

## Algorithmic Doodle Art Grass

Landscapes in films are often computer generated. Ever wondered how they do it? Next time you find yourself doodling, draw an algorithmic doodle and explore algorithms for drawing nature. Here is an example Doodle Algorithm. What does it look like?

1. Start by drawing a single straight vertical line (as below)
2. DoodleDraw from that line as follows.

### To DoodleDraw from a given line:

1. Draw 3 shorter lines at an angle in the **top two-thirds** of the line on its **left** side.
2. Draw 3 shorter lines at an angle in the **top two-thirds** of the line on its **right** side.
3. Choose a new existing line and **DoodleDraw** from that line



As you choose the exact positions and lengths of lines randomly you will get a slightly different picture each time you follow the algorithm just as no two plants are identical. Different algorithms give different looking trees, grasses, ferns, snowflakes, crystals.