

# BEADED SCHEMA HOW TO'S IN INKSCAPE

User manual

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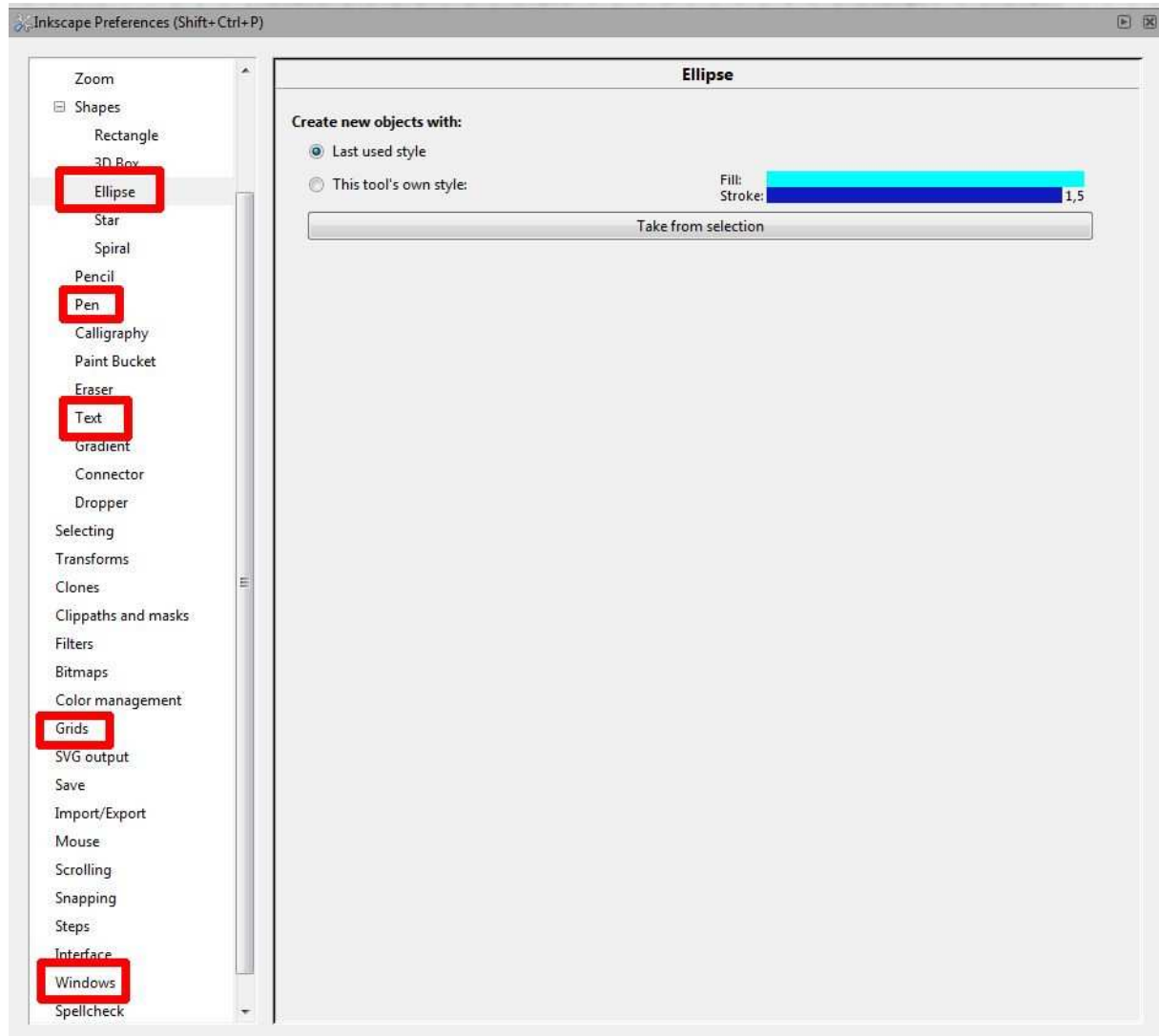
# Part I – Basic elements

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## Configuration

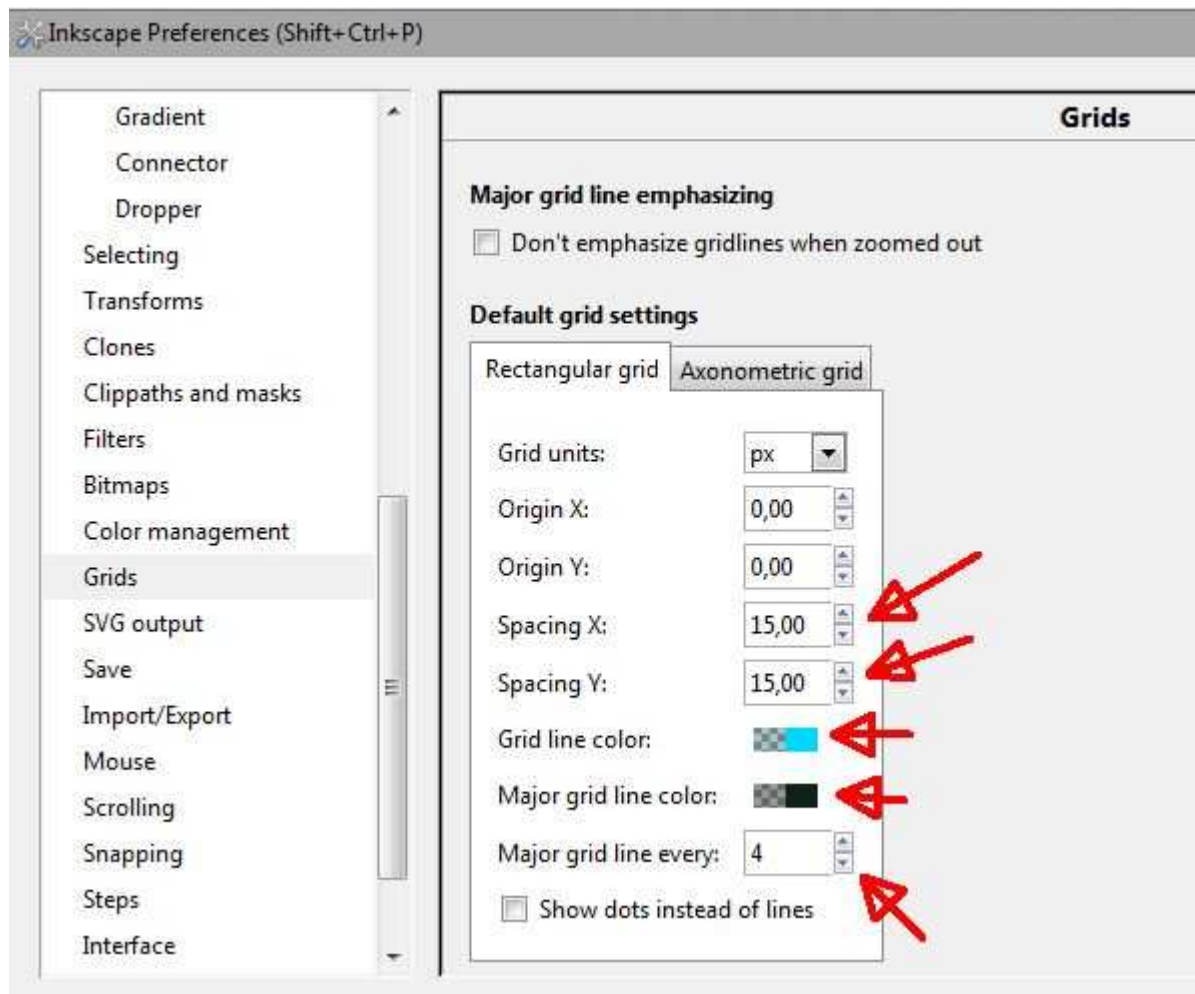
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File -> Inkscape Preferences



