**Pre-Lab Assignment 3: Plant Hormones (12 points)**

Pre-lab assignments are designed to get you thinking about the upcoming experiment and experimental design process. Before beginning this assignment please read the lab notebook module related to Plant Hormones.

To help with your understanding of this topic and help to prime your thinking about this experiment we want to know what you know and what you don’t know about plant hormones and plant growth/inhibition.

1. Please list 4 things that you know for sure about plant hormones and plant growth/inhibition (1 point for each complete statement).
2. The hormone Auxin which is important for stem growth and general plant growth.
3. The hormone gibberellins which is important for seed germination as well as flowering.
4. The hormone abscisic acid which is important for inhibiting growth.
5. It’s important for the plant to be able to tell when an environment is suitable for it to leave dormancy and germinate.
6. Please list 4 things that you think you know about plant hormones and plant growth/inhibition, but you are not sure about (1 point for each complete statement).
7. The plant seed needs to have been under the right type of light for a long enough time before it germinates.
8. The plant seed has food reserves called cotyledons which it uses during germination.
9. The hormones are what essentially dictate what the seed does.
10. There are different suitable environments for germination for different plant types.
11. Please list 4 things that you feel you need to know about plant hormones and plant growth/inhibition before beginning this experiment (1 point for each complete statement).
12. How exactly the hormones travel through the seeds to signal it’s time to germinate.
13. How herbicides work in regard to either inhibiting or encouraging plant growth.
14. What is the type of responses produced from different hormone combinations.
15. The likelihood of a seed surviving.