

## WATER CYCLE SHOWCASE

**Topic:** Earth and Space Sciences

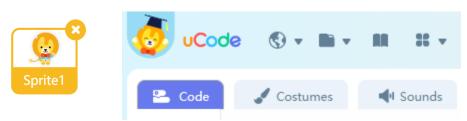
**Short Description:** In this lesson, you will create a program showing the stages of the water cycle. Uco will assist by narrating. Need a refresher on the water cycle? Check out these free resources: "Nat Geo Kids: The Water Cycle!", "National Weather Service: The Hydrologic Cycle," or "World of Water: Water Cycle."

## Steps:

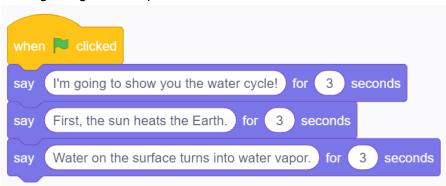
- 1. Open <u>uCode</u> in a web browser. Google Chrome is preferred.
- 2. Click the Choose a Backdrop icon at the bottom right of your screen. Select an outdoor backdrop that shows things like the sky, land, sun, and a body of water. If you cannot find a background you like, you can always upload or create your own. You can also add sprites in place of these items, as described in Step 4.



3. Click on Sprite1 then click on the Code tab.



**4.** Using the **when clicked**, **say ( ) for ( ) seconds**, and **stop all** blocks, create a code where Uco says each step and stage of the water cycle. To help you get started, here is the beginning of a sample code.





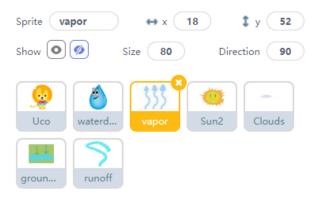
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**5.** To animate your water cycle story, add some sprites to represent different parts of the cycle. These might include water drop, water vapor, clouds, and so on. If your background did not include items like the sun, you could also add those in as sprites.

To add a sprite, click the **Choose a Sprite** icon next to the **Choose a Backdrop** icon in your screen's bottom-right corner. From here, you can choose from the samples provided, create your own, or upload a saved image from your computer.



6. You will need to create a code for each sprite that will be performing an action within your water cycle. For example, you might want the sprite that represents water vapor to move up the screen. To do this, click the water vapor sprite in the sprite area of your screen.



With this sprite selected, create a code that will show the water vapor and move it from the bottom or middle of the screen to the top. Here is a sample code to get you started:

```
when clicked

wait 6 seconds

show

glide 2 secs to x: 18 y: 97

wait 1 seconds

hide

go to x: 18 y: 52
```

**7.** As you add in code for each sprite, run your program every so often to see how it looks overall. If you get stuck, watch this video for inspiration.



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