MAYOR OF LONDON



Algorithmic Doodle Art Example

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?

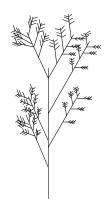
- 1. Start by drawing a single straight vertical line (as below)
- 2. DoodleDraw from that line as follows.

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

By following the algorithm you should get a picture something like this one: though as you choose the exact positions and lengths of lines randomly yours won't be exactly the same just as no two plants are identical.

Different algorithms give different looking trees, grasses, ferns, snowflakes, crystals, ... so now try the Doodle Algorithm overleaf. Then start inventing your own doodle art algorithms and see how realistic the drawings you end up with are.





MAYOR OF LONDON



Algorithmic Doodle Art 1

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

To DoodleDraw from a given line:

- 1. Draw 3 shorter **curving** lines from the **top two thirds** of the line on its **lower** side.
- 3. Choose a new existing line and DoodleDraw from that line

