



INTRODUCTION TO PROCREATE

 Makerspace Sessions



SESSION PLAN

What is Procreate

Procreate Tools

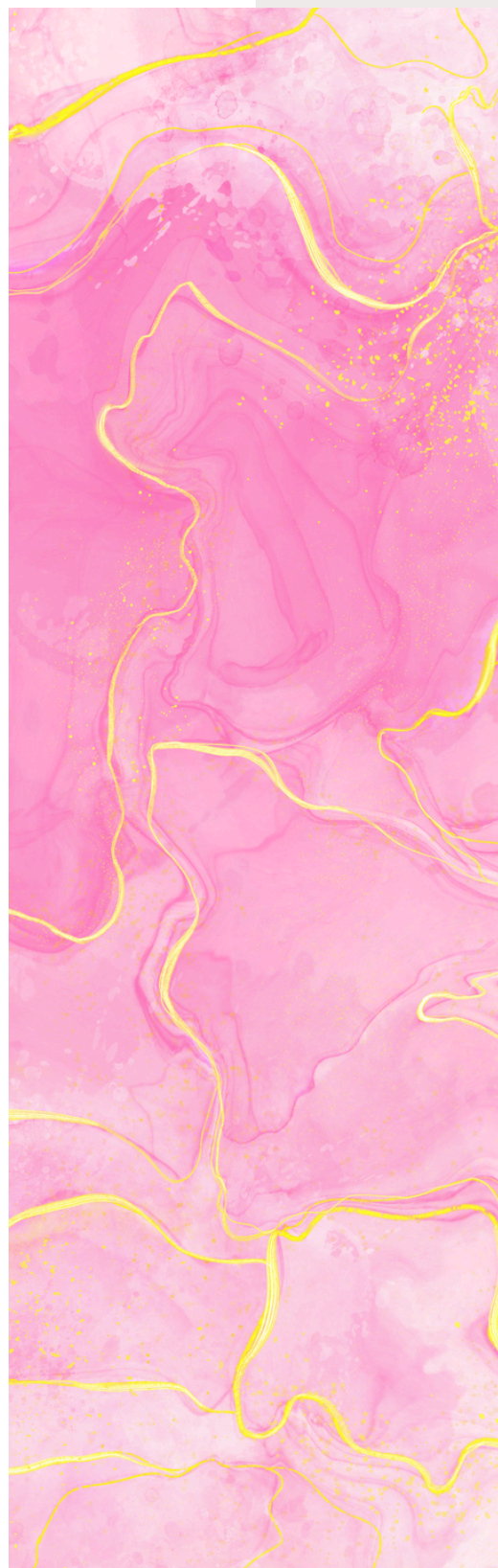
Before we Begin

Tutorial

- Sun and Moon ★☆☆
- Cat ★★☆☆
- Robot ★★★☆☆
- Meiki ★★★★★

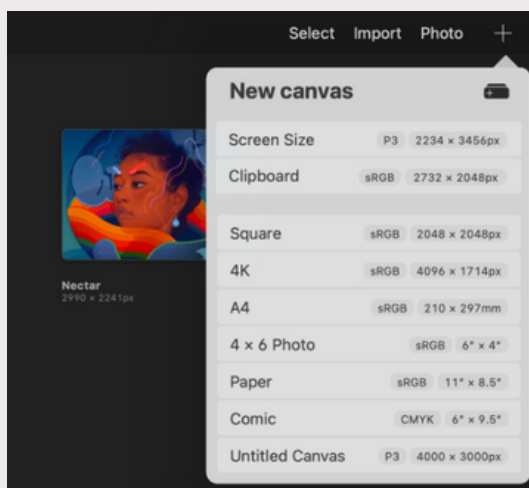
Other Programs

Further Information



WHAT IS PROCREATE

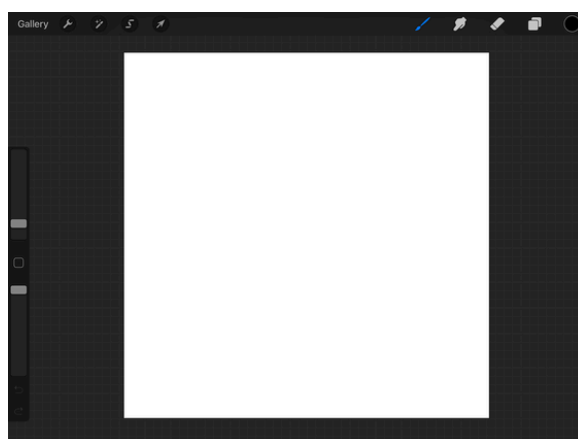
Procreate is a digital painting and illustration program available on iPads.



Pressing the + button in the top right corner will show a list of preset canvas sizes to choose from when starting a new illustration.



The Canvas



This is how it will look when opening a new canvas in Procreate. The canvas can be altered to specific sizes and resolution you designate.

This space can be navigated using a mix of gestures with two fingers:



Pinch to zoom in and out of the canvas.

Rotate your fingers to rotate the canvas.

Move both fingers to pan across the canvas.

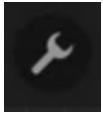
PROCREATE TOOLS

The primary tools in Procreate are found along the top bar of the screen. The function of each element is listed below.

Gallery

GALLERY BUTTON

Saves the current artwork and brings you back to the list of all artworks.

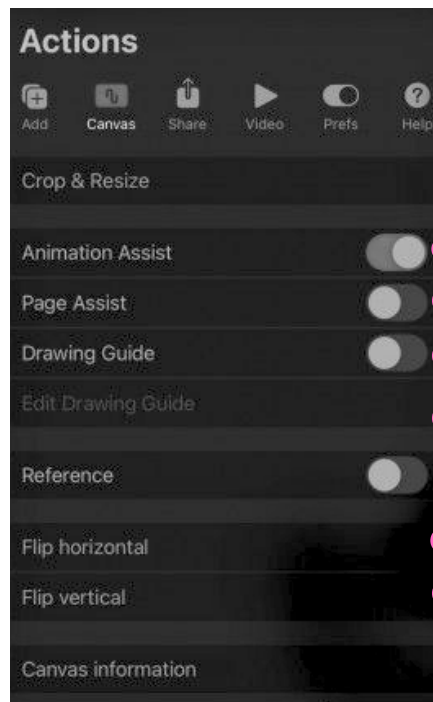


ACTION TOOL

Opens a set of tabs relating to general customization of the canvas and workspace, as well as options regarding importing and exporting.

There are two main tabs that'll assist with drawing:

Canvas allows you to make broad adjustments to your artwork.



Allows for the canvas to be resized

Treats layers as frames for animation

Treats layers as sequential pages

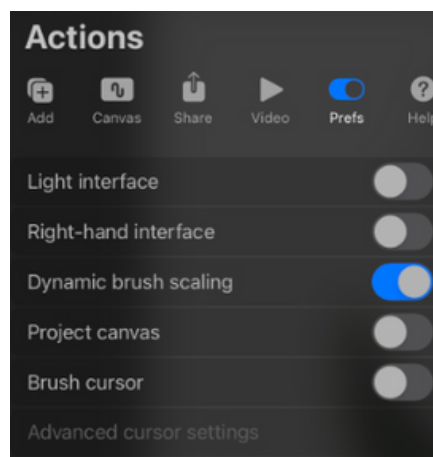
Toggles a grid overlay to help with drawing

Allows for the grid overlay to be customized

Flips the canvas horizontally

Flips the canvas vertically

Prefs allows you to manage the workspace preferences to maximize comfort.

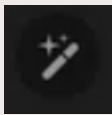


Toggles light mode interface

Switches what side of the screen the sliders are

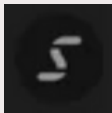
Changes the way the brush size behaves when you zoom in on the canvas

Toggles for the pen to have a visible cursor when drawing



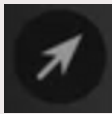
ADJUSTMENTS TOOL

Opens a list of adjustment options and visual effects which can be applied to the artwork.



