



Taster Workshop Handout

Introduction to Risograph Printing



Overview

This handout was made to guide you into your first workshop with the risograph. Here's what you can expect to find:

- ◆ What is RISO?
- ◆ How does the risograph work?
- ◆ Layers & Ink
- ◆ A step-by-step guidance on how to create your first analogue riso print.
- ◆ Do's & Don'ts of Riso printing

Riso History

What is RISO?

RISO is the name of both a printer and ink company founded by Noboru Hayama in post-war Japan, in 1964. The name RISO means 'ideal' in Japanese, a poetic name that Hayama chose as he found it important that people should not lose their ideals in this period of despair.

Before the Risograph became an artist's printmaking tool, it was a machine born out of necessity. Following the end of World War II, emulsion ink was only available in Japan through an expensive importing process that relied on unreliable trading channels.

This was a direct result of Japan's strategy to use high tariffs on American and European industrial products, thus limiting money spent on outside materials as a way to recover from their period of economic depression.

On a quest to bring a cheaper alternative to the market, Noboru Hayama devised "Riso," a soy-based ink, ideal for high-quality colour printing at an affordable price.

In 1986, it revolutionised short-run prints for places like schools, churches, and businesses; for anyone looking to print duplicates between 50 to 10.000 copies, the Risograph



Noboru Hayama - 1952

became their answer. But as technology developed and coloured ink jet printing became cheaper, the need for a Risograph in the workspace plummeted.

However, in recent years its use as an artist tool has substantially increased, mainly because of the opportunities it gives for self-publishing as well as the vibrant colours this machine is known for.

<https://www.riso.co.jp/english/company/history/sidestory.html>

The Risograph

Get to know the machine!

Before we start printing, let's get to know the machine and printing vocabulary.

A. Paper Tray: This is where you place your stack of paper and rollers will feed it to the machine.

B. Scanner/USB: You can send your file either through the powerful scanner bed or the usb cable.

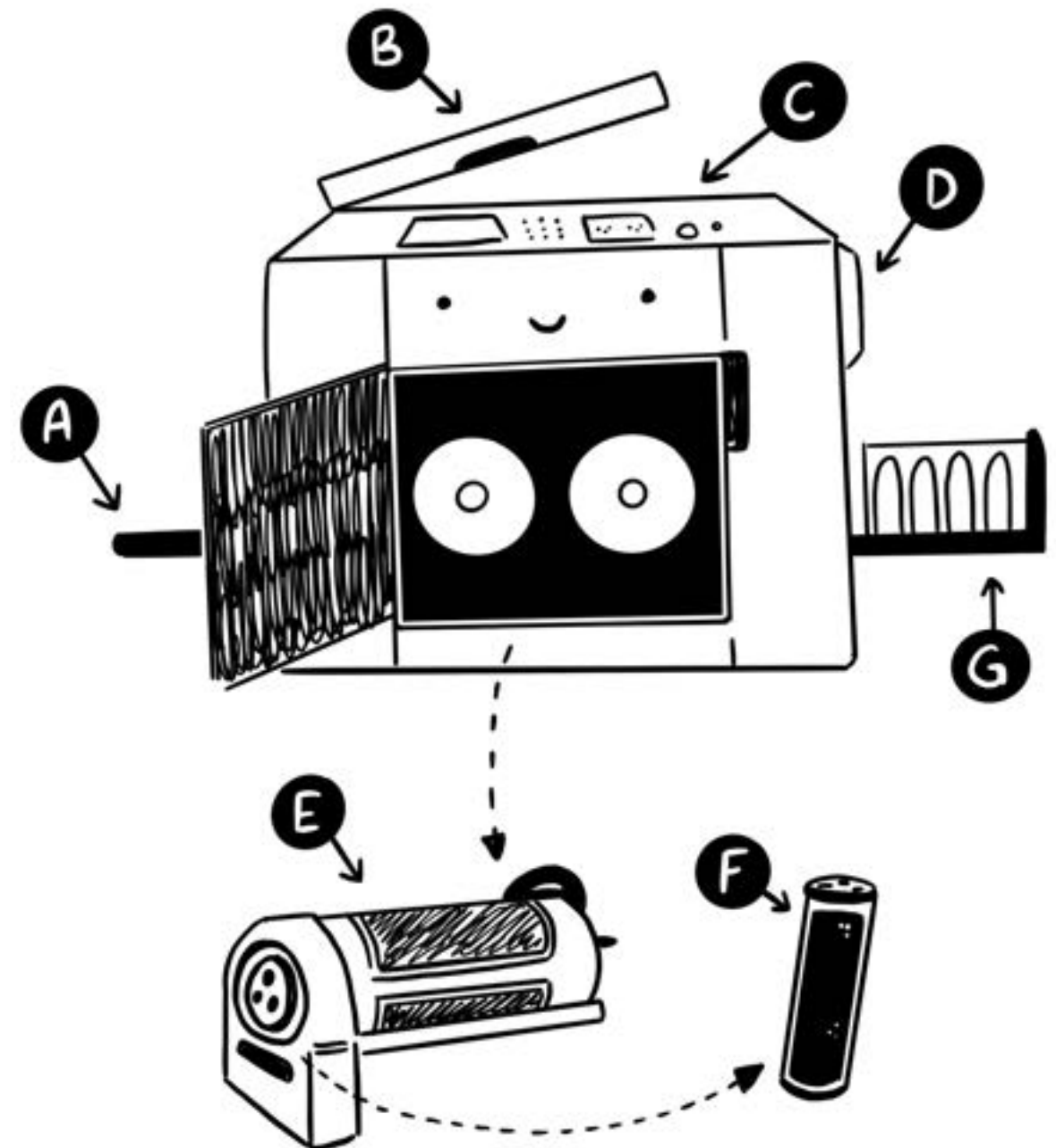
C. Control Panel: Here's where you talk to the printer. You can: make a master; start & stop printing; move the drums and more. *Before pressing anything, always have a member of the studio with you!*

