Directions: For each of the questions below, choose the BEST answer.

1) Plants respond to changes in the environment. This response is called:
   A. erosion
   B. adaptation
   C. stimulus
   D. modeling

2) A plant’s ability to keep soil from being washed away is an example of the plant’s ability to stop ________.
   A. tropism
   B. gravity
   C. stimulus
   D. erosion

3) Which part of the plant takes in carbon dioxide?
   A. leaves
   B. roots
   C. stem
   D. flower

4) Which part of the plant takes in water and nutrients for the plant to grow?
   A. leaves
   B. roots
   C. stem
   D. flower
5) Plants make their own food in a process called:

A. chlorophyll  
B. pollination  
C. photosynthesis  
D. germination

6) When a plant makes food, which gas does it give off?

A. oxygen  
B. carbon dioxide  
C. nitrogen  
D. helium

7) A small plant is shaded by a large tree. Which answer best describes why the small plant bends toward the sunlight?

A. sourcing  
B. tropism  
C. accommodate  
D. repose

8) If a plant receives very little water, the plant will respond by growing its roots toward a water source. The water acts as a plant _______.

A. erosion  
B. tropism  
C. adaptation  
D. stimulus

9) Sarah plants her flowers in a shallow pot. Jake plants his flowers in a deep pot. What effects will the depth of soil have on the two flowers?

A. Jake’s flowers will have longer roots.  
B. Sarah’s flowers will not get as much sun.  
C. Jake’s flowers will be more colorful.  
D. Sarah’s flowers will grow larger.
10) Tommy drives by a field of sunflowers. Knowing that the sun is a stimulus, which picture best represents what Tommy sees?

A.  
B.  
C.  
D.  

11) Maria is an engineer for a company called Green Roof Basics. Maria has been hired by the Tippecanoe County Library to design a green roof for the library guests to enjoy.

Who is the client?

A. Maria  
B. Green Roof Basics  
C. Tippecanoe County Library  
D. The library guests

12) Sam and Jane have built a prototype for their new green roof. What should be the next step in the design process?

A. Write their problem statement.  
B. Brainstorm for other designs.  
C. Test their prototype.  
D. Present their design and prototype.

13) Tom has decided he needs to build a greenhouse in his back yard. Tom’s yard is not very large. Tom can only make his greenhouse four feet wide. This limitation is a _______.

A. design  
B. client  
C. prototype  
D. constraint