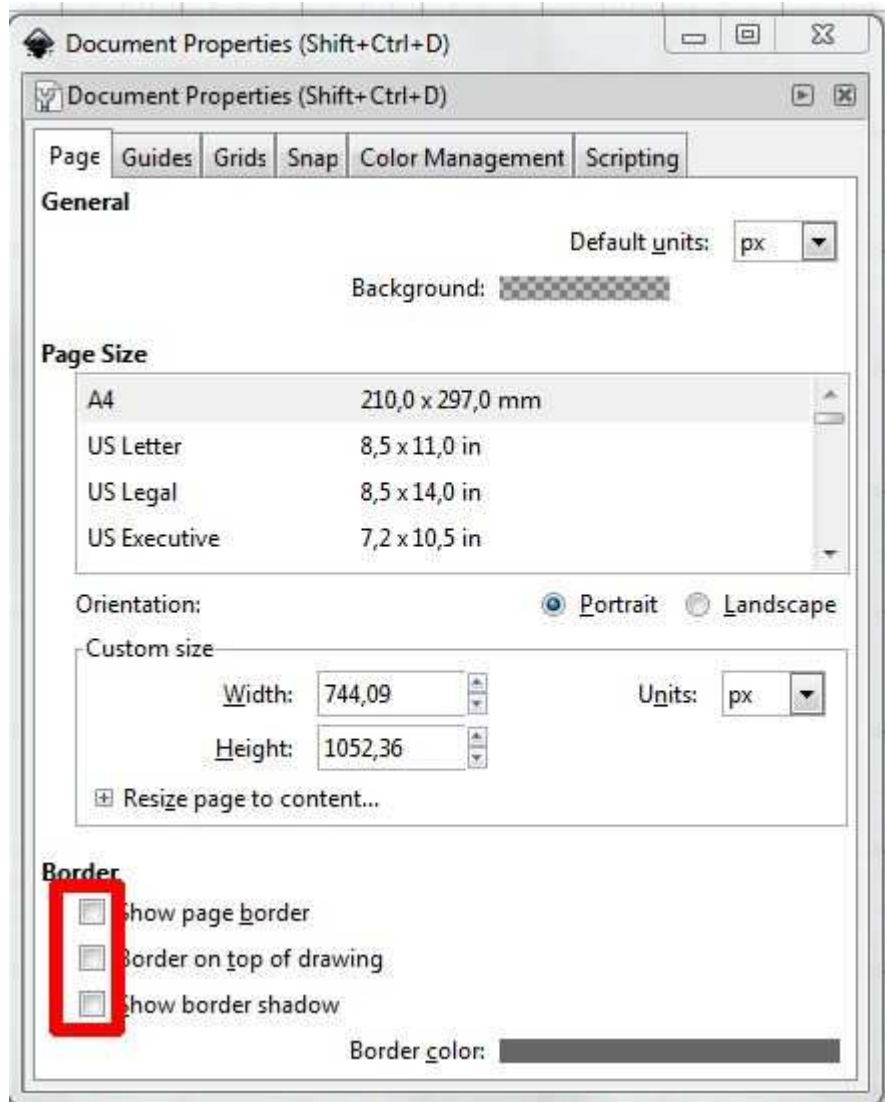
- Windows – set to “Last used style”
- Ellipse – set to “Last used style”
- Pen – set to “Last used style”
- Text – set to “Last used style”