D. Master Making Unit: Here you can find the master roll. Every time we send in a design, the machine 'burns' a stencil, before wrapping it around the drum.

E. Drums: A key element of the machine! A physical piece you put in and take out manually. Each drum has its own colour.

F. Ink Cartridge: This cylindrical tube hold the ink and sits inside the drum. This is the piece that gets replaced when ink is running low.

G. Delivery Tray: The best part! Where your paper will land after flying out of the machine.





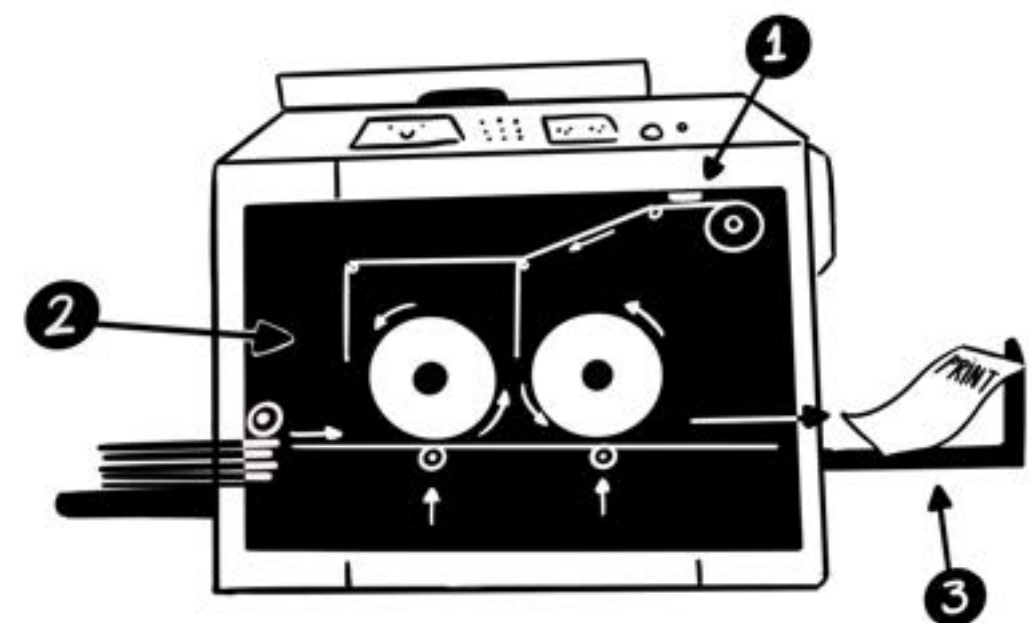
How it works?

