1. Q. I am the layer of the atmosphere where most of the Earth’s weather occurs. I contain the following gases: nitrogen, oxygen, and a small amount of carbon dioxide. The burning of fossil fuels fills me with higher amounts of carbon dioxide, which can cause changes in the Earth’s climate. What am I?

A. Troposphere

2. Q. Carbohydrates are the food that plants use to live and grow. I am the process by which the green tissues in plants form carbohydrates from carbon dioxide and water. I can only happen when the green tissues are exposed to sunlight. What am I?

A. Photosynthesis

3. Q. I am a measurement that explains the relationship of one thing to another. I can describe the size, amount, or degree of the things being measured. The scientists in this study used me to explain their finding that leaf area increased in relation to the amount of carbon sent below ground. What am I?

A. Proportion

4. Q. I am a type of selection method used by scientists that gives every element in a study an equal chance of being selected. Elements are selected purely by chance. What am I?

A. Random Sample

5. Q. The scientists in this study used technology to simulate how trees react to rising levels of carbon dioxide in the atmosphere. Data was collected from four FACE (Free-Air Carbon Enrichment) sites. I am the only place that wasn’t located in the United States. Where am I?

A. Tuscania, Italy

6. Q. I describe groups of organisms that look and behave like one another. Organisms in each group also share similar chemical processes and genetic structures. The Earth contains millions of examples of me which include groups of plants and animals. What am I?

A. Species
7. Q. I describe the state of being completely filled or soaked. When something has reached me it can no longer take in additional inputs. An example of me occurs in trees when photosynthesis is at its peak and the tree can not produce any additional carbohydrates. What am I?

A. Saturation