

## Vocabulary: Seed Germination



### Vocabulary

- Controlled experiment – an experiment in which only one *variable* is changed at a time.
  - Generally, in a controlled experiment, all conditions are kept the same except for the variable being tested.
  - In some cases, it is impossible to perform a perfectly controlled experiment. For example, a scientist cannot perform a controlled experiment on animal behavior in the wild because there are too many uncontrollable variables, such as weather and the presence of other animals.
- Germinate – to sprout or begin to grow.
  - *Seeds* contain small plant embryos and stored food. The outside of a seed is called a seed coat. Germination occurs when the stored food absorbs water and swells, causing the seed coat to crack. At this point, the plant embryo begins growing first a root and then a shoot.
- Hypothesis – a tentative explanation that can be tested by doing experiments.
  - Hypotheses often are written as if/then statements. For example “If fertilizer is added to the soil, then the plants will grow more quickly.”
- Mean – the sum of a set of numbers divided by the number of items in the set.
  - The mean of a set of numbers also is known as the set’s *average*.
- Seed – a plant embryo and food supply surrounded by a protective covering.
  - About 80% of the world’s plants use seeds to reproduce.
- Trial – a single time an experiment is conducted.
- Variable – a factor that can be changed in an experiment.