

## Lesson Plan for about 4 Scratch Sessions:

### Learning xy coordinates

1. Explain the grid:
  - a. Start with a number line (they recognize number lines) and show them that we can turn it vertically and put them on top of each other
  - b. Point out the x- and y- axes.
  - c. Explain how to locate a point, using the mouse and using the axes; negative means go down or left, positive means go up or right
  - d. Demonstrate counting out to find a point (right 1,2,3, up 1,2,3)
  - e. Have them try finding a point and tell me how to figure out where I want Scratch to go

### XY Coordinate System:

2. Add the grid background
  - a. Click on stage
  - b. Click on backgrounds
  - c. Click on import, next to new background
  - d. Find the xy grid, click it and click ok
  
3. Control Commands
  - a. They tell the computer when to do things
  - b. The program won't start unless you tell it to
4. The program:
  - a. click on kitty, then click on the scripts tab
  - b. add the control, when flag clicked
  - c. motion: makes sprites move;
  - d. kitty needs to start in the same place every time you start your program, so use a motion command to make him go there (use xy skills to find where there is)
  - e. kitty can glide from one point to another, make him glide in a rectangle
  - f. you should have 4 steps to making the rectangle
  - g. make sure they can describe the steps