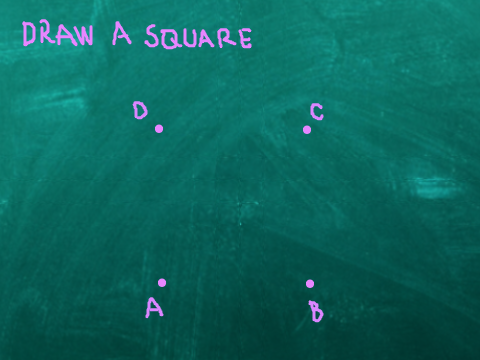
**Scenario 8 – Drawing with a chalk**



**[Task 1]**

1. Open *Drawing with a chalk* and write a code so that the chalk will draw a square by pressing the »S« key.
2. The chalk has to connect the vertex A and B, B and C, C and D and D and A.

*Hint*: The distance between A and B is 150 steps.

Every angle of a square is 90°.

Use  so you can see the chalk's movement.

If the steps are repeated, use the *loop repeat*.

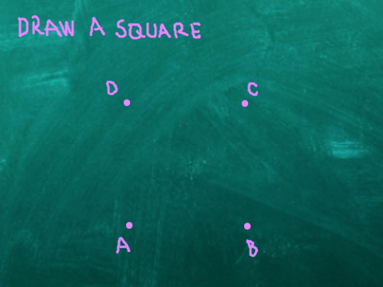
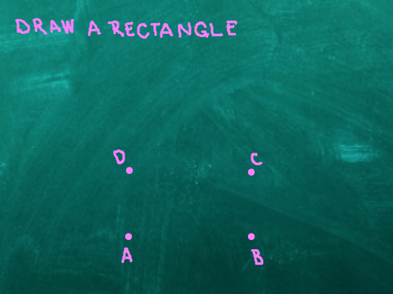
1. Before using the loop, we have to add a following code:
   1. Set pen color.
   2. Set starting coordinates for the chalk in vertex A (x: -80, y: -105).
   3. Put the pen down.

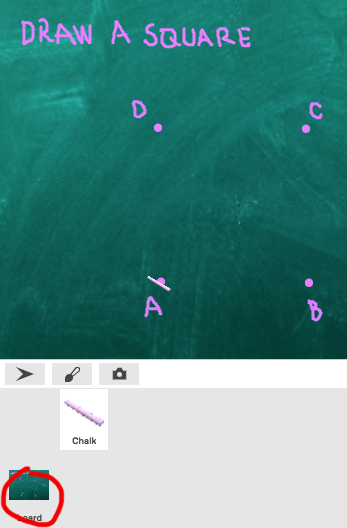
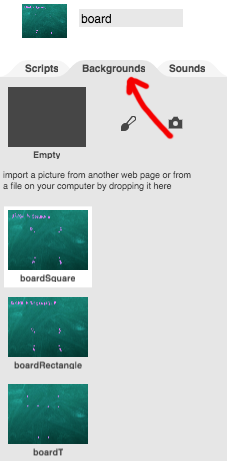
Consider whether it makes sense so use blocks *pen up* and *clear* as in the previous activity and where to put them.

Why is good to use the block  ?

**[Task 2]**

1. In this task you will write a code for drawing a rectangle. Firstly, you will have to change a background.

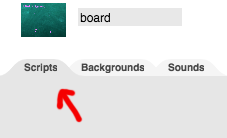
 

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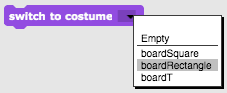
Clicking on »board« (left picture)

you open backgrounds.

Clicking on »Backrgounds« (right picture) you can see 3 prepared backgrounds for this activity:  
  
*boardSquare, boardRectangle* and *boardT*.

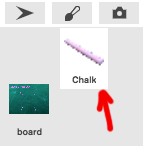
1. For writing a code click on Scripts.

We want switch the background to boardRectangle by pressing the key “R”.

Use blocks ** and .

Do the same for switching backgrounds to *boardSquare* with the key “S” and to   
*boardT* with the key “T”.

1. By clicking on the Chalk you go back to writing code for the chalk.

You have to add one more block of code to the [Task 1].

You already wrote a code for switching to boardRectangle by   
pressing the key “R”, but the player does not know that so you have to tell him. For writing instructions use block *say*.

Now you can continue with writing the code for a rectangle. You will use a similar procedure as when drawing a square. Use the loop when possible!

Same hints:

* 1. Vertex A has the same coordinates as before x: -80, y: -105.
  2. All angles are 90°.
  3. The distance between the vertex A and B is 150 steps and between the vertex B and C is 75 steps.

Add instructions for switching to a new background.

**[Task 3]**

1. Here you will connect the vertices to the letter T.
2. Some hints:
   1. Coordinates of the starting vertex are x: -56, y: -138.
   2. The distances between vertices are 60, 185 and 180 steps.
   3. All angles are 90°.
3. Add instructions for playing again from the beginning.

**[Additional tasks]**

You can add additional tasks according to you wishes or follow the tasks below:

* Add a new background and draw some dots.
* Write a code that connects the dots. You can draw a background or you can use a given one.

*Drawing with a chalk*:

<https://snap.berkeley.edu/project?user=mateja&project=Drawing%20with%20a%20chalk%20-%20Part>