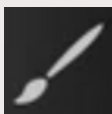
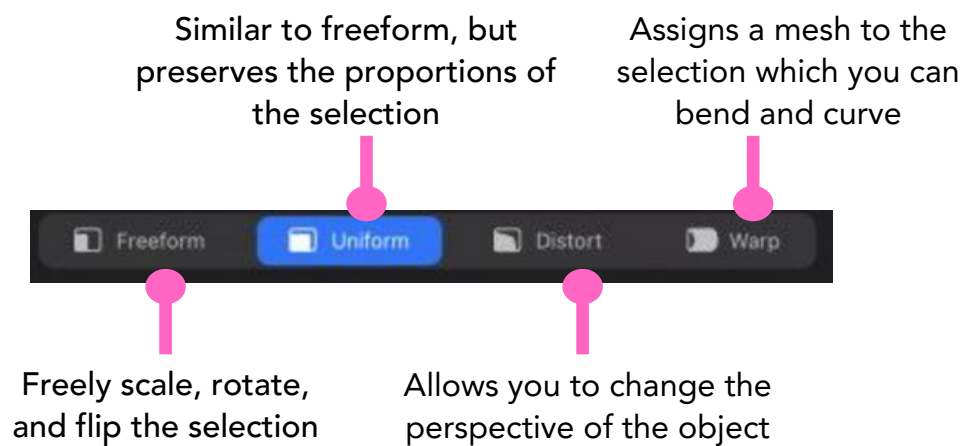
SELECTIONS TOOL

Allows for you to choose from a variety of selection modes (Automatic, Freehand, Rectangle, and Ellipse) to isolate parts of your artwork to be subject to change. To deselect the area, simply press the selections button again.



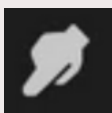
TRANSFORM TOOL

Allows you to manipulate the selected part of the artwork (if no selection is chosen, the entirety of the current layer is considered) through several different modes.



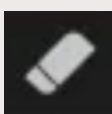
BRUSH TOOL

When selected, you're able to draw on the canvas using the apple pencil. Tapping the brush tool again will open a menu, allowing you to choose from hundreds of brushes that look and behave different.



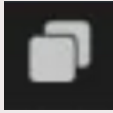
SMUDGE TOOL

Allows you to smudge and blend colours on the canvas using the apple pencil.



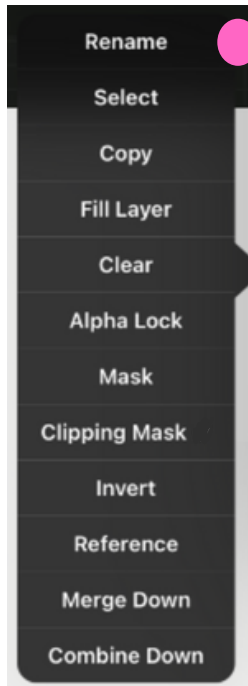
ERASER TOOL

Allows you to erase the contents of the canvas using the apple pencil.

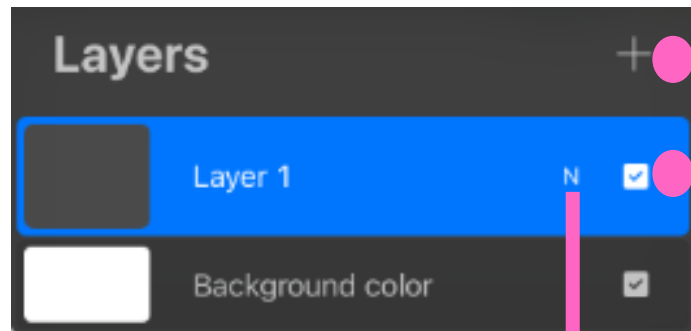


LAYERS TOOL

Opens a window which lets you view, modify, create, and delete layers. Layers allow you to create overlapping content while preserving work you've already done. The layer which is currently selected (highlighted blue) is where all your drawing takes place.



The menu above will open when tapping a selected layer. Some applications will be explored further in this booklet

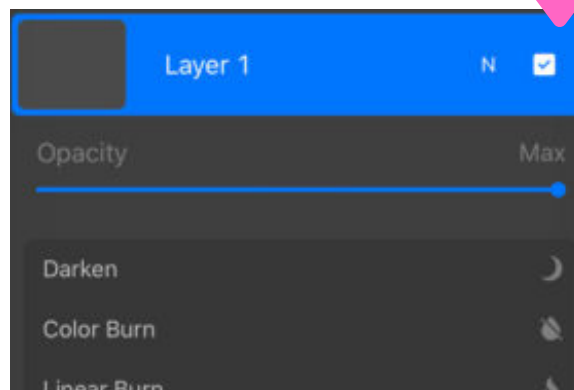


Adds a Layer

Toggles Layer visibility

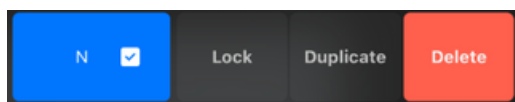
Tapping the N will open a menu that lets you change the opacity. It will also open a list of "Blend Modes".

These affect how the colour on the selected layer interacts with layers below that one



A list of Blend Modes to experiment with:

- Multiply - Good for shadows
- Add - Good for bright highlights
- Overlay - Good for increasing vibrancy

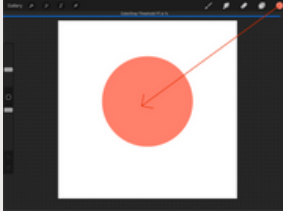


Swiping left on the selected layer will allow you to lock it, duplicate it, or delete it.



Colour Tool

Found in the top right, the colour tool allows you to change the colour you're painting with. The appearance of the tool reflects the colour currently selected.



You can use it to fill an area by dragging the circle of colour to the area you'd like to fill. By default, the colour will spread until it hits a boundary on that layer (Such as an enclosed line, or a different colour).

If you wish to refer to a different layer for the boundary of the colour fill (usually where your lines are drawn), open the menu for the desired boundary layer by tapping it and select "Reference".

If you need to adjust the amount of 'strength' the colour fill has, drag the colour to where you want to fill and don't release it. A small blue bar labelled "Threshold" will appear where you can swipe left and right to adjust the percentage.

Side Tools



This slider adjusts the brush size. Different brushes will have different maximum and minimum sizes

Tapping this will activate an eye dropper tool that allows you to pick any colour on the canvas. Alternatively, you can activate the tool by pressing and holding with your finger on the canvas

This slider adjusts the opacity of the brush

Undoes the previous action.

Alternatively, you can tap the canvas with two fingers

Redoes the last undo.

Alternatively, you can tap the canvas with three fingers

BEFORE WE BEGIN

How long can I use Procreate for?

In our Makerspaces we have a time limit of 1 hour sessions using Procreate. During this time you can play around, create an artwork, learn how to use it, or follow along with our self-led session with the session booklet provided.

What do I need?

You only need to bring yourself and a library card. To use the iPads for Procreate you must be over 12 years old and be a member of the library in order to loan the Apple Pencils we keep at the desk. We do not allow outside pens to be used on the iPads. If you would like to save your work, you will require a USB or Email and advise our friendly staff.

Can I import a design and work on it in Procreate?

Yes. Procreate can import file with PSD, JPEG, PNG, TIFF, GIF, PDF, MP4, HEVC, OBJ, and USDZ file formats. We recommend using a high-resolution image. Procreate does not have a scanning function so you will have to have your files already with you on USB. Alternatively, the tablet can take photographs, however we do not guarantee your work will remain on the device or unaltered by another if not removed.

Can I save my work?