- Grid – see the picture below; values to be set are marked with arrows

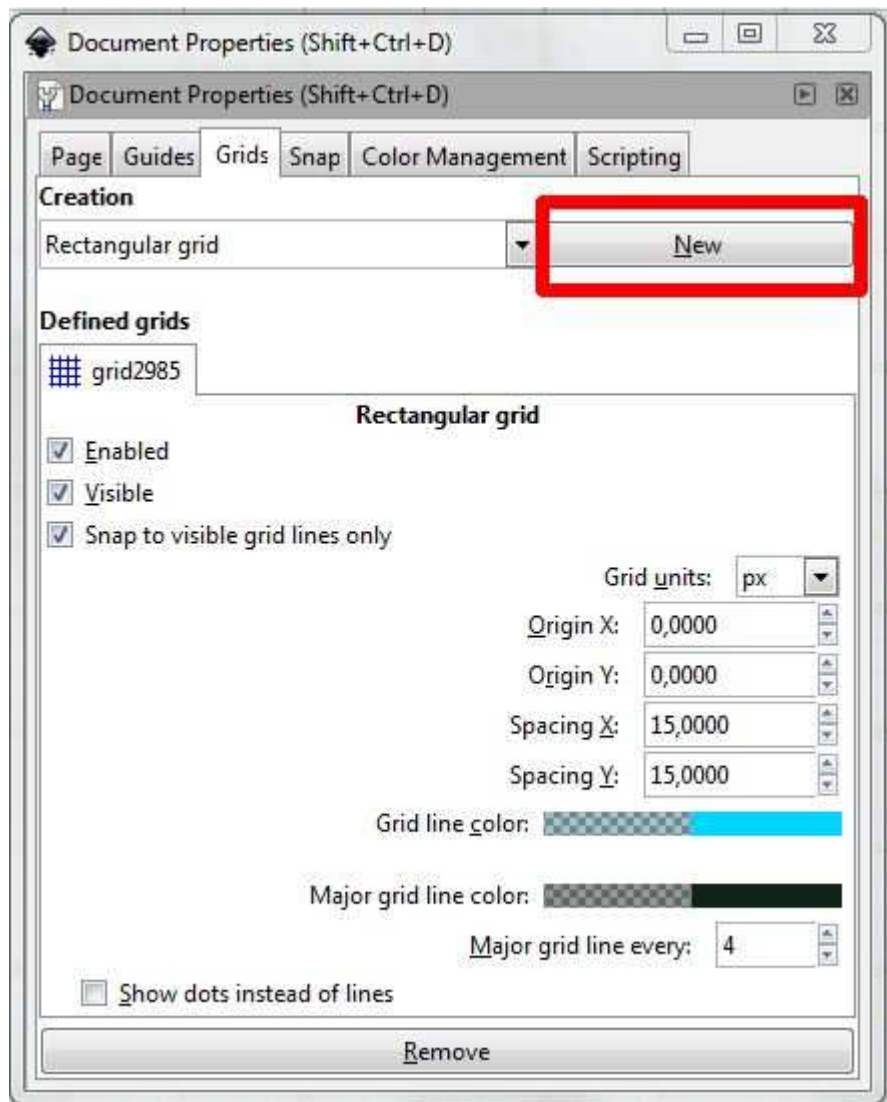


File -> Document Properties 

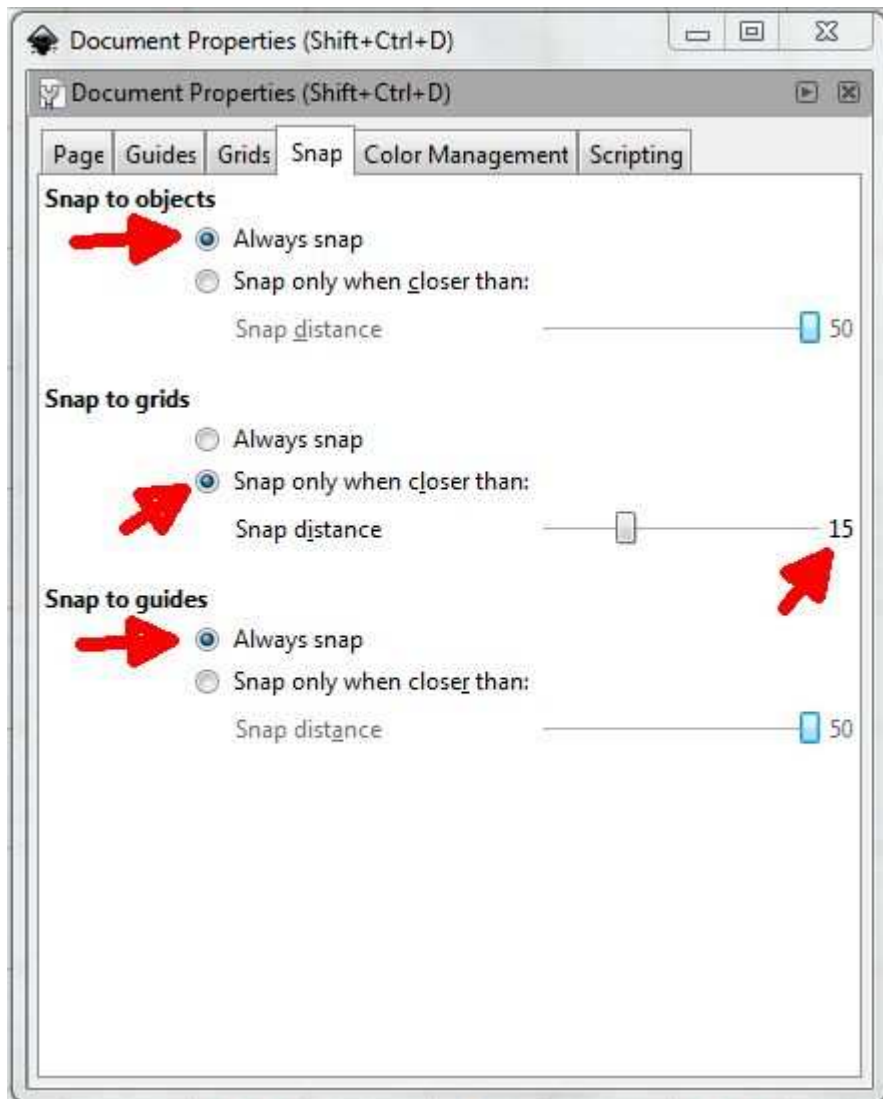
- Page borders – deselect all values; see the picture below for reference



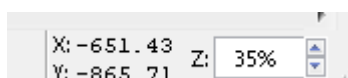
- Grid – click the “New” button, as shown on the picture below



- Snap – see the picture below; values to be set are marked with arrows



- Set zoom to 100% instead of default 35% (placed in the bottom right corner of the application's window)



File -> Save as ... default.svg

(/Inkscape\_installation\_directory/share/templates)

File -> Exit

File -> New

Now, all the settings set in the previous step should be visible (i.e. configuration is saved and maintained for future uses).



## Tools placement

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Tools for drawing different objects, like ellipse, lines, text, etc. can be found on the left side of the application's window.



## Beads

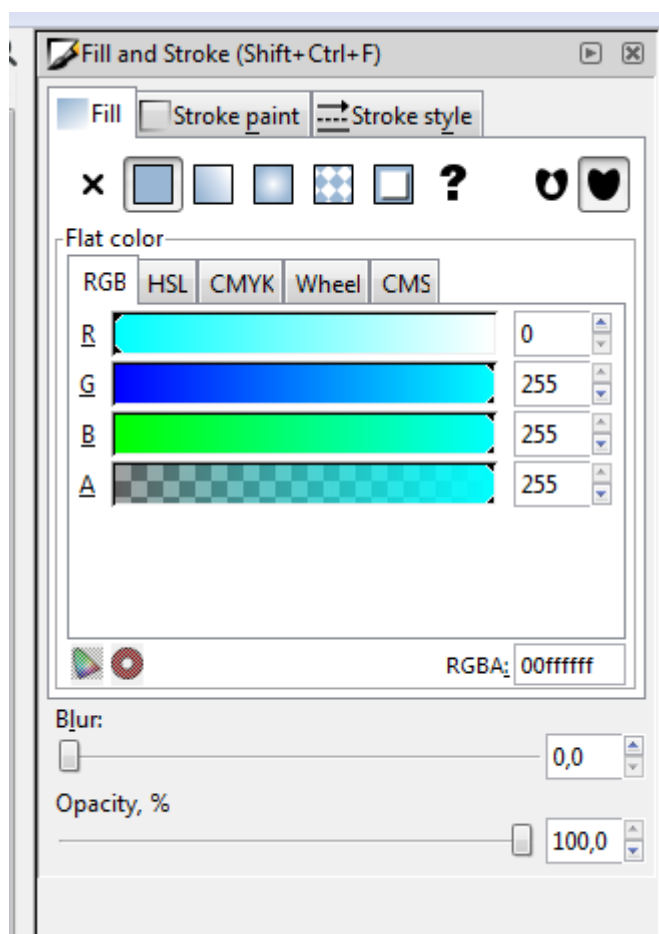
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Ellipse tool 

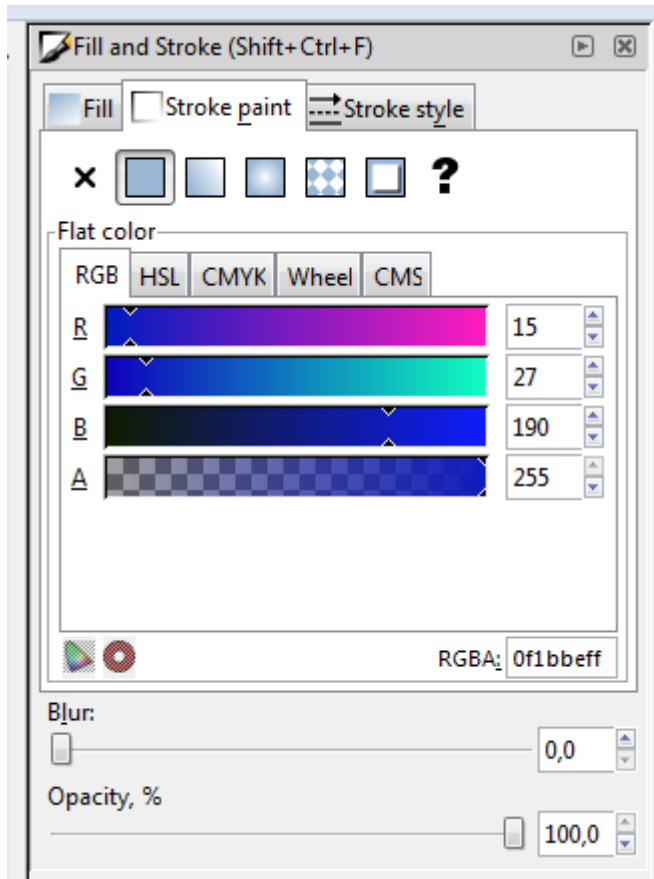
- For creating ellipse/circular shaped objects

