

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.

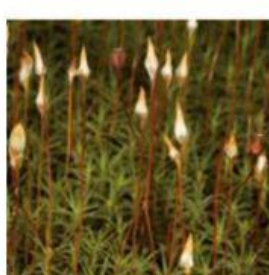
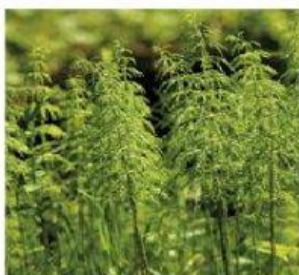
- a) Ferns are plants with conducting vessels but no flowers:
- b) All plants can produce seeds, even if they don't have flowers:
- c) The group of liverworts and ferns are called pteridophytes:
- d) Mosses need very sunny and dry places to live:

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	

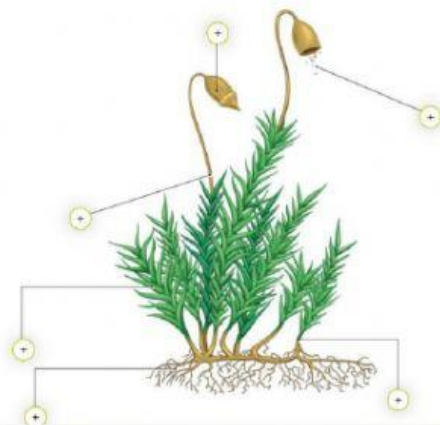


6. Drag the corresponding structure of a MOSS to its function.

spores sporangia caulidia rhizoids phyllidia

Function	Structures of mosses
Capsules where spores are formed.	
Reproductive cells	
Small stems that not conduct water.	
Small root-like growths that hold the plant in the ground.	
Leaf-like structures that grow from the caulidia.	

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



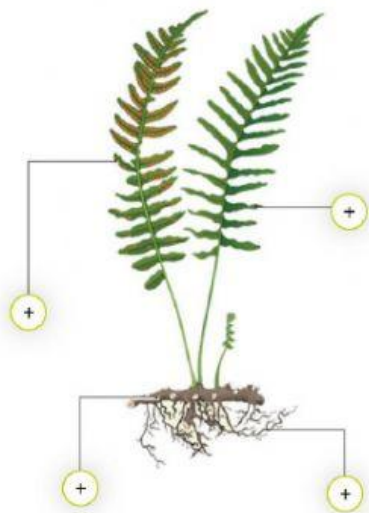
SPORES
SPORANGIUM
RHIZOIDS
PHYLLIDIA
CAULIDIUM
SETA

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.	
Thick underground stems	
Fix the plant to the ground and absorb water and minerals. Connect to the rhizomes.	
A group of sporangia	
Reproductive cells that grow in the sporangia.	