****[**Blowing in the Wind Lesson**](https://agora.cs.illinois.edu/display/cs4hs/Analog%2BClock%2BLesson)

Patty S Page



1. Start new project and name it Blowing in the Wind. Save your work.
2. Move the images of the cloud blowing and the flower top into the project work area. Erase any solid color backgrounds by selecting painting using the menu option in the halo. Place the cloud on the side and the flower head near center (x) and about 1/3 down from top (y). Save.
3. Draw the stem by drawing five separate line segments and connect them end to end beginning at the flower head and proceeding downward to where the leaves will be. To do this select the paint icon, choose the line segment on the bottom, choose black, choose the thinnest line, and draw. Select “keep”. This ensures that each line segment is an independent object.
4. Before connecting the lines as described above, move the center of rotation to the end. Save.
5. Create the leaves by selecting the tool box, the objects icon and then “shapes”. Drag to the bottom-right of the flower. Right click, adjust the shape and change the color to green. Using the halo, copy the finished leaf. To create a similar leaf for the opposite side, use the halo for the copied leaf and choose the menu icon. Select handles. This lets you change the direction of the leaf and change its shape. Save.
6. Connect each of the line segments so they will move as one stem. Right click on lowest line segment and label “Seg 1”.
7. Select “eye” icon. Script Seg 1 to rotate 5 degrees by dragging “turn by” out into the world and naming it “Rotate Seg 1 5d’.
8. Create reset script by dragging Seg 1’s heading out into the world, setting it to 0, naming it Reset, and selecting Button from the script menu. Drag the button to the bottom of the world. Save.
9. Create Script for moving Seg. 2. Select Seg 2 icon from top right of world to open Seg 2 script menu. Like above:

a. Drag “turn by” to world and name script “Rotate Seg 2”. Change number to 10.

b. Before aligning Seg 2 with where Seg 1 will be after rotating. Move x and y coordinates into reset script. Reset script may be accessed by using the halo on the reset button and the menu icon to select “open underlying scriptor.”

c. Align bottom of Seg 2 with where Seg 1 will be after rotating by increasing x and decreasing y coordinates and dragging them into the Rotate Seg 2 box. Save.

10. Create Scripts for Segments 3-5 remembering to drag heading “0” and original x-y coordinates into reset box before changing. Save after each segment is scripted.

11. Create Script to move flower head’s x and y coordinates.

12. Using empty script. Drag each of the above scripts, in order, into the new script and name it “Run”.

Here is what it looks like:



