## Master Code Key: Orbiting Planets

STEMTaugher Edition $_{\circledR}$



## Background Code:

Note: This code is in the background pane because it not associated with any specific sprites. It stops all code.

Programming objective:

- Allows planets to be paused with a keystroke.



## Sun: No code



## Sprite 1:Mercury code

Code Causes Mercury to Spin a number of degrees per day cording to planet table. 360 Refers to the number of degrees in a circle and 88 refers to how many days it takes Mercury to go around the sun. $360 \mathrm{deg} / 88$ day gives us degrees per day. Degrees per day allows our planets to orbit with speeds that are proportionate to each other.

This explanation of the code applies to all the planet sprites.

Programming objective:

- "point in direction" allows planets to align on start
- Turn Function causes the planets to rotate

Sprite 2:Venus code


Sprite 3: Earth code


Sprite 4: Mars code


Sprite 5: Jupiter code


Sprite 9: Pluto code