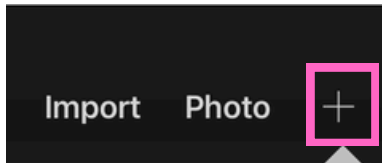
Yes! The artwork will save automatically to the iPad you're using when you press the button in the top left corner that says "Gallery". If you want to take your artwork home, you can go to the Makerspace Officer at the desk and ask for help - we can help you save your work to a USB or send to your email! From there, you can head over to the public PCs to print it as well! Please note that no saved work on the iPads will remain after your session as the iPads are periodically wiped. TO avoid disappointment please save your work to a personal device.

To Begin

Follow the 'Getting Started' tips then when you're ready choose from one of the tutorials in the following pages or start creating your own design.

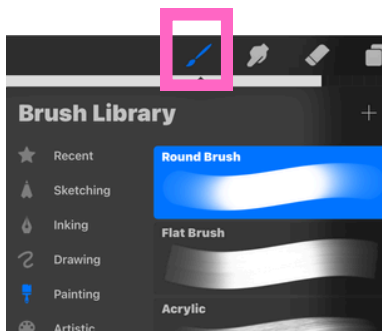
GETTING STARTED

Opening a New Canvas



Let's start creating! Open Procreate by tapping on the icon. This will open the Procreate menu, or "Gallery", you will see pieces done by other users as well as a bar along the top of the screen. In the top right corner is a little plus + button. Press that to open a new canvas. Here you can make changes to the overall size or choose a preset. For now we will just select the current size.

Brushes and Pressure



On your new canvas you can use the Apple Pencil to draw! If you tap the paintbrush icon you will see a list of other brushes. Select a different brush and see what it does!

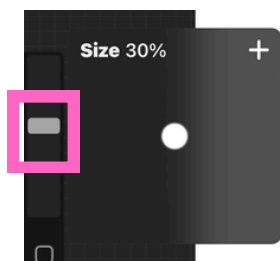
NOTE: the Apple Pencil has pressure sensitivity! You can make thin or thick lines depending on how hard you press - but make sure not to press too hard! iPads are breakable!

Colouring



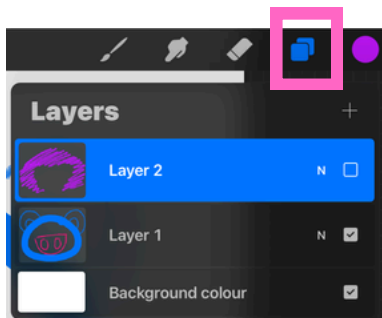
The colour circle in the top right corner can change the colour. Tap on it and change your brush colour.

Erasing



If you tap the eraser icon you can erase any line on your canvas. You can also drag the slider on the left side to change the size of your brush or eraser if it's too big or too small.

Layers



Layers are important in digital art because they allow us to change different aspects of our work without changing other parts. In the tutorial section, you'll see how to use layers in your own pieces. Here I have coloured in Meiki's head on a different layer, so when I make the layer invisible, the colour disappears!



PROCREATE TUTORIALS

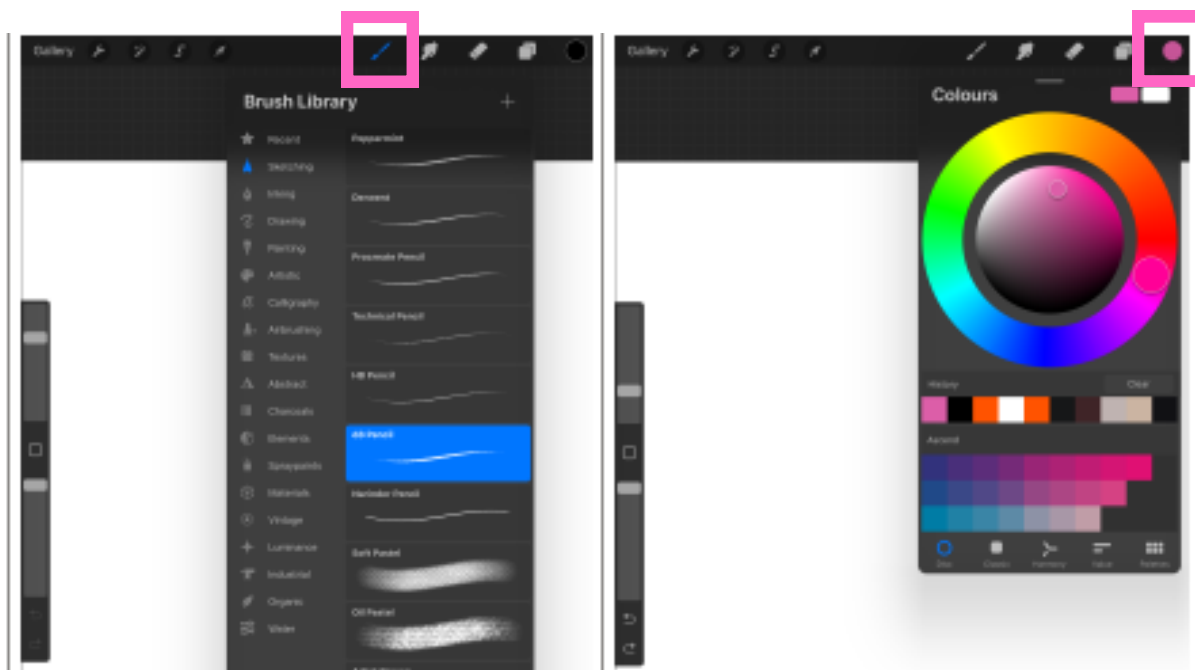


SUN AND MOON



Directions

- 1 To start, change the brush to a sketching pencil. Any of these pencil brushes are okay. You can change the colour of your brush to something that's easy for you to look at, or just a colour you like! We'll start first with a rough sketch of the piece. After we finish the sketch, we can work on the line art (clean lines) and the colouring.

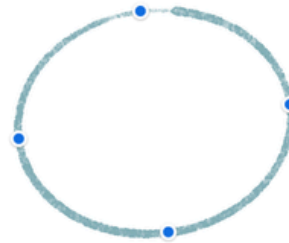


Tip: if you ever need to go back after making a mistake you can tap the screen with two fingers at the same time. The previous action will be undone like magic! Alternatively you could press the back/forward buttons on the left side of the screen. Other gestures can be found at the back of the booklet in the "Gesture Reference Guide" section.

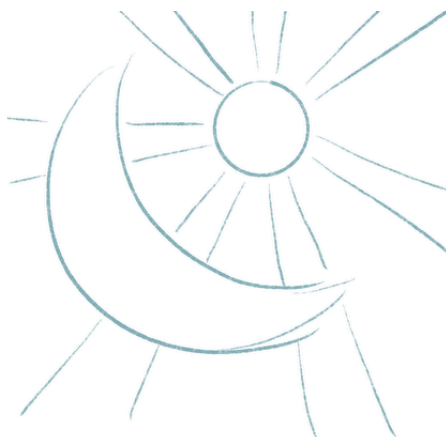
- 2 Start by drawing a large crescent shape. It doesn't need to be perfect - we'll clean it up later.



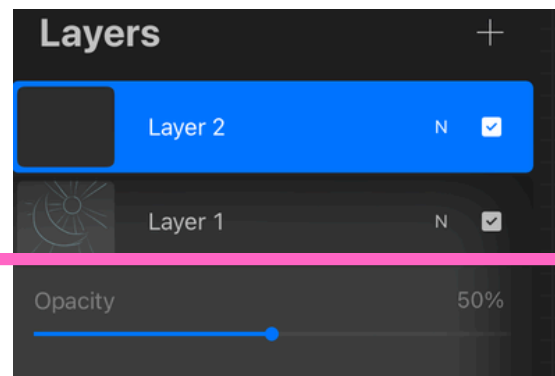
- 3 Next draw a circle for the sun. If you draw a circle then hold the pencil in place without picking it up, the shape will snap to an "ellipse". From here you can edit it to be more round and circular.