Canvas tool 

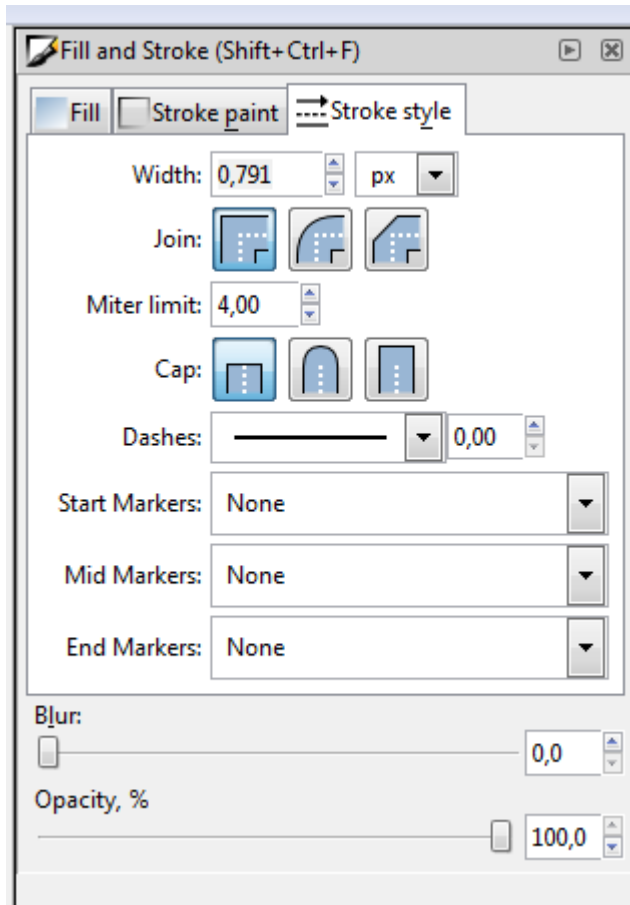
- Fill – for filling inside of the object



- Stroke paint – for defining object’s outline

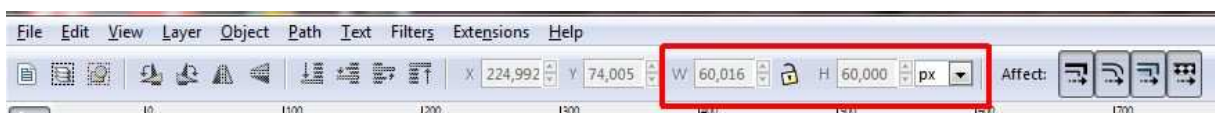


- Stroke style – for setting outline parameters, like the thickness of the circle

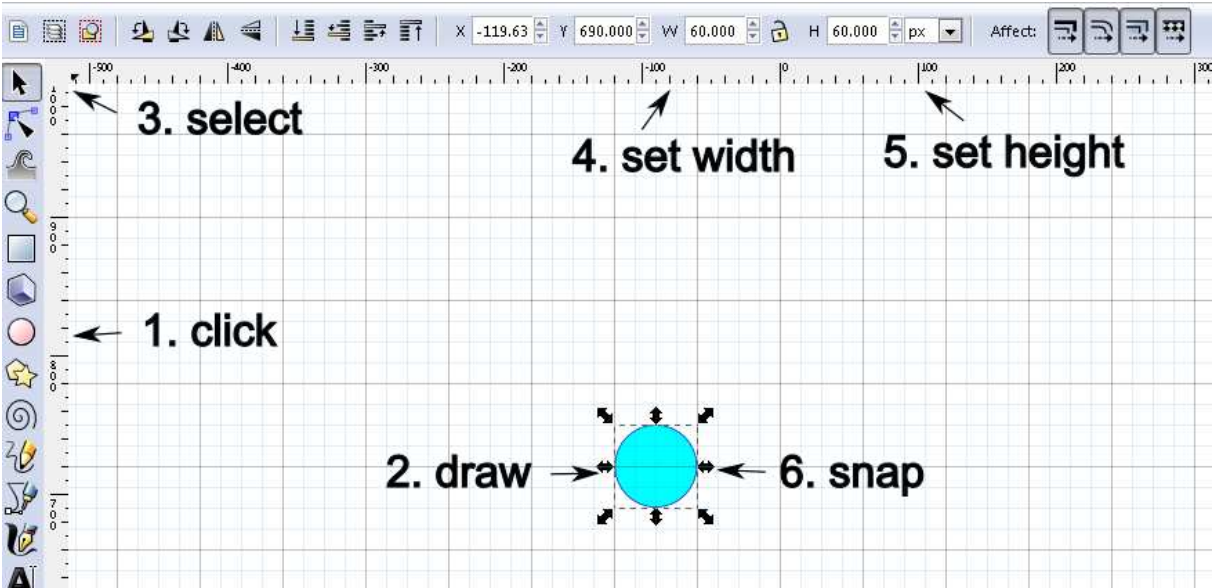


## Width [W]/Height [H]

- Used for setting width and height of the object, in this case, it is a circle



# Drawing a bead "HOW TO"



Copy/paste for more beads of the same size.

# Lines

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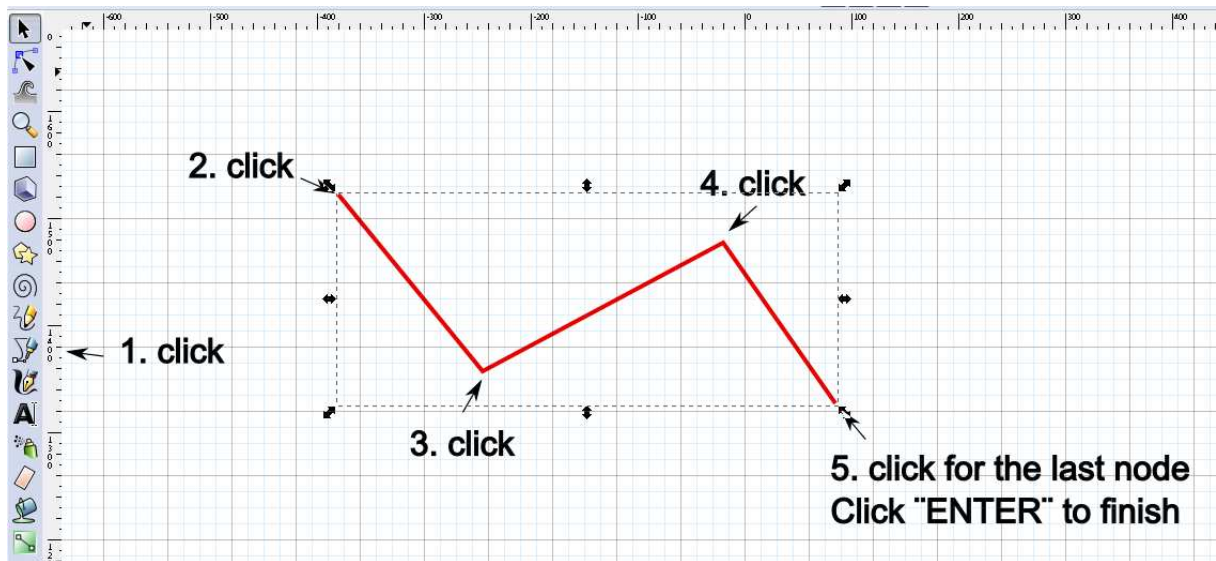
Bezier lines tool 

- For drawing lines

Canvas tool 

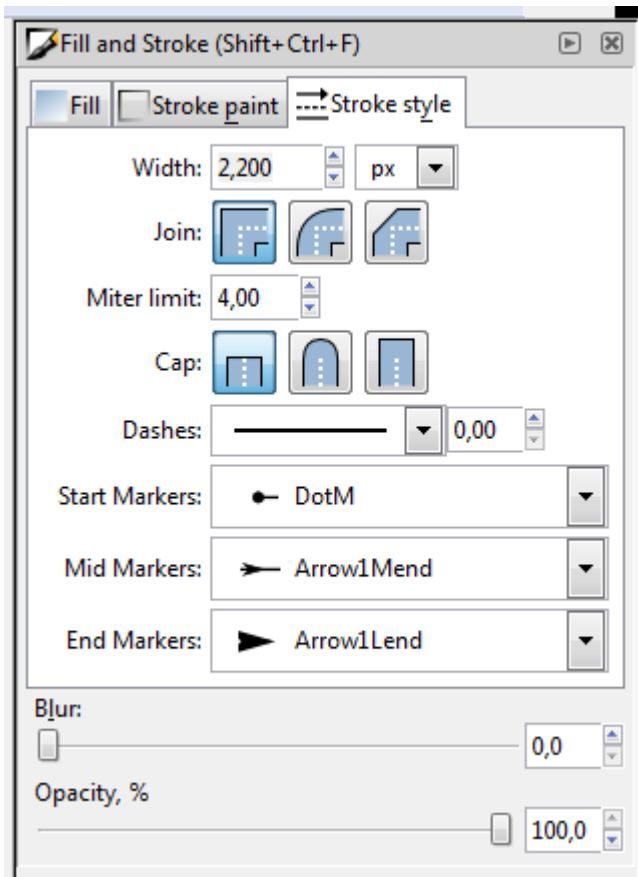
- For defining object's fill and outline
- In the case of a line, only object's outline (Stroke paint & Stroke Style) will be needed/defined