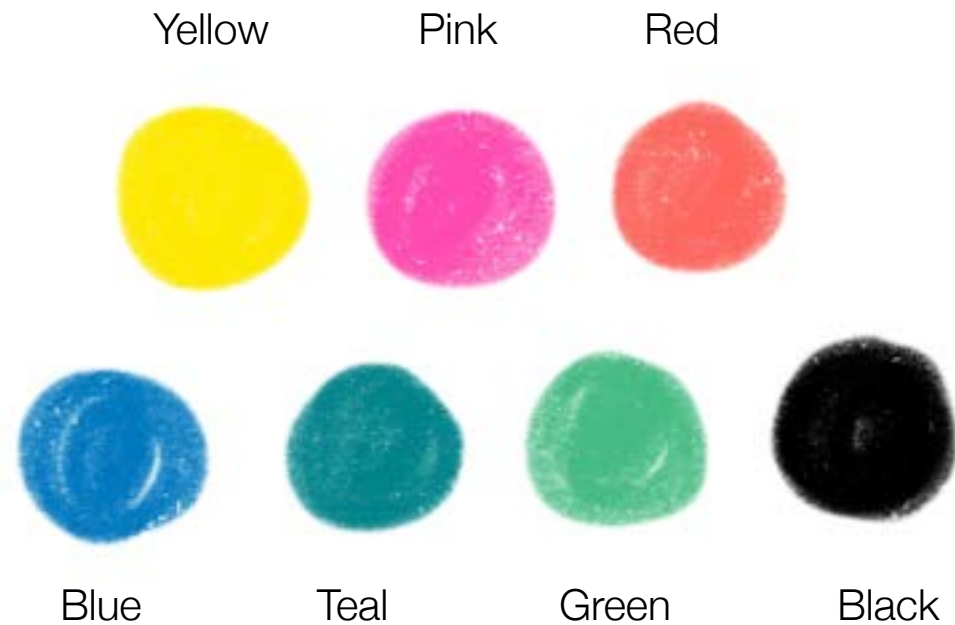
1. When you scan or upload an image to the machine, it first makes a 'paper stencil' and wraps this around the ink drum. These are called **Masters**. Our machine has two ink drums, so it can make two masters.

It's important to note that every time we make a new master, the old one is lost forever.

2. Paper is placed on the 'feeder' where the machine rolls in the paper and adjusts the pressure depending on the weight of the paper.

3. Paper is pressed and passed through one or both of the ink drums before it comes out to the delivery tray.





Layers & Ink

When printing with Riso we actually work with greyscale files. You can think about the machine being “colour blind” so what it reads is tonal values of black and white.

This means:

100% black = 100% colour of your choice.

At Riso Pop we have 7 colours, from which you will be choosing 2. These inks can also be mixed into new colours when layered on top of each other creating a third colour.



Get ready!

Working on
your design!

Materials List

What you'll need...

For this workshop you will need:

- A4 size paper
- Drawing Materials and/or Collage
- A Scanner
- A Lightbox or a window.

There are many fun options on materials for analogue printing with riso! Some of my personal favourites are: markers, ink, graphite pencils & crayons.

Pro Tip: Textures work extremely well with the risograph, so have fun experimenting!



Step-by-step

Step 1: Sketch out your design.

Tip: Remember you can split your A4 into parts if you want to make multiple designs!

Step 2: Split your image into 2 layers by tracing your original design with a Lightbox or a window.

Tip: You can use markers or coloured pencils to test out first what areas you want in which colour.

Remember, each layer is meant for one colour only.