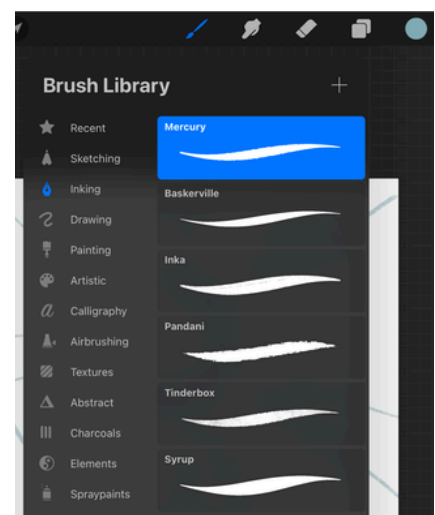
- 4 Add some long lines radiating outwards from the circle - these are the sun's rays.



- 5 Add a new layer on top of the sketch layer. You can change the opacity of the sketch layer by tapping on it and moving the opacity slider to 50%.



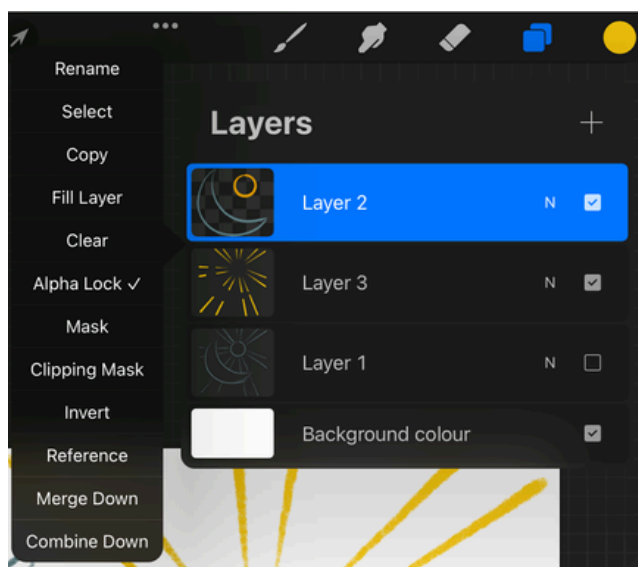
- 6 On the new layer above the sketch, change your brush to one of the inking brushes and start drawing over the lines of the sketch. We want to make these lines cleaner and nice.



- 7 Keep going over the sketch until the clean lines are complete. To make the rays of light more straight you can add another layer to draw them on, then erase the lines that overlap with the moon. You can make the sketch invisible by tapping the check box next to it.



- 8 If you don't like the colour of the lineart that you've done, you can easily change this by opening the layers tab, tapping on the lineart layer, then selecting "alpha lock". This will make it so you can only affect what's already on this layer - you can draw all over the canvas, but it will only show up over the lineart.



- 9 Make a new layer on top of the sketch layer (under the lineart layers). On this new layer, you can start colouring the image. To make it easier to colour that background, you can do the same thing as before with the rays - add a new layer beneath the current layer.

Once the picture is fully coloured, you are finished! You can add whatever you want to make the work yours - maybe you want to add stars or sparkles, or maybe you could change the colours to make it more interesting? Go wild and have fun!



CAT



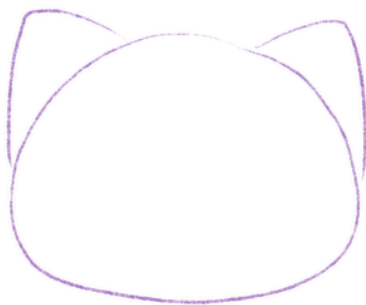
Directions



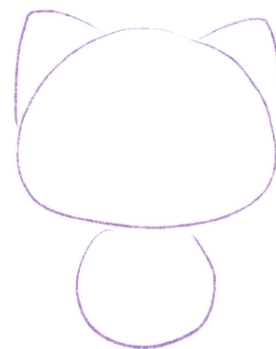
- 1 Start by drawing a round shape, kind of like a bean. This is the cat's head.



- 2 Draw two triangles on top of the head for the ears.



- 3 Add a circular shape below the head to make the body.



- 4 Over the body, draw two lines near the base to make the front legs. Add a little round shape at the bottom to make the paws. Draw two more lines closer to the centre to finish the front legs.



- 5 Add another set of round shapes on either side of the legs to make the back paws.



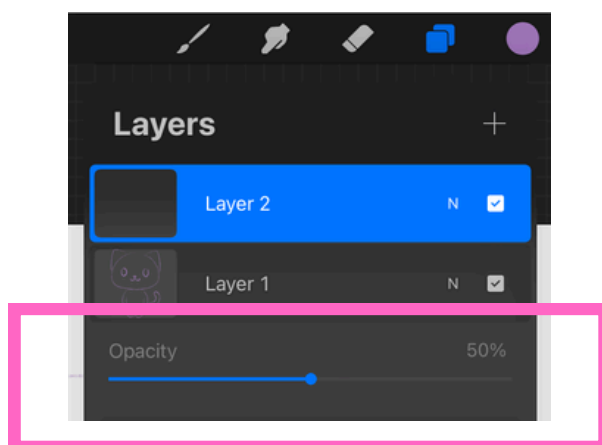
- 6 Draw the tail curling up from behind. It looks somewhat like a worm.



- 7 Give your cat a face! My cat has a simple expression, but you can make yours look like whatever you want.



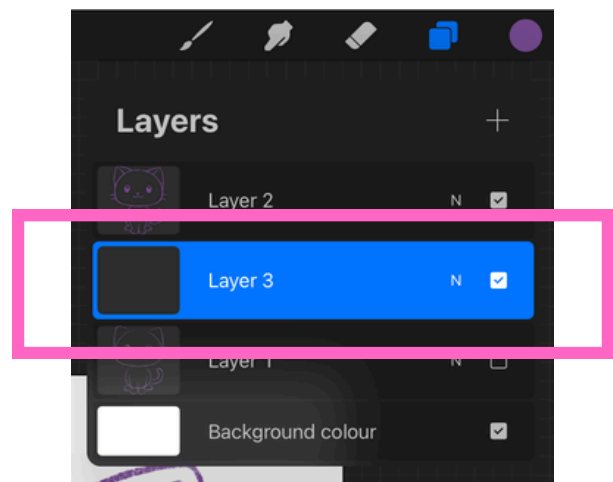
- 8 Open the layer tab and make a new layer on top of the current one. Change the opacity of the current layer by tapping on the layer and moving the opacity slider down. Around 50% is usually good. On the new layer you can go over the drawing with cleaner lines. This step is optional.



- 9 Make the sketch layer invisible by tapping the little checkbox next to the layer in the layer tab. You can also add some extra features to your cat here to make it more detailed.



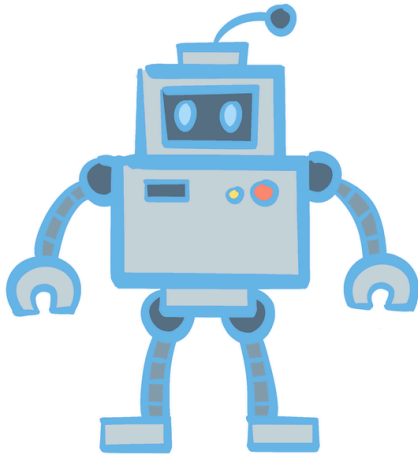
- 10 Make a new layer and drag it below the drawing. On this layer, colour your cat in!



- 12 Congratulations now you have completed the Cat tutorial!



ROBOT



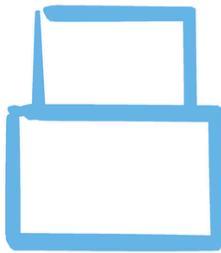
Directions

- 1 Draw a rectangular shape. The shape will snap to a quadrilateral which you can edit to your liking.