## Drawing a line "HOW TO"

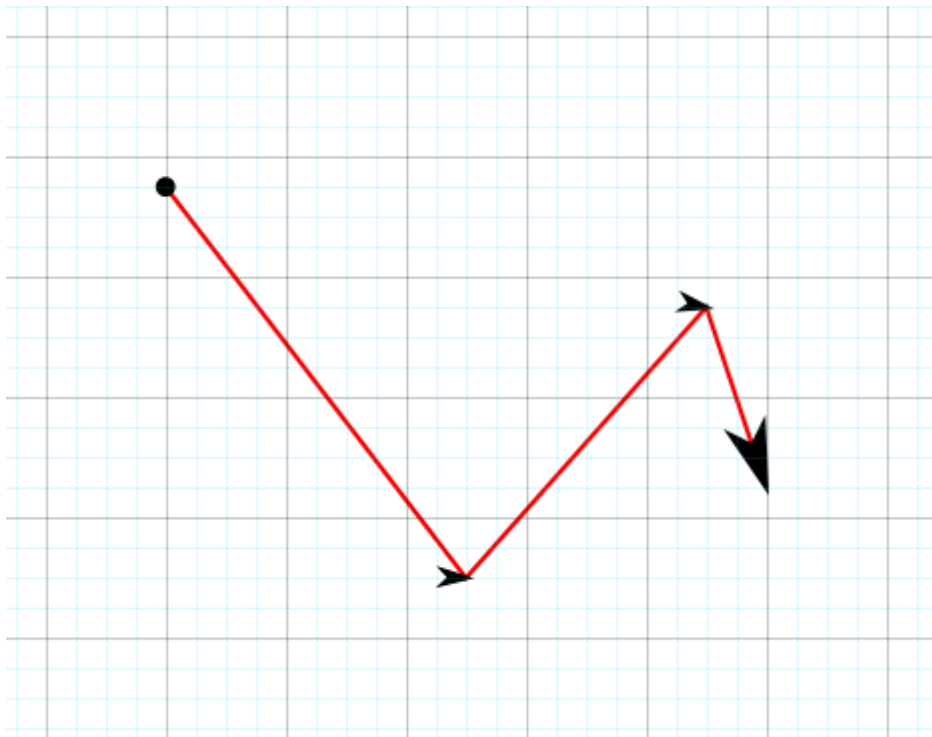


6. click on Canvas tool 

- set Fill to X (none)
- set Stroke Paint to Solid color (RGB)
- in Stroke Style, set markers as shown on the picture below:






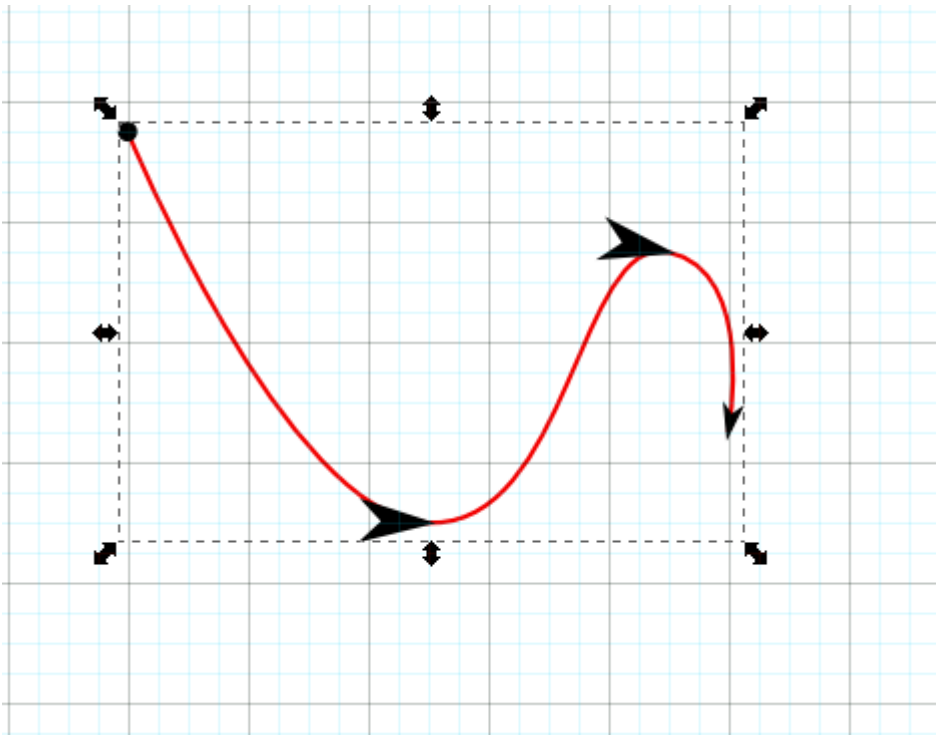
The result is line with markers selected in the previous step:





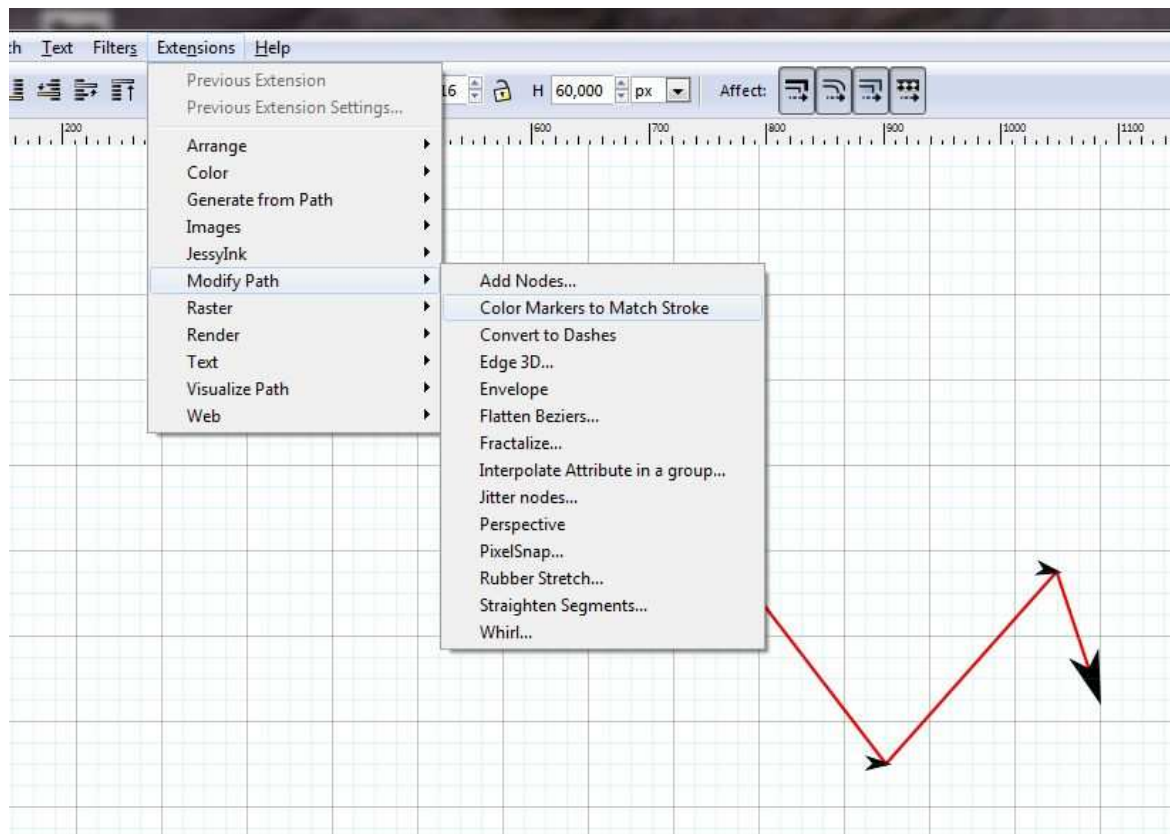
## 7. Smoothing the lines:

