

## NON-FLOWERING PLANTS INTERACTIVE ACTIVITIES

**1. Divide the following word chain and write the words in the box for the correct definition:**

SPORESBRYOPHYTESLIVERWORTSMOSSESPTERIDOPHYTES

- a) Reproductive cells of non-flowering and seedless plants:
- b) Plants without flowers, seeds or developed conducting vessels:
- c) Bryophytes with lobed leaflike structures and rhizoid:
- d) Bryophytes with rhizoid, caulidium and phyllidia:
- e) Plants also known as ferns:

**2. Write a X in the correct boxes:**

|                                         | Liverworts | Mosses | Ferns |
|-----------------------------------------|------------|--------|-------|
| They reproduce using spores.            |            |        |       |
| They have developed conducting vessels. |            |        |       |
| They do not have conducting vessels     |            |        |       |

**3. Are the following statements true or false? Write a T (true) or a F (false) in the box.**

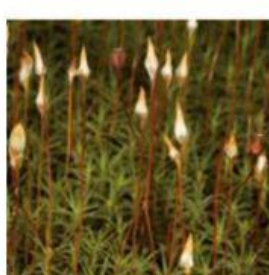
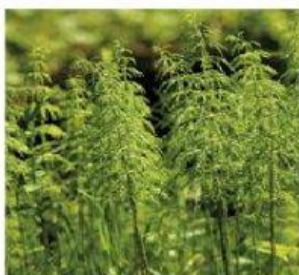
- a) Ferns are plants with conducting vessels but no flowers:
- b) All plants can produce seeds, even if they don't have flowers:
- c) The group of liverworts and ferns are called pteridophytes:
- d) Mosses need very sunny and dry places to live:

**4. Choose the correct word in each sentence.**

- a) Non-flowering plants cannot produce.... seeds / spores.
- b) Hepatic plants and mosses are.... bryophytes / pteridophytes.
- c) Bryophytes / pteridophytes.... do not have conducting vessels.

**5. Complete the table by choosing the correct option in each case and by dragging the pictures.**

| BRYOPHYTES |  | PTERIDOPHYTES |  |
|------------|--|---------------|--|
|            |  |               |  |
|            |  |               |  |
|            |  |               |  |

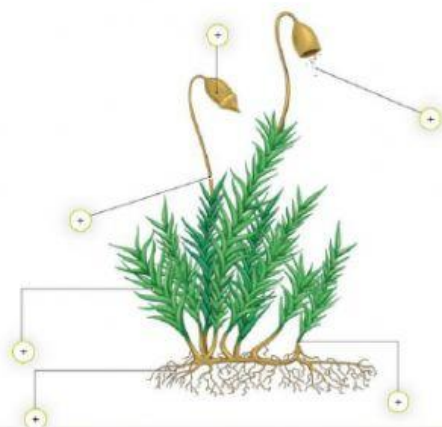


6. Drag the corresponding structure of a MOSS to its function.

spores   sporangia   caulidia   rhizoids   phyllidia

| Function                                                   | Structures of mosses |
|------------------------------------------------------------|----------------------|
| Capsules where spores are formed.                          | <input type="text"/> |
| Reproductive cells                                         | <input type="text"/> |
| Small stems that not conduct water.                        | <input type="text"/> |
| Small root-like growths that hold the plant in the ground. | <input type="text"/> |
| Leaf-like structures that grow from the caulidia.          | <input type="text"/> |

7. Complete the drawing of a MOSS with the corresponding concept on the right:



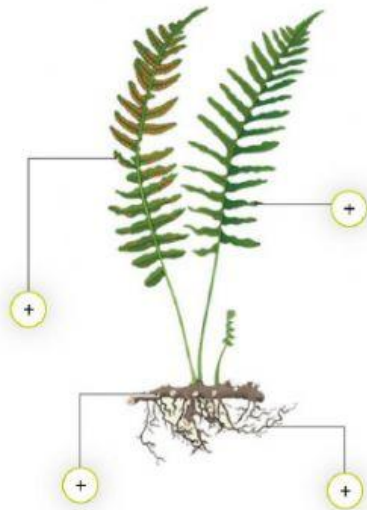
SPORES  
SPORANGIUM  
RHIZOIDS  
PHYLLIDIA  
CAULIDIUM  
SETA

8. Complete these sentences about mosses with the words from the box by dragging. There is one extra word.

rhizoids   seta   caulidia  
phyllidia   spores   sporangia

- Spores are formed in capsules called \_\_\_\_\_. These capsules grow from the caulidia during the period of reproduction.
- Sporangia grow on a stalk called a \_\_\_\_\_.
- \_\_\_\_\_ are leaf-like structures that grow from the caulidia.
- \_\_\_\_\_ are small root-like growths that hold the plant in the ground.
- \_\_\_\_\_ are small stem-like structures (they do not conduct water).

9. Complete the drawing of a FERN with the corresponding concept on the right:



FROND

RHIZOME

ROOTS

SORUS

10. Drag the corresponding structure of FERNS to its function.

rhizomes spores roots fronds sorus

| Function                                                                            | Structures of ferns  |
|-------------------------------------------------------------------------------------|----------------------|
| Leaves that grow from the rhizomes.                                                 | <input type="text"/> |
| Thick underground stems                                                             | <input type="text"/> |
| Fix the plant to the ground and absorb water and minerals. Connect to the rhizomes. | <input type="text"/> |
| A group of sporangia                                                                | <input type="text"/> |
| Reproductive cells that grow in the sporangia.                                      | <input type="text"/> |