digital 2030

Code it Yourself - Scratch Activity 2

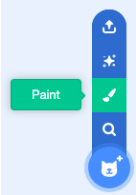
Design a Well-being Algorithmic Flower

This guide contains three challenges. The idea is for you to create the flower you like the most and that makes you feel good just like you did in The Challenge.

Challenge #1: Design your own simple well-being algorithmic flower

Instructions:

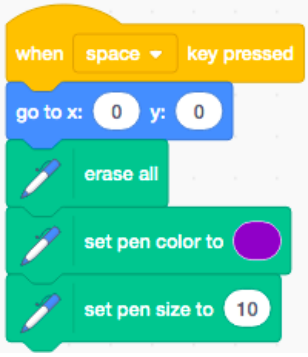
1. Create a **dot** sprite.



2. Start coding!

Set your scene right:

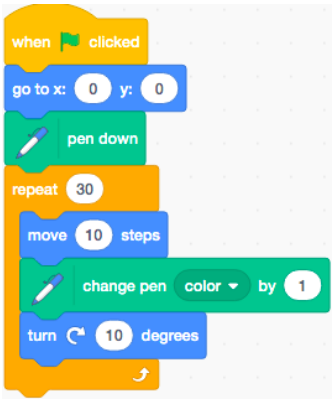
- Add **Pen extension**
- Set a trigger event, a starting point (**x:0, y:0**), a reset, a **pen color** and a **pen size**.



> Using simple symmetrical shapes for the artwork makes visualization more pleasant. Selecting palettes that are colorful and accessible to colorblind viewers is also awesome!

3. Design your own simple well-being flower with a set of algorithms (just like in a recipe!)

- Set a trigger event and a starting point (**x:0, y:0**)
- Add **pen down** to start drawing
- Create a loop to draw one “petal”

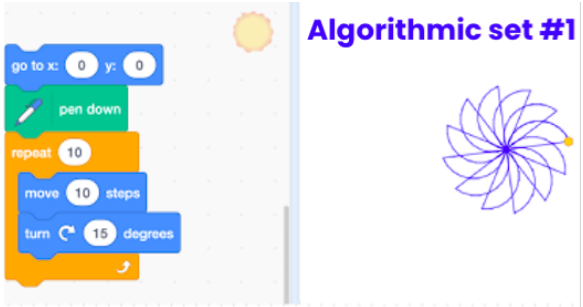


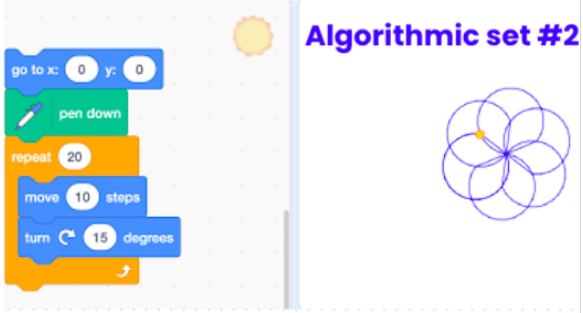
To modify the visual outcome, experiment with:

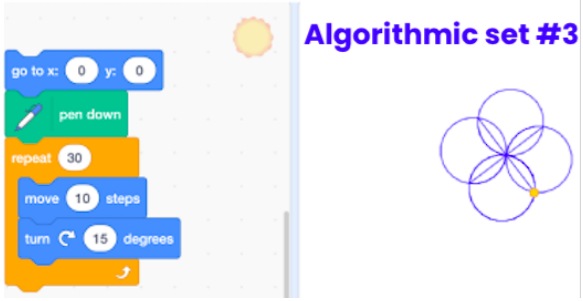
- **Move _ steps**
- **Turn _ degrees**
- **Pen color** (**set** and **change**)
- **Pen size** (**set** and **change**)

Additional challenges: Change the backdrop (color or image) and draw the whole flower automatically by adding one loop.

Access full code [here]





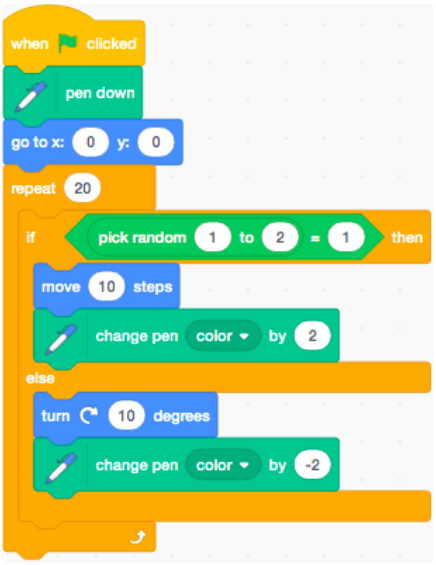


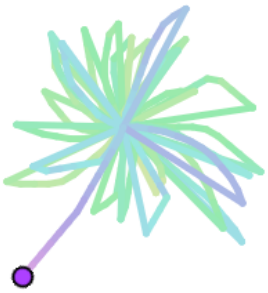
Challenge #2: Design your own complex well-being algorithmic flower

Instructions:

1. Follow steps 1 and 2 above
2. Design your own complex well-being flower with a set of algorithms

- Set a trigger event and a starting point (**x:0, y:0**)
- Add **pen down** to start drawing
- Create a conditional loop to draw a randomly oriented and colored “petal”





To modify the color, experiment with **Pen color** (**set** and **change**)

Additional challenges: Change the backdrop (color or image) and draw the whole flower automatically by adding one loop.

Access full code here

Challenge #3: Remix the Ultimate Well-being Algorithmic Flower with Sliders

Access full code here

The sliders represent:

- How many degrees will the dot move in each iteration
- How many steps will each dot take, changing the size and duration of the flower artwork
- How far will the dot travel in each iteration, affecting the size of the flower artwork

Experiment with the different sliders to obtain unique outcomes.

Check out all these great well-being algorithmic flowers: