When do I need Inkscape when creating tactile graphics?

Step 1

Download Template

Visit our database **Share**.
share.problind.org/graphic/createTemplate

For step 2 and 3 you need the open source graphic program Inkscape

Download the latest version for Windows, Mac and Linux on https://inkscape.org

Step 2

Design Graphic

- Create your own tactile graphics.
- Simple graphic tools are available for this purpose.
- Predefined tactile patterns can be used.

Step 3

Add Information

- Add explanatory language information.
- Provide info about context and structure of the graphic.
- Add source of texts if available.

Step 4

Upload

Visit our database **Share**.
share.problind.org/graphic/upload

Step 5

Print

Print your tactile graphic
in swell or braille printing.

OUR INSTRUCTIONS help you create tactile graphics:

Quick guide – creating a tactile graphic
Transform existing graphics into audio tactile graphics

Inkscape User Interface
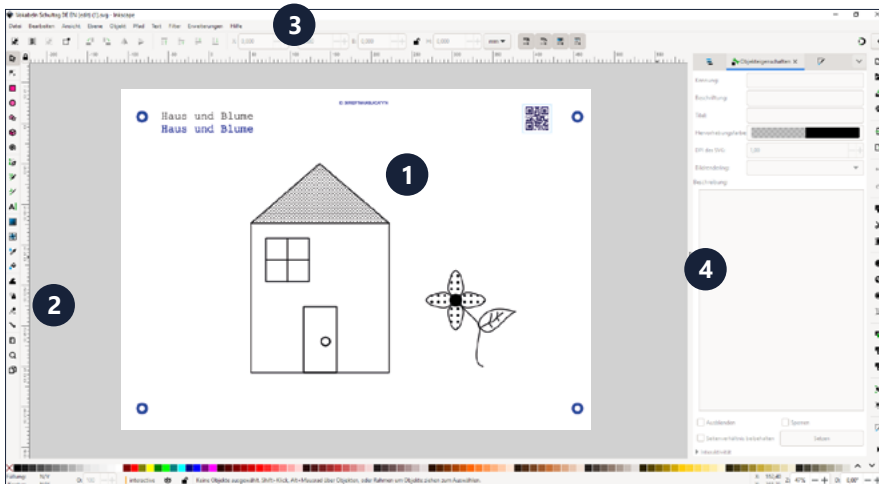
1 **Drawing Area**
place/create
your graphic here

2 **Toolbar**
create/edit paths,
shapes and texts

3 **Tool Settings**
for the selected tool

4 **Dialog Box**
objects/layers, fill/contour,
object properties, other

Tools

Select/edit/delete shapes, paths and nodes:

select and modify objects
[shortcut S]

edit the nodes or the handles of a path
[shortcut N]

Draw your own shapes and lines:

bézier curves and straight lines
[shortcut B]

freehand lines
[shortcut P]

Create shapes

rectangles and squares
[shortcut R]

circles, ellipses and arcs
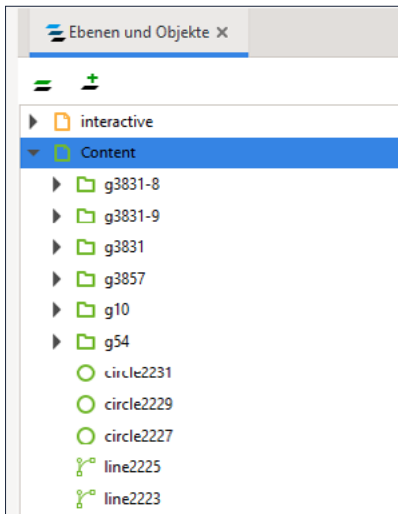[shortcut E]

stars and polygons
[shortcut numpad*]

Set texts:

create and edit text objects
[shortcut T]

The Dialogue Windows

Layers and Objects

Arrange the hierarchy of elements in lists:

In [layers and objects] the arrangement of individual graphic objects can be determined.

move and delete icons with the symbols at the end of the list

With [+] or [-] you can add or delete layers

with the eye symbol you can show and hide elements

with the lock symbol you can lock or unlock elements
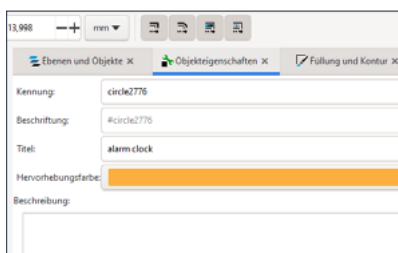

Fill and Contour

Fill: ■

Graphic elements should either be filled with the color black #000000ff □ or with any pattern. ▦

Interactive fields should have the transparent color value #00000001.

Pattern of the contour: ⇄

Determine the thickness of lines.

Object Properties

Determine titles and descriptions for the interactive fields and set the input by clicking on „Set".
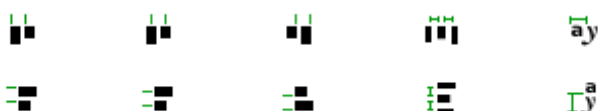

Title:

Choose a meaningful title.

Description:

You can add further information here as concise text.

Align and Distribute

With this tool you can align graphic elements accurately and distribute them evenly distribute them.

in menu [object/align and distribute].

Checklist

Have I forgotten important settings? Is my graphic user-friendly?

Filling and contour

☐ Fillings as well as contours of all graphic elements have the color value black #000000ff.
   Only black elements can be processed during threshold printing.

☐ Black font, ID and QR code do not have the color value black.

☐ Fillings of interactive fields have the transparent color value #00000001.

☐ Contours of interactive fields are removed ✖ or transparent #00000001.

Sizes and Distances

☐ Lines/contours should be at least 0.4 mm thick.

☐ Graphic elements can be grasped with a fingertip.

☐ Interactive fields are at least 10 mm² in size.

☐ The 4 round markers are visible and not hidden.

Objects

☐ In the object list all interactive fields are arranged above the graphic elements.
   They are at the top of the object list.
   Make sure that no interactive element is covered by another.

Contents

☐ The content of the graphic is concise and meaningful.
   There are no graphic elements that are irrelevant to the context.

☐ The recommended license (CC-BY-4.0) or alternatives are indicated.

☐ Source citation, if available [file/document settings/metadata/source]

☐ Introductory description text available [file/document settings/metadata/description]

☐ In order for blind user to be able to handle the graphic independently, they need an introductory explanation.
   The following questions can help:

   What is being depicted? What is the purpose of the graphic? What is the type of representation?
   What is the structure of the graphic? Which elements are shown? Where is the entry point of the graphic, if ther is any?

Print

☐ Ink font, ID and QR code are not printed in black.

☐ The graphic should be printed without margins, at a scale of 100%,
   so that it does not result in a reduction in size.

Example: House and Flower

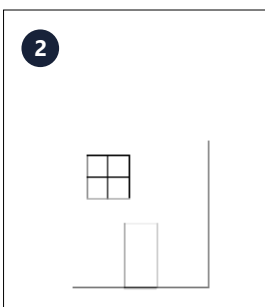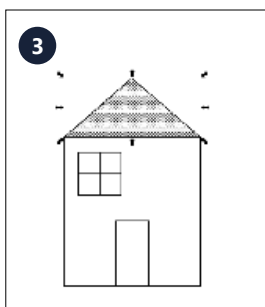Use this example to get to know basic Inkscape features.
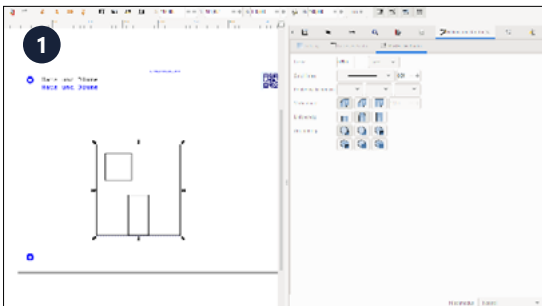
1 **Create rectangles** 🟥

- Create wall, window, door with rectangle tool.
- Select contour 0.8 mm and color black #000000ff
  [object/fill and contour].
- Select objects directly to change position or size in the bar above
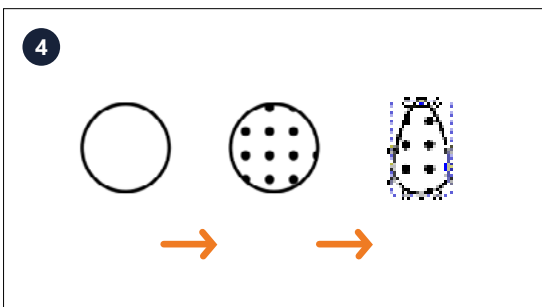 or change size.

2 **Create straight lines**

- Create lines for window cross
  with Bézier curve tool.
- Duplicate and rotate with pressed
  [Ctrl] key to rotate by 90°.
- Center lines in window.

3 **Create polygons, set pattern**

- Create roof triangle
  with polygon tool.
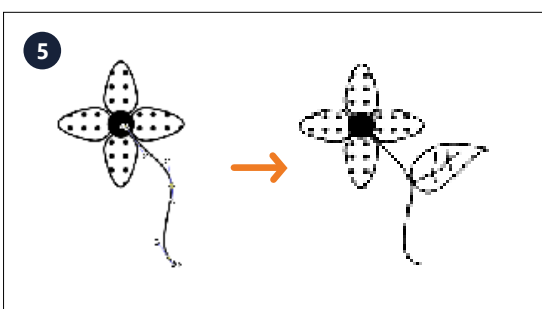- Use [fill and contour]
  to choose a pattern.

4 **Adjust paths, duplicate/mirror objects**

- Create circle for petals with pressed [Ctrl] key.
- in menu bar: [Convert path/objects to path]
- Fill shape with pattern, duplicate
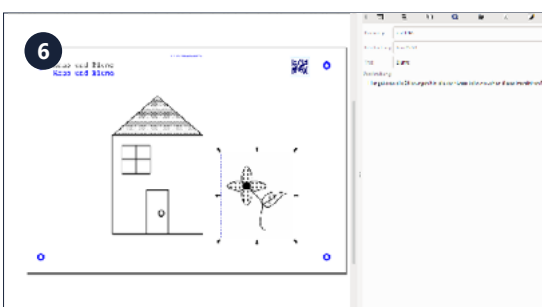 [Strg + C, Strg + Alt + V] and mirror [H].

5 **Freehand drawing**

- Draw lines for flower stems with freehand tool
- Select points of the path directly and adjust position

6 **Add information for voice output**

- Draw rectangle over graphic element.
- Select transparent filling #000001 🟦 Remove contour ✕ .
- Insert text for speech output in [object properties].
- Confirm with „Set" Button.