**Plant Reproduction**

**Chapter 4 Lesson 4**

**Vocabulary**

**Sporophyte-** plant stage that produces spores

**Gametophyte-** plant stage that produces 2 kinds of sex cells: sperm cells and egg cells.

**Annual-** flowering plants with one growing season

**Biennial-** angiosperms that complete their life cycle in 2 years

**Perennial-** flowering plants that live more than 2 years

**Fertilization-** a sperm cell unites with an egg cell

**Zygote-** a fertilized egg

**Cone-** reproductive structure of a gymnosperm (think pinecone)

**Ovule-** structure that contains an egg cell

**Fruit-** ripened ovary and other structures that enclose one or more seeds.

**What are the stages of a plant’s life cycle?**

Plants have complex life cycles that include two different stages, the sporophyte stage and the gametophyte stage.

The sporophyte stage: the plant produces SPORES

The gametophyte stage: the plant produces two kinds of sex cells; sperm cells and egg cells.

**Plant Life Cycle**

Seeds & the Plants Life Cycle

**Angiosperms: life cycle length**

Annual: one growing season

Ex: petunias

Perennial: more than 2 years, flower every year.

Ex: roses

Biennials: complete life in 2 years. Normally flower only the second year then die.

Ex: celery

**How do plants reproduce?**

All plants involve sexual reproduction that involves fertilization.

Fertilization occurs when a sperm cell unites with an egg cell.

The fertilized egg is the zygote.

**Fertilization/Reproduction**

For algae and some plants, fertilization can only occur if there is water in the environment.

This is because the sperm cells of these plants swim through the water to the egg cells.

Asexual Reproduction- includes only one parent and produces offspring identical to the parent.

Asexual reproduction does not involve flowers, pollination, or seeds, so it can happen faster than sexual reproduction.

**Nonvascular and Seedless Vascular Plants**

Examples: mosses, liverworts, hornworts, ferns, club mosses, and horsetails.

All the above examples need moist environments.

This is because the plants release spores into their surroundings, where they grow into gametophytes.

**Assessments**

**BOOK WORK-Complete the assess your understanding on pages:**

**137**

**143**