- Select Node's tool  and drag it around the object (a line should be already selected with selection tool; if not, first selected it with the selection tool )
- Select Symmetric tool 

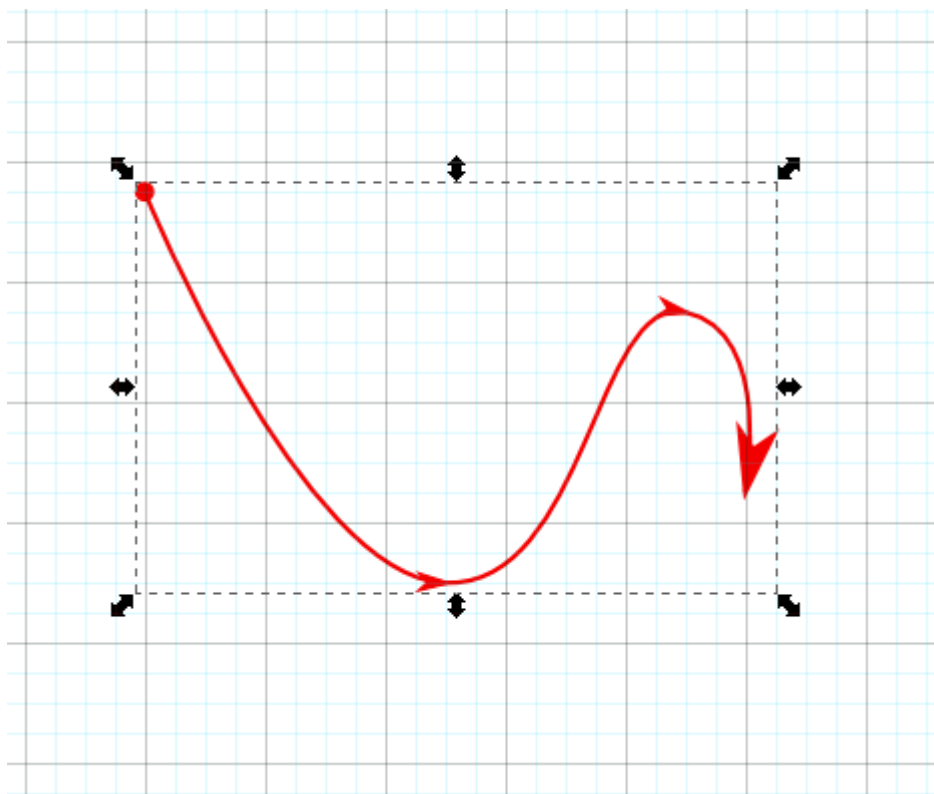


## 8. Correct the color of arrows to match the color of the line itself:

- Extensions -> Modify Path -> Color Markers to Match Stroke



The resulting line should look like this:



# Text

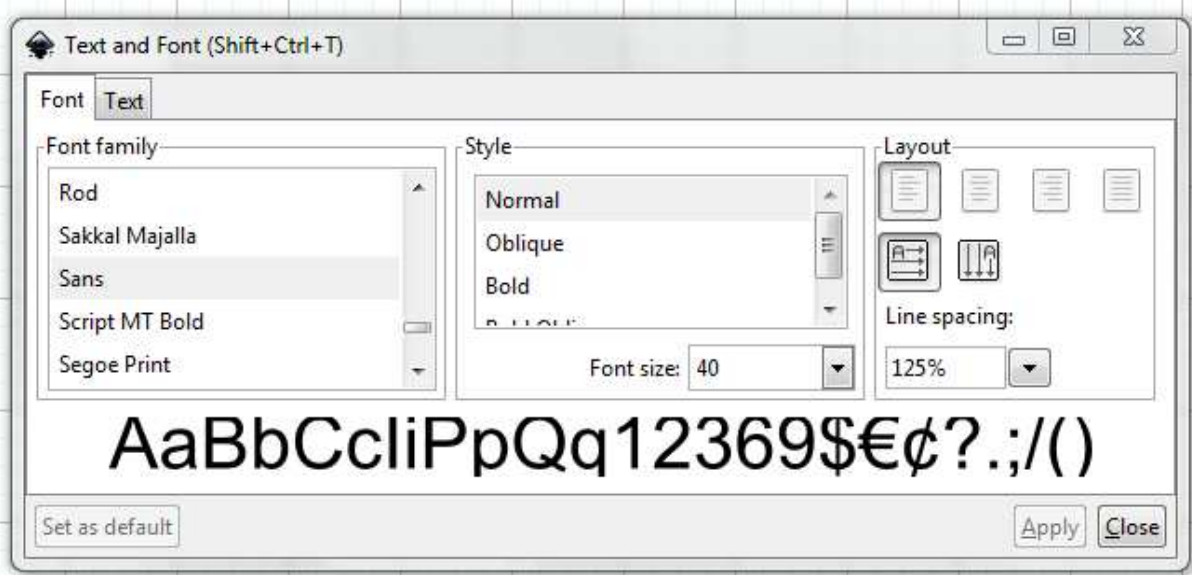
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Text tool 

- Used for writing text

Font tool 

- Used for setting font size and style



## Layers

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Layers are used to separate different parts of a schema one from another for ease of manipulation.

There are quite a few functionalities offered concerning layer manipulation. Here, adding, renaming, switching and locking of layers are the ones that will be mainly used.

Layer -> New layer

- Used for creation of a new layer

Layer -> Rename layer

- Used for renaming the layer

Layer -> Delete layer

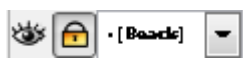
- Used for deleting a layer

Locking/unlocking layers

- Used for locking all the layers that are currently not worked on
- Only "working" layer should be unlocked.



Unlocked layer has "open lock" icon beside its name



Locked layer has "closed lock" icon beside its name and square brackets "[]" around its name

## Switching layers

- Used for choosing the next layer to work on by clicking on the drop/down menu and selection the layer in question by its name



## Combining all the elements together

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### Layer "Beads"