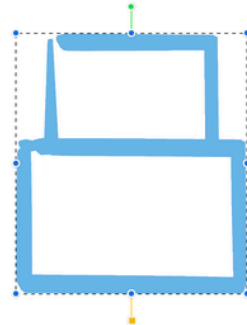


Tip: To make it have cleaner sides, you can hold the pen in place for a few moments after drawing the shape without picking the pen up.

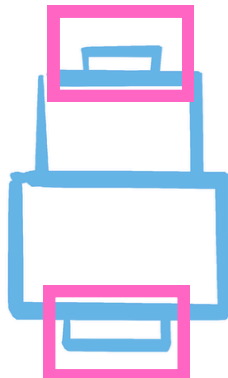
- 2 Draw another, slightly bigger rectangular shape below the first one. This is the robot's body.



- 3 If the drawing is too big, you can select everything with the select tool and scale it down.



- 4 Draw smaller rectangle shapes on the top and bottom of the robot.

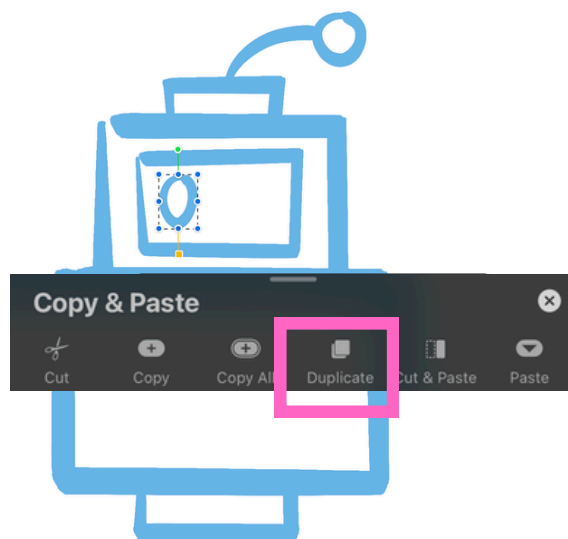


- 5 Draw another rectangular shape on the head. This is for the face.

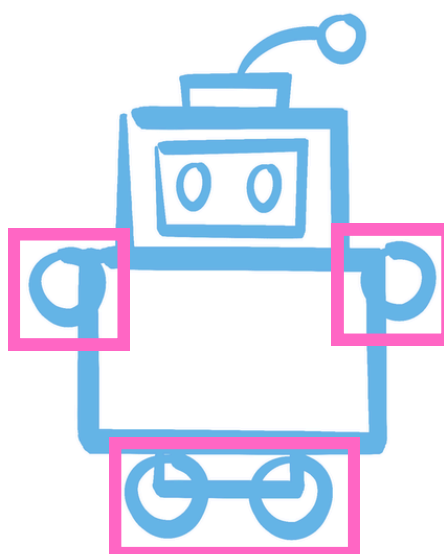


- 6 Add a round shape for an eye or you can just draw them freehand.

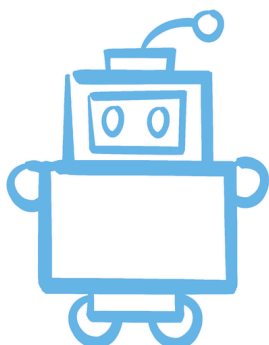
Tip: you can also copy the first eye by using the select tool to draw a selection around the first eye. Quickly drag downwards on the screen with three fingers to open the quick menu. Tap "duplicate", then move the other eye to the other side of the face. The other eye will be on a new layer "from selection". You can combine the layers or leave them as is.



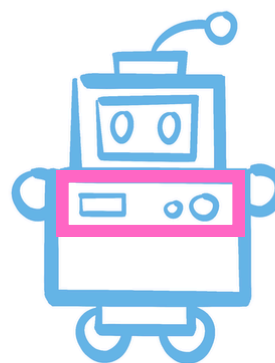
- 7 For the next step we will be using a new layer. Draw a circle on the bottom left side of the robot for the leg joint. Hold on the screen like you did for the rectangles to snap the shape to an "ellipse". You can change it to a circle and edit it to your liking. After this, add another one on the other side, plus two more on the top of the body for the shoulder joints.



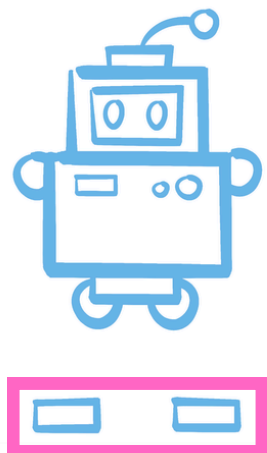
- 8 As these joints are on a different layer, you can easily erase the sections where they overlap with the body. Erase those overlapping areas then combine the layers into one.



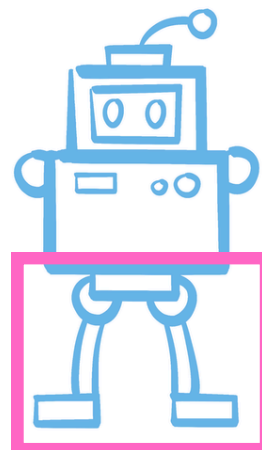
- 9 Next you can add some detail to the body of the robot. Some small circles and another small rectangle should suffice. You can add whatever you want!



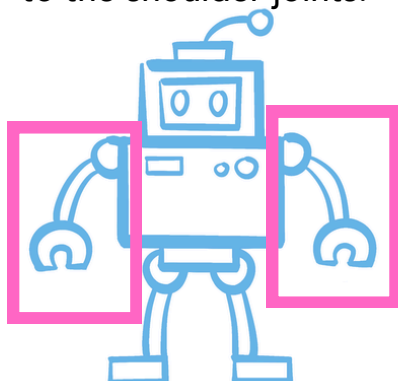
- 10 Now draw some more smaller rectangles at the bottom of the canvas for the feet.



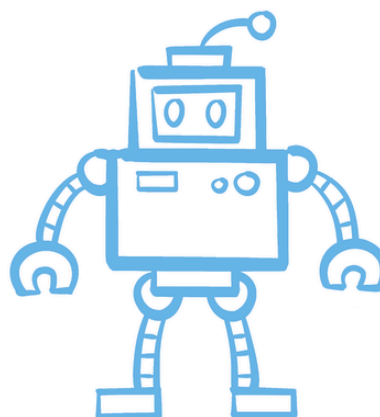
- 11 Join the feet to the leg joints with two lines. Mine are slightly curved to make them look a bit softer.



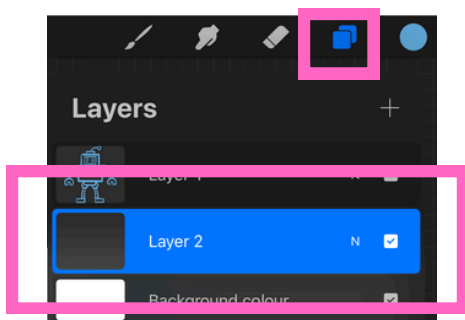
- 12 Draw two claw shapes or 'C's' for the hands first. After you've drawn the claw hands, add two curved lines to join the hands to the shoulder joints.



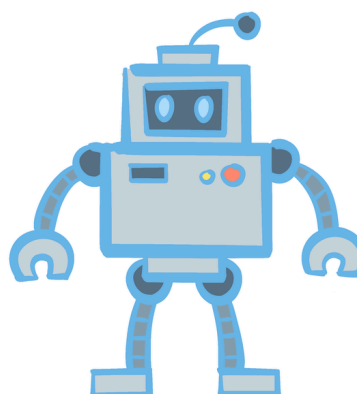
- 13 You can add some detail to the arms and legs by drawing straight lines across them.



- 14 Now make a new layer below the drawing for the colours and bring your robot to life!



- 15 Congratulations! You've completed the robot tutorial!

