

BOTANY SCAVENGER HUNT

Purpose of activity: A really fun way to review botanical terms

Age level: Any

Time required: Can be done in one session (at least an hour) if you have an adequate place with plenty of plants to look at, or it can be stretched out over the course of a few weeks, with participants collecting whenever they have the opportunity.

Materials needed: Photocopies, large plastic bags, places to find plants (Optional: prizes)

Instructions:

Each student will need a copy of the scavenger hunt and a gallon-size ziplock plastic bag for collecting specimens. Set a time limit for the collection period. You can make this time period whatever suits your needs. You could do it all in one afternoon as part of a field trip, or you could do it over the course of several weeks, allowing students to have enough time to look for things as the plant life around them grows and changes. They'll have a better chance at finding more of the items if a larger time frame is allowed. If you decide to allow several weeks, the bags will need to be refrigerated. If you are doing this in a group setting with regular weekly meetings, you might want to ask the students to bring in whatever they have found each week, checking them off the list, then disposing of them. Send the bags back home empty. This will prevent problems with bacterial overgrowth.

For an additional fun challenge, have a LARGEST LEAF contest. (A good way to measure the leaves is to measure the widest dimension and the longest dimension and then add the two numbers.) The winners of the contest can have additional points added to their total score.

Prizes:




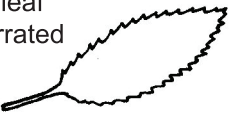


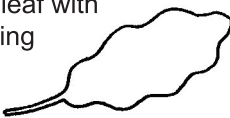
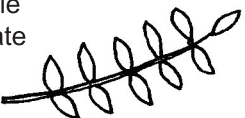
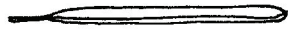
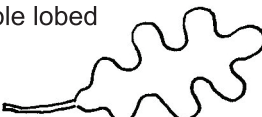
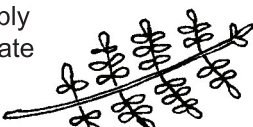





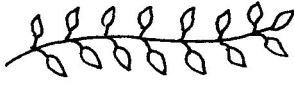










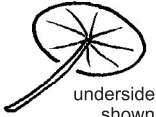


If you are doing this as a group, you may want to award prizes according to point values earned. One method that works very well is to have a prize table with point values assigned to all the prizes. Students may "spend" their points at the prize table. To make it fair, line them up in order of how many total points they earned, letting the students who earned the most points go first. However, each participant only gets to take one prize the first time through the line. This ensures that there will still be a nice selection of prizes available for even the last person in line. Then let them file past the table a second time, taking one more item. Then a third pass, etc., until everyone has spent all their points. This method of awarding prizes rewards those who worked extra hard without disheartening the other participants.



BOTANY SCAVENGER HUNT

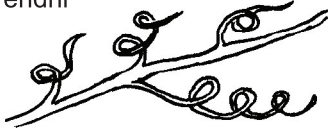





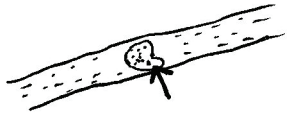

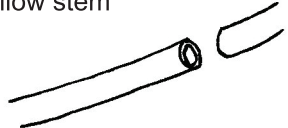


LEAVES (NOTE: Your specimens do not need to match these pictures. Yours might look very different but still qualify.)

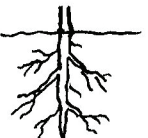
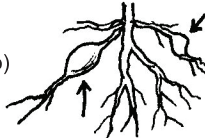
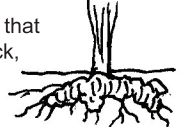

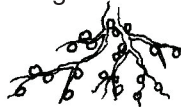

Simple leaf with smooth edges 	1	Simple palmate leaf 	1	Furry or fuzzy leaf 	1
Simple leaf with serrated edges 	1	Compound palmate leaf 	1	Thick, succulent leaf 	2
Simple leaf with undulating edges 	1	Simple pinnate leaf 	1	Flat conifer needle (Test: won't roll between finger and thumb) 	1
Simple lobed leaf 	1	Doubly pinnate leaf 	2	Round conifer needle (Test: will roll between finger and thumb) 	1
Leaf with deltoid shape 	2	Triply pinnate leaf 	3	Conifer tuft containing 2 needles 	1
Leaf with cordate shape 	2	Opposite leaves 	1	Conifer tuft containing 3 needles 	2
Leaf with obcordate shape 	3	Alternate leaves 	1	Conifer tuft containing 5 or more needles 	2
Leaf with linear shape 	1	Leaves in spiral pattern 	1	Leaf miner trail 	3
Leaf with orbicular shape (round, but with stem parallel to lamina) 	2	Leaves with whorl pattern 	2	Leaf gall 	3
Circular leaf (stem is perpendicular to lamina) underside shown 	3	Variegated leaf (more than one color) 	1	Leaf with fungus circles (spots cross over veins) 	3

TOTAL POINTS EARNED ON THIS PAGE

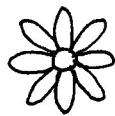










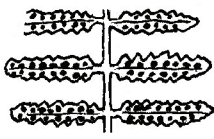
STEMS

<p>Tendrils</p> 	2	<p>Stipules</p> <p>Occur at the base of some leaves. May look leafy or spiny.</p> 	2	<p>Stem gall</p> 	3
<p>Stolon ("runner") They can be at soil surface or slightly under.</p> 	1	<p>Apical (or "terminal") bud</p> 	1	<p>Axillary (or "lateral") bud</p> 	1
<p>Leaf scar</p> 	1	<p>Fuzzy or hairy stem</p> 	2	<p>Hollow stem</p> 	1

ROOTS / RHIZOMES

<p>Tap root (but can't use carrot)</p> 	1	<p>Tuber (but can't use potato)</p> 	2	<p>Rhizome (Modified stem that looks like a thick, clumpy root.)</p> 	3
<p>Fibrous root (but can't use grass)</p> 	1	<p>Nitrogen-fixing nodules</p> 	3	<p>Bulb (but not onion, tulip or daffodil)</p> 	2

REPRODUCTIVE STRUCTURES

<p>Regular flower (has radial symmetry)</p> 	1	<p>Flower spire</p> 	2	<p>Seed case designed to float or fly</p> 	1
<p>Irregular flower (has bilateral symmetry)</p> 	2	<p>Cone</p> 	1	<p>Seed case with hooks or barbs</p> 	2
<p>Composite flower (made of smaller flowers)</p> 	1	<p>A dry fruit (not from the store or your kitchen)</p> 	2	<p>Seed case thicker than this one:</p> 	3
<p>Umbrella-shaped flower</p> 	2	<p>Moss sporangium</p> 	3	<p>Fern sori</p> 	3

optional additional category

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TOTAL FROM FIRST PAGE

GRAND TOTAL
