenging and there is always room to grow. I would love to hear your candid thoughts!