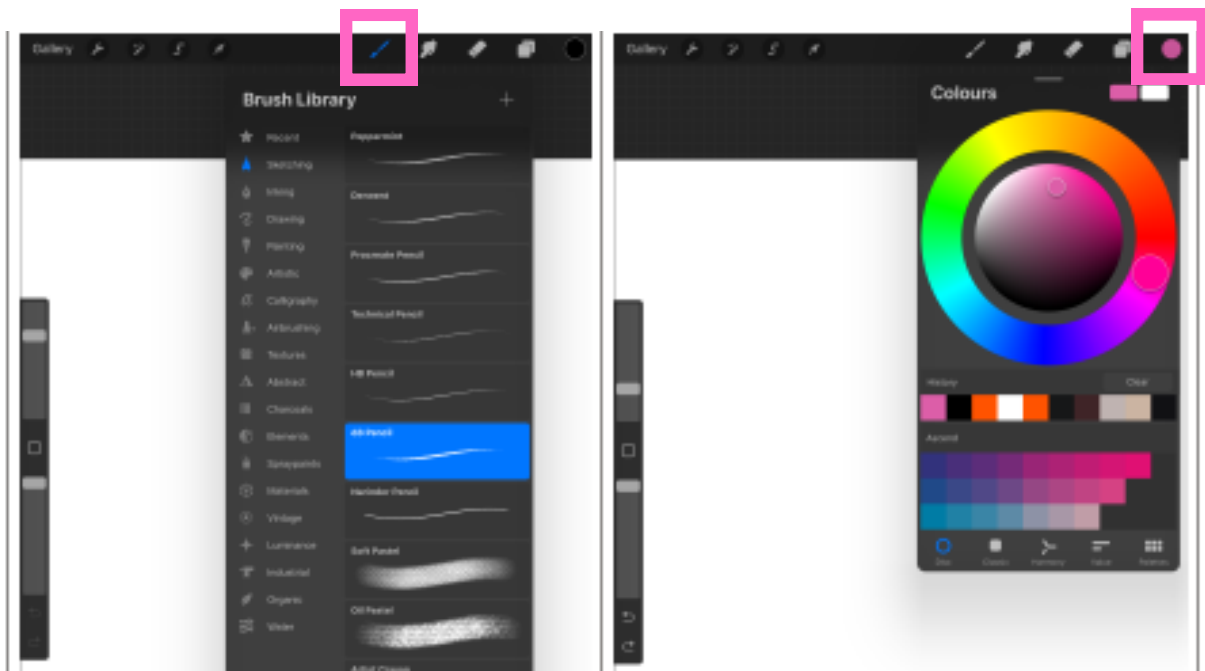


MEIKI



Directions

- 1 For this tutorial we'll be drawing a little picture of our Makerspace mascot Meiki! To start, change the brush to a sketching pencil. Any of these pencil brushes are okay. You can change the colour of your brush to something that's easy for you to look at, or just a colour you like! We'll start first with a rough sketch of the piece. After we finish the sketch, we can work on the lineart (clean lines) and the colouring.



Tip: if you ever need to go back after making a mistake you can tap the screen with two fingers at the same time. The previous action will be undone like magic! Alternatively you could press the back/forward buttons on the left side of the screen. Other gestures can be found at the back of the booklet in the "Gesture Reference Guide" section.

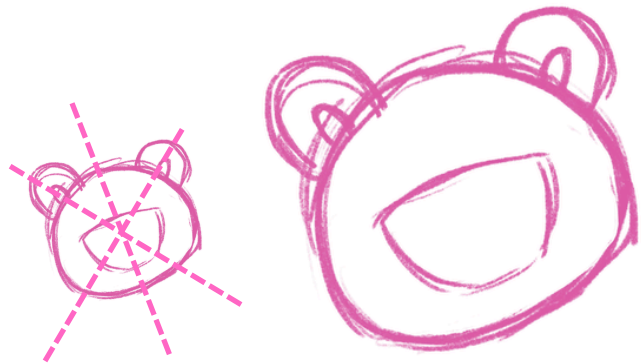
- 2 First, sketch out a round 'bun - like' shape for the head and a smaller round half circle like a teacup without a handle for the face. Remember that the sketch doesn't have to look pretty. This part only serves as the base for later.



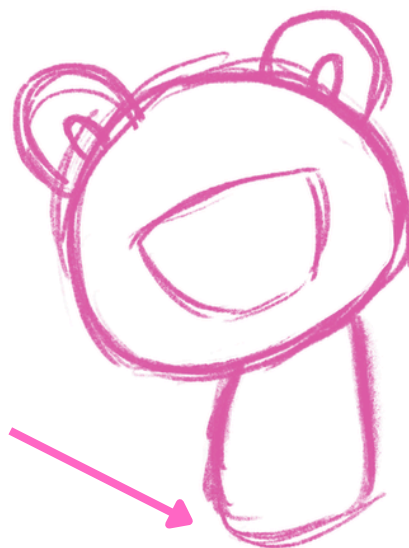
Tip: Draw your shapes on a slight angle and try to place the face in the low part of the head as this adds to the cutesy look of Meiki.

- 3 Draw some ears on top of the head. Meiki's ears are donut shaped!

Tip: To place the ears right mark the centre of the head with a line then imagine an X crossing on the top of the face along the centre line, roughly between the eyes. Mark the lines that touch the top of the head and draw the ears there.



- 4 Below the head, draw a cylinder shape connecting to the head.



Tip: Don't forget to round the base of the shape so that it doesn't look flat.

- 5 Now we're going to add the arms. Meiki's arms start with a circle shape at the shoulders, so draw those first. Then you can add two lines extending outwards to make the arms, as shown. Then for the hand draw a circular shape at the end of the arm.

Tip: You can draw a guide line for the direction you want the hand to go in, then draw your shapes in line with that.



- 6 Hands can be tricky, even for seasoned artists! It's okay to struggle with this part, especially if you've never drawn a hand before. To make it easier, we'll draw the pencil first so you have a reference for where the fingers should go, then we'll break the hand down into simple shapes.

Draw the pencil over the circle base of the hand. The tip of the pencil should be a bit thicker than the eraser end because it's closer to the viewer (us). To make it into simple shapes you can think of the tip like a triangle and the shaft like a thin rectangle.

Tip: You can draw a half circle at the bottom for the eraser to make it look more like a traditional pencil. You can also mark the shave line and pencil tip too.



- 7 You can think of the thumb as a smaller rectangle that goes from the side of the hand and slightly over the side of the pencil. Next is the fingers, which you can also think of as small rectangles. Draw them on the other side of the pencil, extended slightly off the pencil so it looks like they're wrapping around it. This drawing of Meiki only has three fingers, so you only need three rectangles. Now you've successfully drawn a hand!



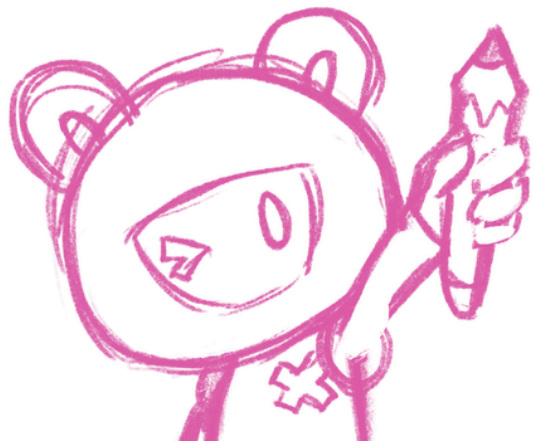
- 8 You'll notice that it looks kind of confusing with all of the lines in that small area. You can select the eraser tool and remove some of the excess lines from the circle we drew earlier for the hand. You can also erase the lines for the pencil that are under the fingers. Now it looks much cleaner!