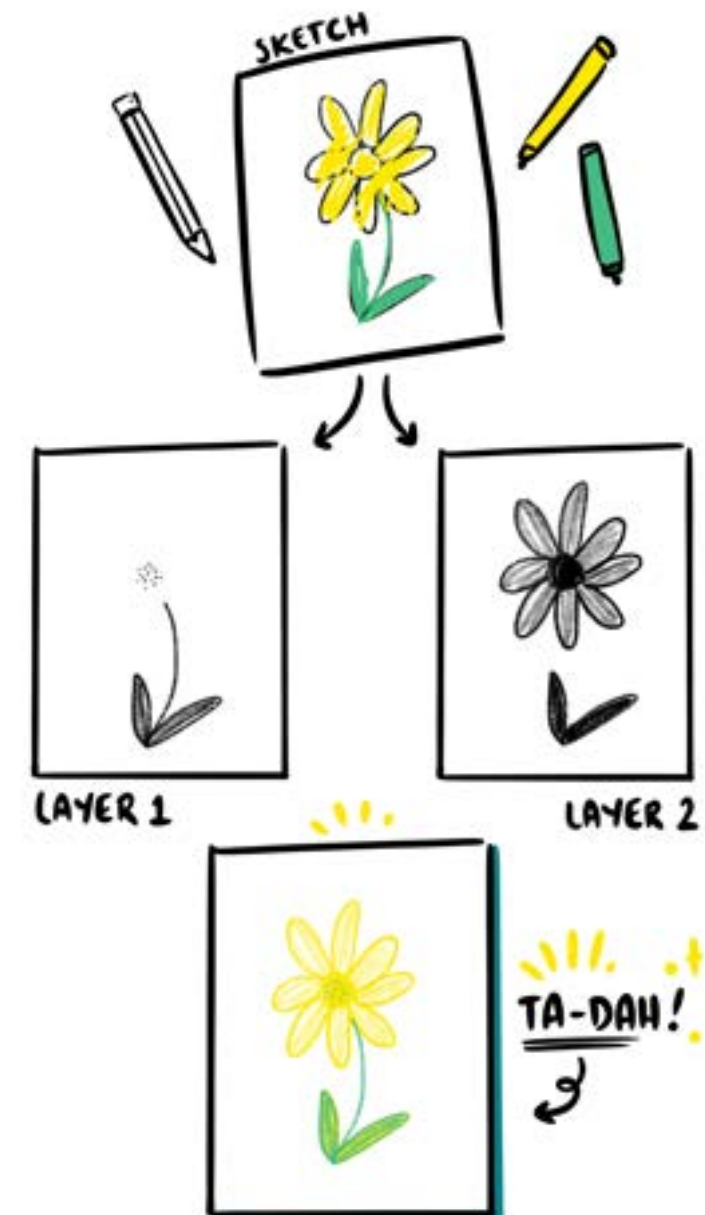
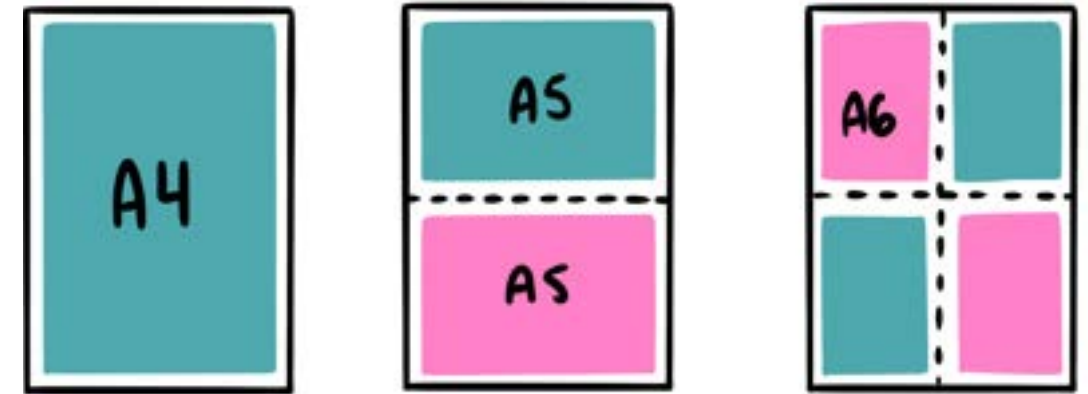
Step 3: You should now have two layers completed, preferably in greyscale. Scan them in and send them per e-mail to hello@risopop.com