- Create all beaded pieces in the "Beads" layer

### Layer "Arrows"

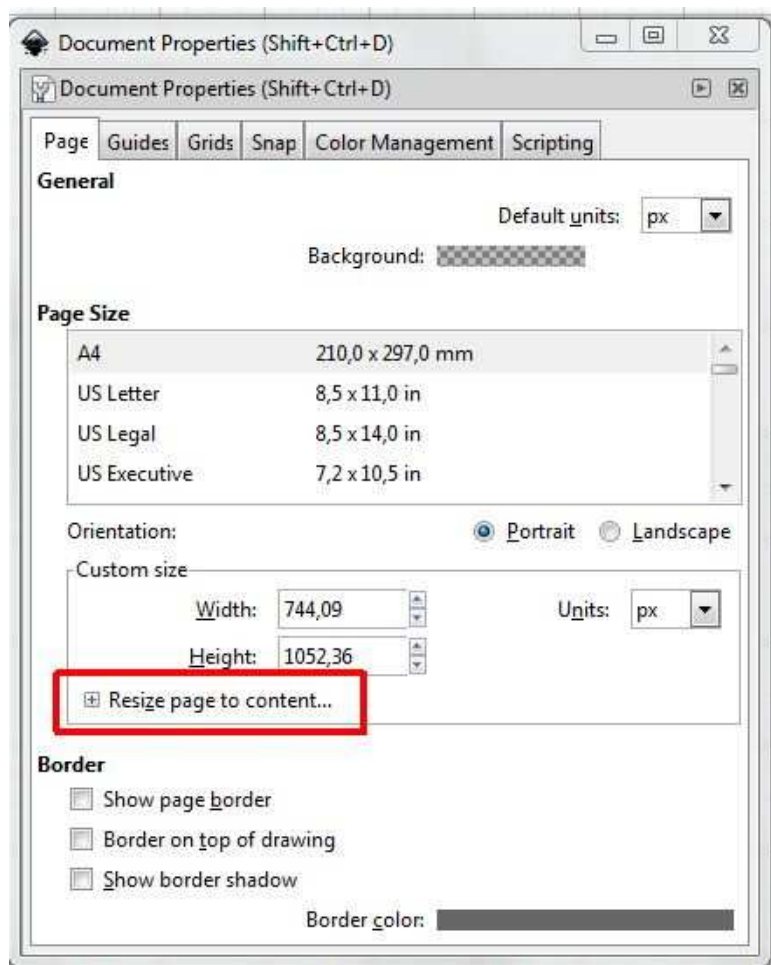
- Create all the lines and arrows in the "Arrows" layer

### Layer "Text"

- Create all the text in the "Text" layer

Finishing touches....

File -> Document Properties



Click on the + sign as shown on the picture on the left and afterwards, click on the button **Resize page to drawing or selection**

## Save as/Save .svg file

- Use save as/save for saving .svg files (the file format in which schema is worked on)

## Save as a copy

- Use for saving the schema in picture file formats (.png, .jpeg, etc.)

## Part II - Advanced object manipulations

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In order to reduce the amount of work put into schema design, one could use techniques like grouping, mirroring and rotation, if possible, and draw only pieces that are different. Then, by using mentioned techniques, other similar pieces could be reproduced from the existing ones.


The pieces could be differently positioned or could have different layout of colors but within the same structure or both. Combinations are numerous.

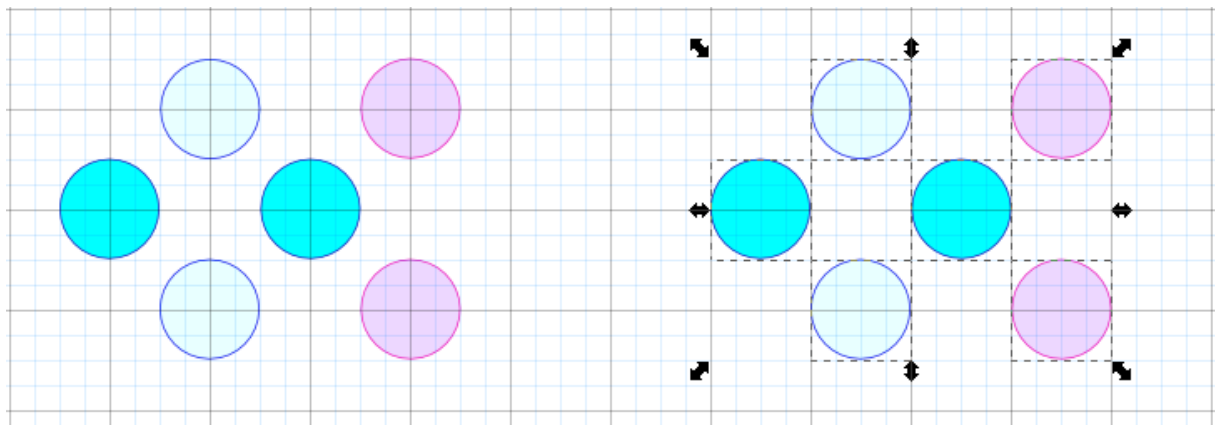
Basic information about these techniques will be given in the paragraphs to follow.

### Grouping of objects

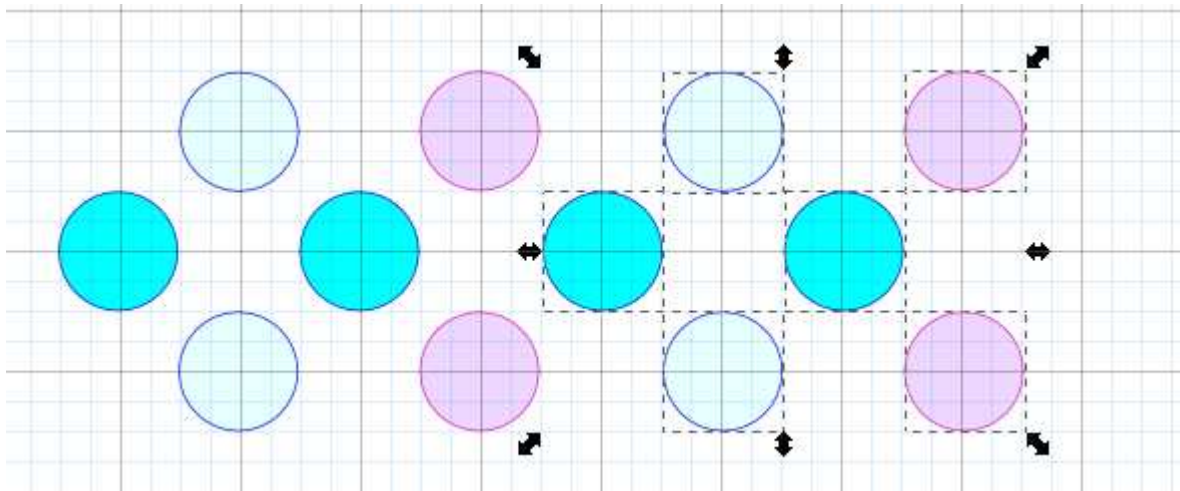
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Sometimes, a schema is composed of pieces that repeat themselves. In that situation, it is a good practice to reuse those pieces and not to draw every little piece from the beginning.

Basically, one selects the piece that should be repeated with the selection tool , copies it desired number of times and places it on the appropriated location in the schema.







Grouping is the basic element for all other advanced object manipulations, such as mirroring and rotation.

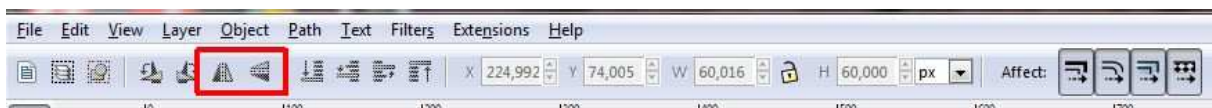
Keep in mind that all kind of objects can be grouped, not just beaded components (i.e. beads). It could be, for example, lines that show how the beaded object, like a necklace, is worked on.

