



Leaf Disk Lab

(adapted from <http://www.elbiology.com/labtools/Leafdisk.html>)

Materials:

0.2% Sodium bicarbonate solution	Hole punch
0.2% Sodium bicarbonate solution with soap	Ruler
Plastic syringe	Timer
Clear plastic cups	Light source
Leaf material	

Procedure:

1. Avoiding major veins, punch out 10 leaf disks.
3. Remove the plunger from the syringe and add the leaf disks to the barrel.
4. Carefully, replace the plunger and push it in until only a small volume of air (1mL) remains. Be sure to not crush the leaf disks.
5. Pull up a small volume of the sodium bicarbonate solution with soap (4mL) into the syringe. If necessary, tap the syringe to suspend the leaf disks.
6. Holding your finger over the syringe opening, draw back on the plunger to create a vacuum. Swirl the leaf disks. Release the vacuum. Repeat 2-3 times or until all the leaf disks sink.
7. Pour the disks and solution into a clear plastic cup. Add more bicarbonate solution to a depth of about 3 cm.
8. Place the cup under the light source and begin timing.
9. At the end of each minute (for 10 minutes) record the number of floating disks. If any disks stick against the sides of the cup, tap or swirl the cup to dislodge them.

Data:

Time (minutes)	Number of Floating Disks
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	