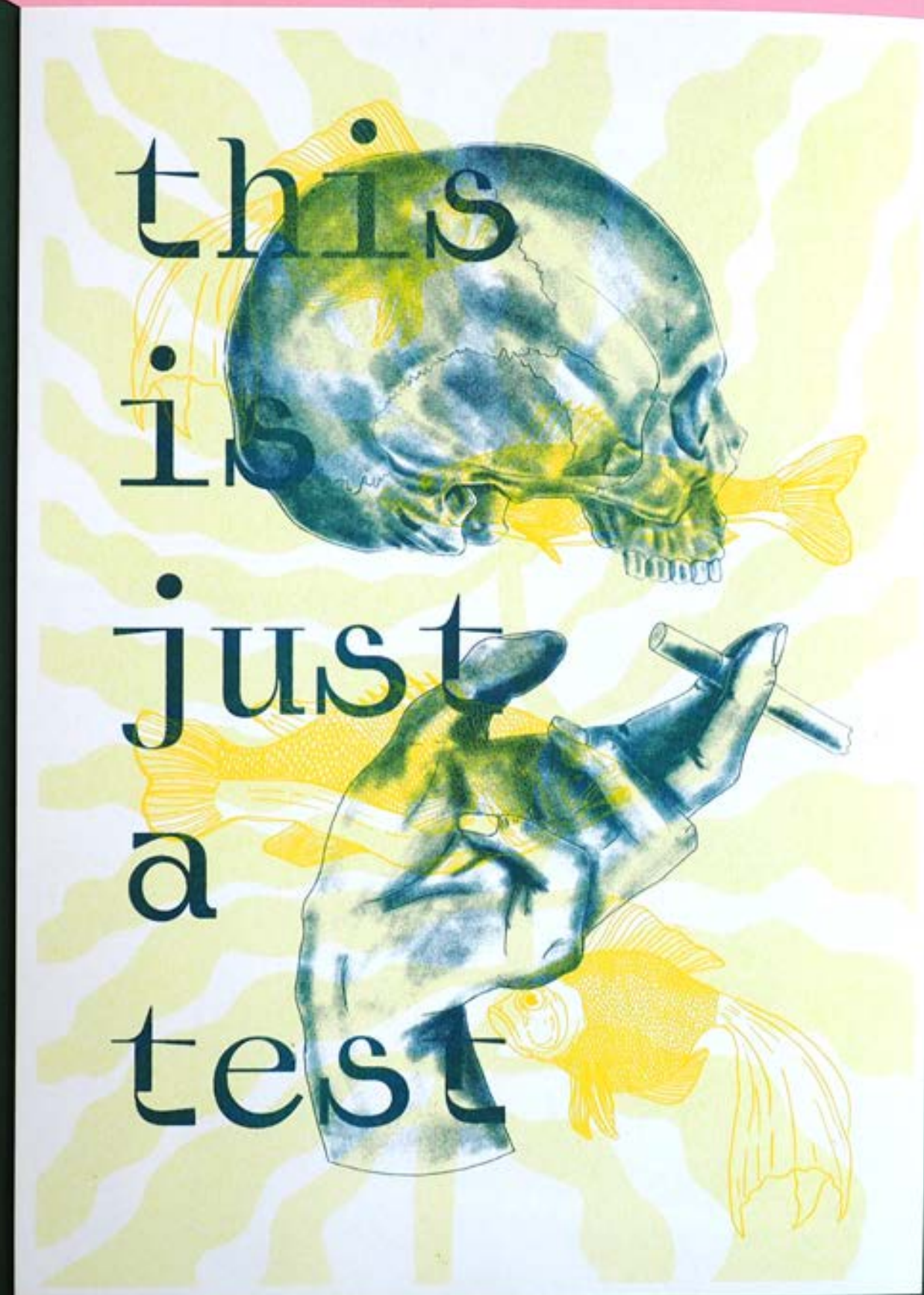
(or if living in the EU you can send them by post - please keep in mind post delays!)

iPad Users

For those using a drawing application in an iPad, you can follow the steps above by creating an A4 canvas and working with layers.

Please send your final two layers as separate files.





Riso Do's & Don'ts

Do...

- ◆ Do remember that the machine is colour blind; so work in greyscale!
- ◆ Do use black! Don't be scared, especially with bright colours such as yellow. Black will translate to the most saturated version of your chosen colour.
- ◆ If you want to have a large area of one colour, use a lighter grey or a pattern. *
- ◆ Do try overlapping colours to create new ones!
- ◆ Do try experimenting with textures.
- ◆ Do use the whole A4 to your advantage!
- ◆ Do remember you will take 15 prints home! So think about what you'd like to have 15 copies of.

Don't...

- ◆ * Don't make large areas of just one colour pure black. This can result in ink overload and the paper getting stuck on the machine.
- ◆ Don't expect perfect results. Riso printing is not an exact technique. Misregistration is normal.
- ◆ Don't work too close to the edge! The printer cannot print full bleed.
- ◆ Don't be scared of asking "silly questions" if you are doubting about your design or anything riso related! I'm here to help you :)





I hope you have lots of fun making your 1st riso print!

This workshop is for you to learn, so if you have any questions, just get in touch or share them during our live printing session!

- Aafke