**Chapter 1.2 Homework**

**Biodiesel vs. Fossil Fuels: (Example #2: Study of Energy)**

1. **What materials in general are used to make biodiesel? Give examples were biodiesel is being used as an alternative fuel?**
2. **What are advantages of using biodiesel vs fossil fuels?**

**Composition of the Sun: (Example #6: Study of universe)**

1. **How scientists can know the composition of the sun without collecting matter from the sun?**

**Elements in the Sun:**

|  |  |
| --- | --- |
| **Element** | **Percent of Total Atoms** |
| **Hydrogen** | **92.1** |
| **Helium** | **7.8** |
| **Oxygen** | **0.078** |
| **Carbon** | **0.043** |
| **Nitrogen** | **0.0088** |
| **Silicon** | **0.0045** |
| **Magnesium** | **0.0038** |
| **Neon** | **0.0030** |
| **Iron** | **0.0030** |
| **Sulfur** | **0.0015** |

1. **Why would it be difficult to present the data as a pie chart or bar graph?**

**Read Chapter 1.2 and answer the following questions:**

1. **Describe two ways biotechnology can help treat diseases.**
2. **Name three factors that decrease crop productivity.**
3. **Explain how scientists know that water once existed on the surface of Mars.**