

Name: _____

Date: _____

Life Science

Period: _____

Section 3.2: *Most mosses and ferns live in moist environments.*

Read pages C92-97 and complete the following outline.

Plant species adapted to life on land.

(Pg. C92)



Green Algae

The first plants.

(Pg. C93)

1. Life first appeared on Earth _____ billion years ago.
2. The first organisms to live on land were the ancestors of _____.
3. The first land plants looked like _____.

1. The first land plants wound up on land because:
 - a. the pond waters became _____
 - b. the pond _____ due to drought
 - c. Some organisms were left on the shore and survived life on land.
2. The first land plants needed to be able to obtain _____ and _____ from the land.
3. Advantages to life on land:
 - a. Plenty of _____
 - b. Plenty of _____

Mosses and ferns.

(Pg. C93)

1. Mosses and ferns evolved from _____ that lived in the sea and fresh water.
2. _____ are descended from the first plants to inhabit land on bare rock.

Mosses and nonvascular plants.

(Pg. C94)



Moss growing on a rock.

Mosses reproduce with spores.

(Pg. C95)



A moss' stalk and capsule.

1. Mosses are adapted to life on land:
 - a. Have simple _____.
 - b. Cells have areas for _____.
 - c. Is supported by a thick _____.
2. Mosses are nonvascular, meaning that they do not have _____.
3. Water and nutrients travel through a moss _____ by _____. Because of this, a moss can only be _____ thick.
4. Since they are plants, mosses have a two part life cycle.
 - a. First part: _____ and _____ structures produced for _____ reproduction.
 - b. Second part: _____ are produced.
1. A spore is a _____
2. First generation:
 - a. Have grown from _____.
 - b. Moss clumps contain both _____ and _____ reproductive structures.
 - c. Structures produce _____ and _____.
 - d. For the sperm to fertilize the egg, _____ must be present.
3. Second generation:
 - a. Fertilized egg grows into a _____ with _____
 - b. The capsule contains thousands of _____.
 - c. The spores are released, starting the first generation all over again.

Ferns are vascular plants.
(Pg. C96)



Woman with large ferns.

Ferns reproduce with spores.
(Pg. C97)



Fern frond with clusters of spores.

1. Ferns were the first plants with _____.
2. A vascular system allows:
 - a. The roots of a plant to _____
 - b. More efficient movement of _____
 - c. Extra _____
 - d. A need for more _____

1. The leaves of ferns are called _____.
2. Ferns have a two-part life cycle, too.
3. First generation:
 - a. Spores grow into **tiny** structures that produce _____ and _____ cells.
 - b. The sperm need _____ to fertilize the egg.
4. Second generation:
 - a. Fertilized egg produces a plant with _____.
 - b. The **large** fronds produce structures on which _____ are produced.
 - c. The spores are released and can potentially grow into a new fern plant, starting the first generation all over again.