

# SCRATCH Scratch & Scroll

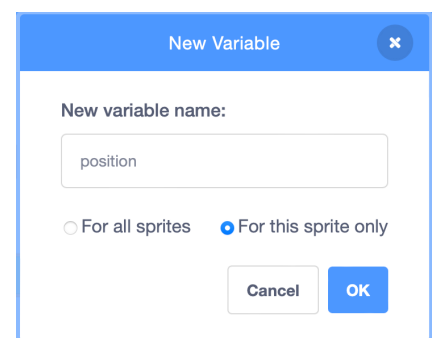
Register/login at <https://scratch.mit.edu>

*Make a scrolling street background using two sprites side by side.*

*The city is a backdrop. Copy it to a sprite.*



- 1) Choose a “city” backdrop for the stage, then click on the **backdrops** editor tab.
- 2) Use the select tool to select the whole city image.
- 3) Copy the image with the **copy** button.
- 4) **Delete** the backdrop from the stage (use the bin icon).
- 5) Create a new sprite using the paint tool.
- 6) On the **costumes** tab, click **paste** to add the image.
- 7) **Make a variable** for the sprite **position**, **For this sprite only** because we need two sprites in different positions.
- 8) **Make variables (For all sprites)**, for the **speed** of the scrolling backdrop, and the **step** added to the position.
- 9) Hide all the variables except **speed** (uncheck them).
- 10) Right-click on **speed** and make it a **slider**.



11) Add code to the city sprite. After **setting position** to zero, make a clone. A **forever loop** scrolls the sprite and its clone to the left.

12) The **step** must be negative to make the sprite scroll left. Make the speed negative by multiplying it (\*) by -1.

13) **Broadcast** the step to the sprite itself and its clone.

14) When the sprite **receives** the message, **change position** by the step value – it moves left.

*The screen and pixel width is 480 pixels.*

15) Once the sprite has moved off screen by 480 pixels (**position** < -480), it jumps over the other sprite to the right by two screen widths, adding  $480 * 2 = 960$  to its **position**.

16) Make the sprite **go to** the new **position**.

17) Finally, start the clone at a **position** one screen width (480) to the right.

*You can add a vehicle sprite to make it look like its driving along.*

**Save** your code with a good name. **File > Save now**