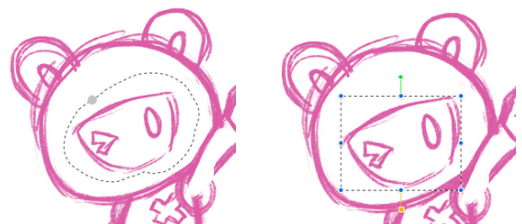
- 9 For the face you can draw whatever expression you like, or you can copy the one that's shown here.

To copy this draw the top part of an arrow on the left and an oval shape on the right.

Don't forget the little 'x' shape on Meiki's chest!

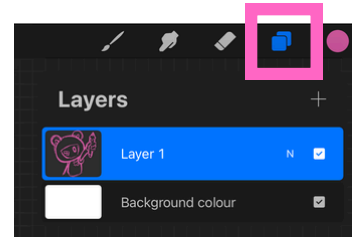


Tip: If you don't like where you've put something you can use the select tool to draw around the part you want to move, then tap the icon with the cursor on it to freely move the part around. Move it to where you want then tap somewhere else on the screen to deselect it.

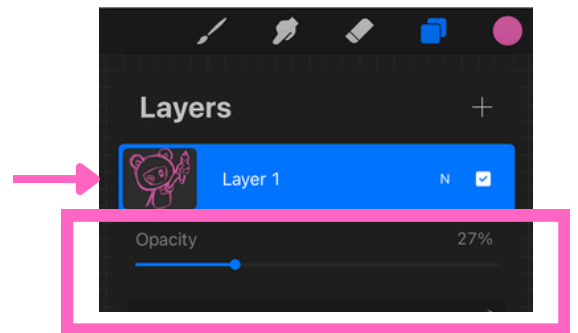


- 10 Now that we've drawn the parts of Meiki that will be visible, we need to work on the background and surroundings. You can draw the background sections on the same layer, though it is good practice to keep them separate. This makes it easier to delete an element you may not like without destroying the work you don't want touched.

Select the icon next to the colour circle that kind of looks like sticky notes. This is the layer tab. We use layers a lot in digital art, so it's good to get familiar with it!

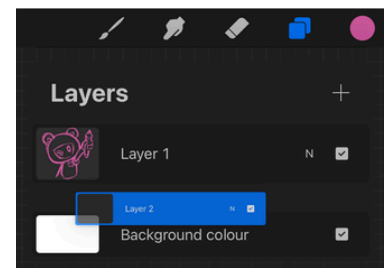
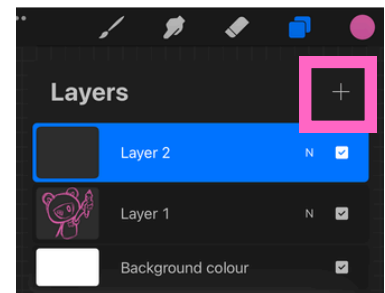


First you can tap on "Layer 1" where we've drawn Meiki, then lower the opacity by dragging the slider. This part is optional, but it will make it easier to see what we're working on in the next parts.



- 11 If you press the plus button, a new layer will be added. It's added on top of the first one by default, but if you hold it and drag it down you can move it below "Layer 1". This means that everything we draw on "Layer 2" will be below what's already drawn on "Layer 1". This will make more sense later when we work on the lineart and colouring.

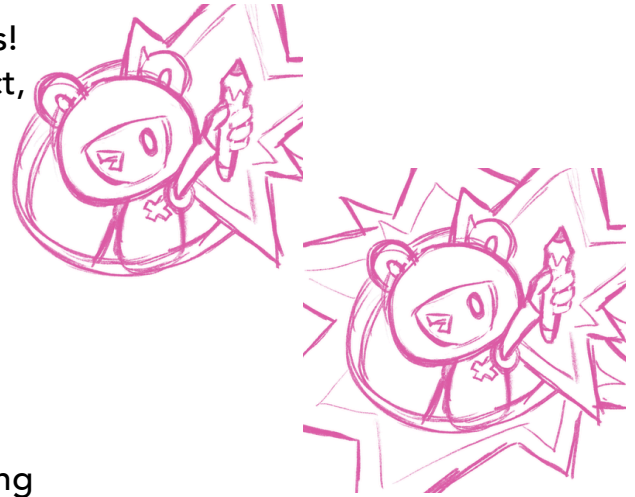
Tip: It is good practice to label your layers so you know what they are, for example 'line art' and 'background art'. You can do this by double clicking on the layer name i.e. 'Layer 1' and renaming it.



- 12 On "Layer 2" draw an oval shape around Meiki. Draw another, smaller one inside it and erase the lines on the right side.



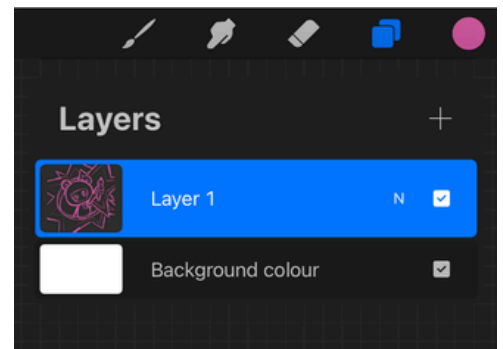
- 13 Now to draw the explosion shapes! These parts don't need to be exact, just do what feels right. You can think of it in sections of smaller triangles to make it easier.



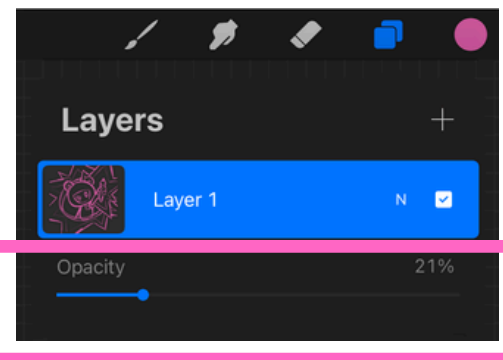
First draw the explosion in the foreground on the right that comes from Meiki.

Then draw another explosion that comes from the ring meiki is coming out from.

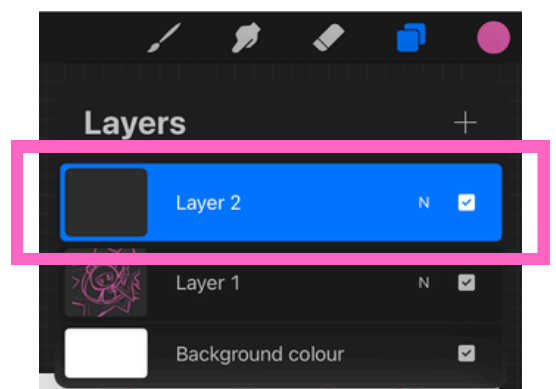
- 14 Open the layer tab again. We'll combine these two layers to make it one sketch layer. To combine the layers, hold both of them with your fingers and move your fingers together like scissors. They should merge automatically. Make sure to turn the opacity of "Layer 1" up to 100% again before combining them!



- 15 Now that we have one sketch layer, turn the opacity of it down to around 20%. This will make it easier to see the lineart that we'll work on next!



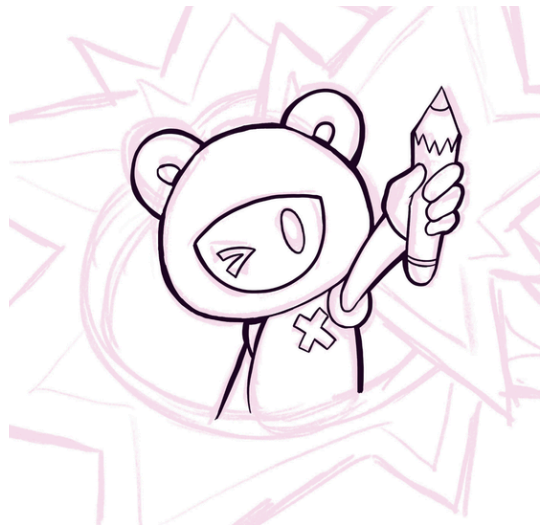
- 16 Make another new layer on top of the sketch layer. Open the brush tab and change to one of the inking brushes. You can choose whichever one you like, but one of the smoother brushes will be easier to work with



Tip: You can change the size of your brush on the left side of the screen by dragging the top slider up and down.

