Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Section\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_

**CASIS Project Open book/internet Test**

***Please write the letter of the best choice on the line provided.***

\_\_\_\_\_\_\_1) What does the acronym CASIS stand for?

1. Conference for Always being Safe In Space
2. Center for the Advancement of Science In Space
3. Cool Adventures for Science In Space
4. Center for Activities in Space, Industry, and Science

\_\_\_\_\_\_\_2) What company builds the ArduLab?

1. ArduLab Incorporated
2. CASIS
3. NASA-Ardulab
4. Infinity Aerospace

\_\_\_\_\_\_3) What software does the ArduLab rely on to operate?

1. Arduino
2. Python
3. C++
4. Basic

\_\_\_\_\_\_4) What company provides the “plug and play” platform (framework) for the Ardulab?

1. ISS Racks
2. Nanoracks
3. Microracks
4. NanoLab

\_\_\_\_\_\_5) How large is the ArduLab box that we will be using

1. 5 cm3
2. 10 cm3
3. 10 square inches
4. 10 m3

\_\_\_\_\_\_6) What does acronym ISS stand for?

1. International Space Station
2. International Super Station
3. Industrial Station for Space
4. International State of Space

\_\_\_\_\_7) When was the first module of the ISS launched?

1. 1990
2. 1998
3. 2005
4. 20013

\_\_\_\_\_8) Approximately how long is the ISS?

1. 10 m
2. 100 m
3. 1 km
4. 10 km

\_\_\_\_\_\_9) What countries or agencies have not built any modules for the ISS?

1. US and Russia
2. Canada and Japan
3. China and Pakistan
4. European Space Agency

\_\_\_\_\_\_10) Where would you be able to feel “weightless”?

1. On the moon
2. On Mars
3. When you fly to Europe on a commercial jet plane
4. On the ISS

\_\_\_\_\_\_11) What is meant by being in a micro-gravity environment?

1. the same as being “weightless”
2. When you are in a state of free fall
3. When you are on the ISS
4. All of the above

\_\_\_\_\_\_12) How many astronauts are usually living on the ISS?

1. 2
2. 4
3. 6
4. 8

\_\_\_\_\_13) Why are there so few astronauts on the ISS at one time

1. Because it is so small that would get in each other’s way
2. So there is enough space on the escape vehicles in case of emergency and they have to all leave at the same time
3. So there is enough oxygen
4. Just because of tradition

\_\_\_\_\_\_14) Currently, how do the Astronauts get to the ISS?

1. Aboard the Soyuz rocket
2. On the Space X Rocket
3. Aboard the Dragon Rocket
4. On the ATV-Albert Einstein
5. On the Space Shuttle

\_\_\_\_\_\_15) Which of the following statements are true about the engineering notebooks.

1. You should always write in pencil
2. It is a legal document
3. You do not need to number the pages so you can add and remove pages
4. You should write notes, data, etc on fronts and backs of all pages

***Answer the following questions in complete sentences. Please write neatly and in ink. You may include sketches and drawings. Attach additional sheets of paper if necessary.***

1. Briefly describe what happens to uncontained water inside the ISS and why it acts this way, you may refer to an experiment with water such as crying in space, wringing out a wet towel, or popping a water balloon.
2. Briefly describe a plant growing experiment that has flown on the ISS? Be sure to explain why this was selected to fly on the ISS and/or how the results can help mankind?
3. Briefly describe an animal experiment that has flown on the ISS? Be sure to explain why this was selected to fly on the ISS and/or how the results can help mankind?
4. Briefly describe a medical experiment performed on the astronauts while flying on the ISS (or while flying on the Space Shuttle? Be sure to explain why this was selected and/or how the results can help mankind?
5. Briefly describe an experiment that you would like to see done on the ISS in our “box”. Please include a justification as to how this experiment will help mankind in some way.