Do you know what *simulation* is? Simulation is the imitation of something so that people can look and feel it as if they are using that thing in real time.

Since you have learned how to use the pen command in Scratch, you will now create a pencil simulator wherein:

when 🏴 **clicked**

the Pencil sprite will...

❶ endlessly:

    a. go wherever the Lead will go but if the mouse is down it will switch to costume 1; else it will switch to costume 2; and
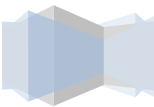
    b. point in 180 + x position * 0.1 direction.

when 🏴 **clicked**

the Pencil Shadow sprite will...

❶ switch to costume 1; and

❷ forever sets its ghost effect to 60, pointing towards the Light Source while following the Lead.

when 🏳 clicked

the Light Source sprite will...

1 switch to costume 1; and

2 forever sets its ghost effect to 60, pointing towards the Light Source while
following the Lead.

when 🏳 clicked

the Lead sprite will...

1 clear the stage;

2 set its appearance to a ghost with an effect of 50;

3 set its pen color to grey and size to 5; and

4 endlessly it will:

a. constantly point towards the mouse-pointer and move based on
the product of its distance to the mouse-pointer and 0.5 steps.

b. if the mouse is down, set the pen down and switch to costume 1;
else if the pen is up, switch to costume 2.

Don't forget to save your file as: SurnameFirstName_L36