## Mirroring of objects

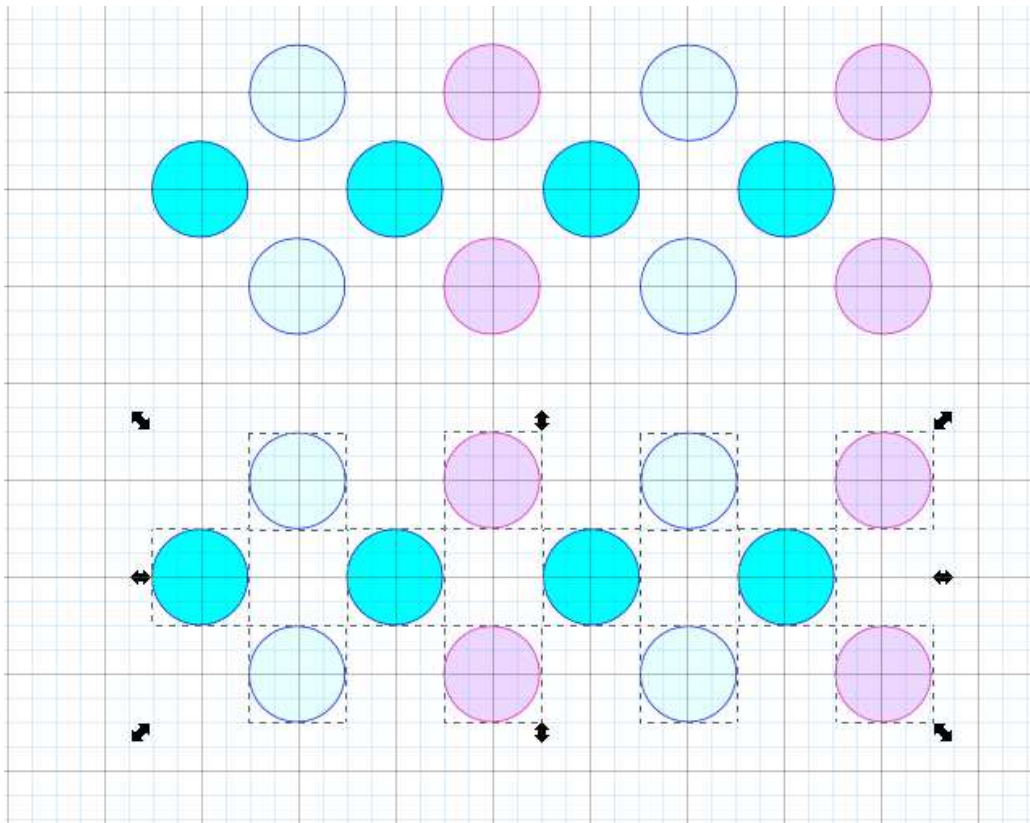
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Objects can be mirrored if design is structured in such a way that parts of design are practically the same but are differently positioned. This way, one can reuse already created parts of the schema and not draw all of its bits and pieces from scratch.

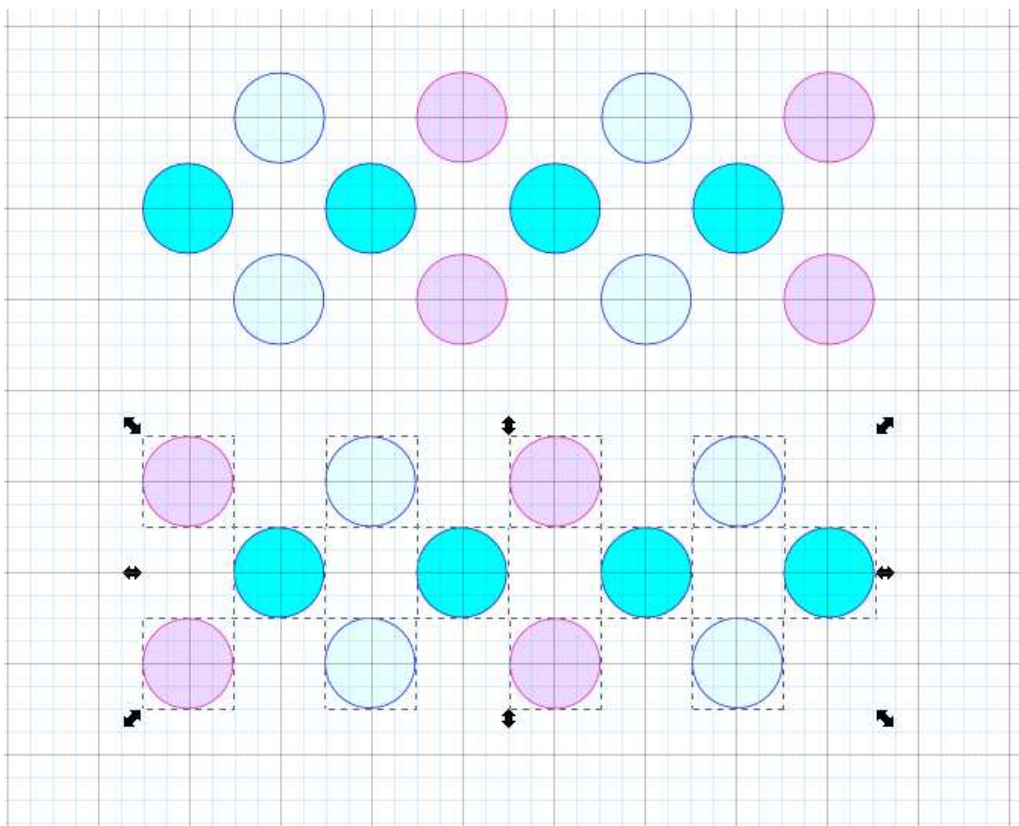
The following picture is showing where vertical and horizontal mirroring can be found in the application.



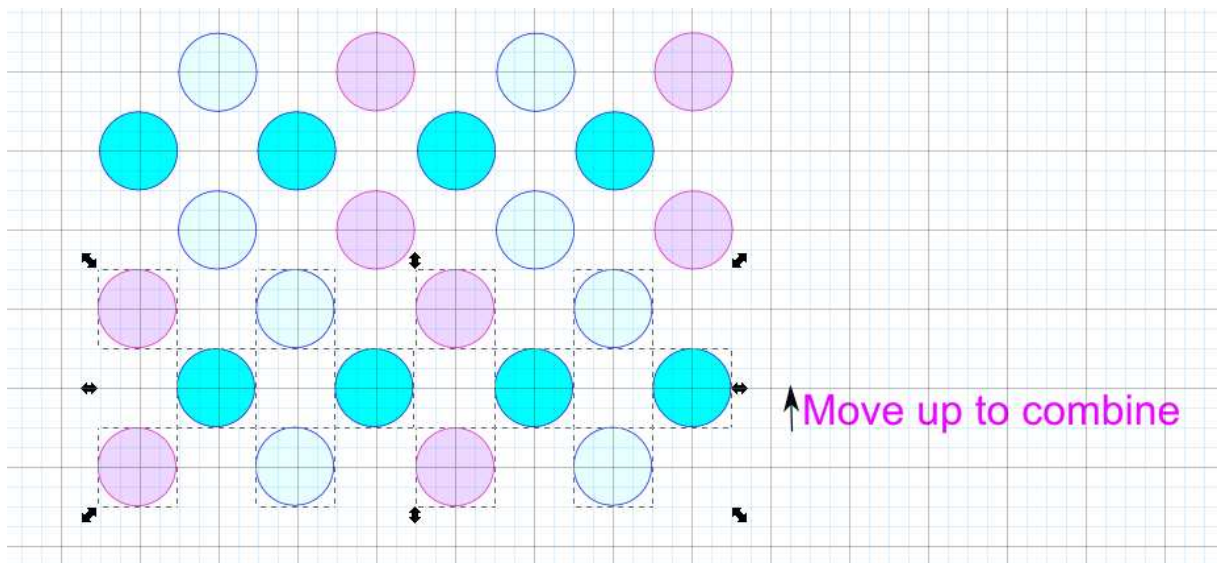
1. Select the object and make another copy of it




2. Mirror the object (here, vertical mirroring was used)



### 3. Combine newly created object as defined by design



### Rotation of objects

Select the object to be rotated with the selection tool . Click into the selection -> curved arrows around the object will show. Grab the curved arrows and rotated until desired.

