

Audesirk, Biology: Life on Earth 7e
Chapter 21 The Diversity of Plants

- 1) Which evidence supports the concept of green algae as ancestral to the plant kingdom?
- A) DNA studies
 - B) similar kinds of chlorophyll in both groups
 - C) similar kinds of cell wall chemicals in both groups
 - D) similar kinds of reserve food in both groups
 - E) All of these are correct.

Answer: E

Diff: 1 Type: MC Page Ref: Sec. 21.1

Skill: Factual

- 2) Green algae are assumed to be ancestors of plants because
- A) the fossil ancestors have been discovered.
 - B) green algae make chitin and laminarin.
 - C) green algae make cellulose and starch.
 - D) green algae are almost exclusively marine.
 - E) lignin is known to occur in some green algae.

Answer: C

Diff: 1 Type: MC Page Ref: Sec. 21.1

Skill: Factual

- 3) Land plants are believed to have evolved from _____.
- A) green algae
 - B) fungi
 - C) lichens
 - D) bacteria
 - E) Euglena

Answer: A

Diff: 1 Type: MC Page Ref: Sec. 21.1

Skill: Factual

- 4) Which of the following DOES NOT support the theory that terrestrial plants have an algal ancestor?
- A) The same type of chlorophyll is present in both.
 - B) Both have starch energy storage molecules.
 - C) Both have the same accessory pigments.
 - D) Vascular tissues are found in both groups.
 - E) Both are autotrophic.

Answer: D

Diff: 1 Type: MC Page Ref: Sec. 21.1

Skill: Factual

- 5) Which of the following is NOT good evidence that land plants arose from green algae?
- A) Both photosynthesize.
 - B) Both use the same kind of chlorophyll.
 - C) Green algae live in fresh water environments.