**Mosses Package**

Fill in the blanks using the word bank below:

Light

Bryophytes

Minimize

Tracheophytes

Reproduce

Water

Transport

Leaves

List 5 requirement for life on land

1. Constant supply of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Support for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to maximize exposure to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ nutrients from cell to cell
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ water loss
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ without water
6. What are the names of the two main phyla of land plants?

a) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - moss, liverworts and hornworts

b) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - ferns and flowering plants

**Bryophytes**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Moss | Liverworts | Hornworts |
| Dominant Generation | Gametophyte |  |  |
| Characteristics/ Features |  |  |  |
| Sketch |  |  |  |

1. What are two adaptations that enable bryophytes to live on land?

2. Bryophytes are small plants that are easily overlooked; however, they are important because they were the first plants to live on land.

a) Using our own words, explain how reproduction in bryophytes is similar to that in algae. Describe places you would most likely find bryophytes growing. Why are these places good for bryophytes?

b) What is different about the moss life cycle from algae?

c) Describe a place in which you would probably not find bryophytes growing.

Explain why bryophytes would not grow in this place.

**3. Label the structures using the word bank**

Zygote

Sperm

Capsule

Archegonium

Antheridium

Sporangium

protonema

Gametophyte

Sporophyte

Spores

Developing sporophyte

Germinating spore



\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Put the statements below in correct order: D\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A - Zygote develops in archegonium

B - capsule releases spores

C - Sperm produced in antheridium

D - Mature gametophyte possesses reproductive structure at its tips

E - Sperm swims to archegonium and fertilizes egg 🡪 2N zygote

F - Mature sporophyte grow on gametophyte, n spores develop in capsule

G - Spores lands and develops into a protonema 🡪 gametophyte

H - Zygote 🡪 sporophyte ( in archegonium)