- 17 On the new layer, using the 'syrup' brush or your brush found in inking brush library, use the sketch as a guide to trace the lines we already made for the head and face. Try and keep the lines clean as this part of the drawing is what we'll see when it's finished so you'll want it to look nicer than the sketch. You can also change the colour of your brush to black or a darker colour.

Tip: Changing the thickness of the lines can help add more depth to your art. Try making Meiki thicker and the background thinner.



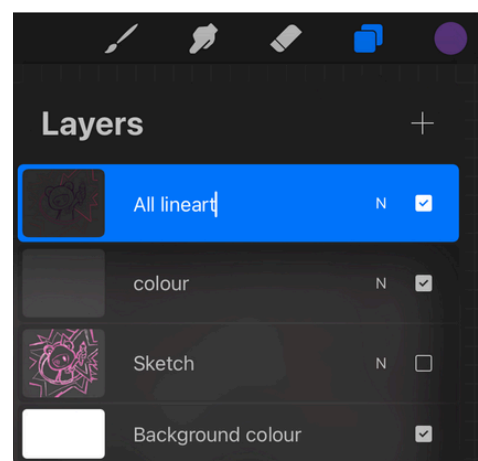
- 18 Line the background explosions as well. We have chosen to line that in dark brown to make meiki pop more. You can make a new layer to line the background on to make it easier for yourself as well. Erase any overlaps once you're done. To merge the lineart layers, do the same thing as in step 14.

Tip: You can make the sketch layer invisible by tapping the little check box in the layer tab.

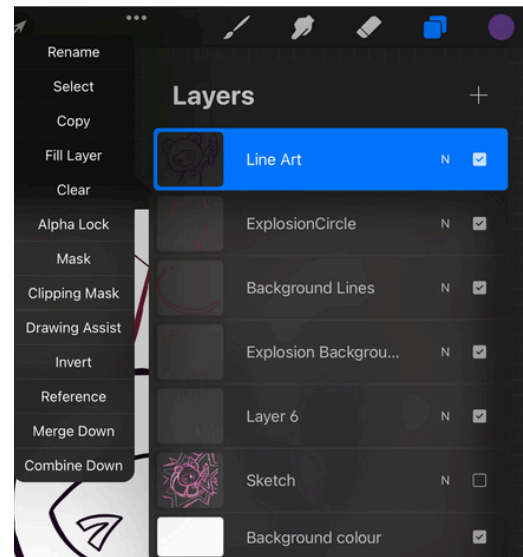


- 19 Now we can move on to colour! Make a new layer in the layer tab and move it under the lineart layer. This way our colours won't go over the lines we just made. Change the brush to something better for colouring. The "Syrup" inking brush is ideal for this because it applies a nice flat colour.

For other artworks you may want to experiment with textured colouring brushes like the ones in the "Painting" brushes tab.



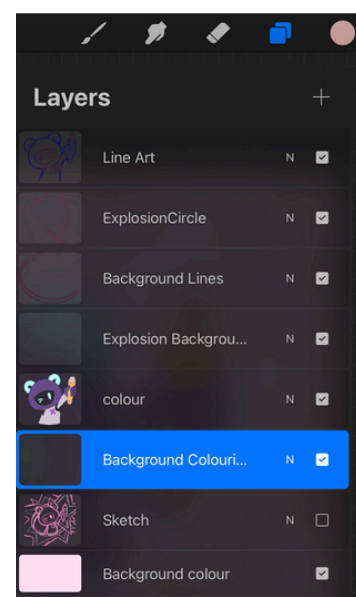
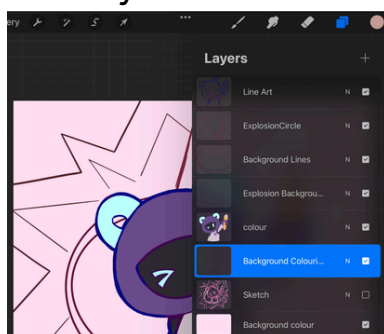
20 Meiki is a nice dark purple colour, so change your brush colour to a dark warm purple. You can colour normally like you would on paper but we will use the fill tool. To use the fill tool you'll need to open the layer tab again and tap again on the selected lineart layer. In the little list that opens on the side, select "Reference". This will turn this layer into a reference layer, meaning using the fill tool will fill areas within the lines. If we don't have a selected reference layer, the fill tool will fill the whole canvas instead of where we want it to go.



21 Go back to the colour layer and tap and drag the colour circle in the top right corner to the area you want to fill - Meiki's head. Drop the colour and watch it fill in the lines like magic! If it filled more than just that area, it may mean there's a gap in the lineart. Check the outsides of the area to make sure there are no gaps, and if there are, go back to the lineart layer and fix it up.



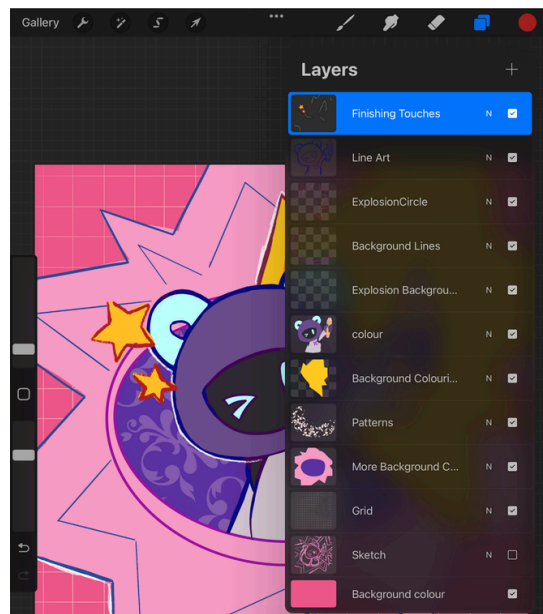
22 Add colour to the rest of the image in the same way, or simply colouring like normal. You can make an extra layer below the colouring to fill in the background - fill it with whatever colour you like!



23 Now that we've added colour, the image is essentially finished! You can add more, change colours, or experiment with other brushes - do whatever you want to make the image fully yours!

Here we have added stars and shadows and played used the 'newsprint' brush in the 'vintage' section of the Brush library.

Tip: Changing the thickness of the lines can help add more depth to your art. Try making Meiki thicker and the background thinner.



Congratulations!

Thank you for participating and completing the Meiki tutorial in our Introduction to Procreate.

Please see the further information page for more experiences with Ipswich Libraries Makerspaces, or speak with a Makerspace Officer!

OTHER PROGRAMS

Makerspace offers access to a range of creative software for you to work with beyond Procreate. These programs are readily available on PC, Mac and other platforms. They are also available on the Fractals at both the Ipswich Central and Springfield Central Libraries Makerspaces.

Two of our most notable digital art software we have are:

Krita, a freeware program, that has taken the creative industry by storm with it's very intuitive interface and wide range of capabilities from digital painting, vector design and even animation.

Gimp, another Freeware program, that offers a digital art experience similar to the original Adobe Photoshop.

Both of these programs are constantly being developed and upgraded so be sure to explore on a regular basis. They are also available for you to acquire on your home PC.

You can also bring in your scanned or photographed drawings and designs and import them into these programs to work on them. Just bring them in on your USB and you're good to go. Please note the Fractal computers are a specially curated locked down environment so there is no access to outside websites including email.

Our Fractals also offer audio and video editing programs such as Audacity and Shotcut for you to edit your home videos or even podcasts. So you can add your digital works across many mediums. We recommend you bring your own headphones when editing this content in the space.

FURTHER INFORMATION

Ipswich Libraries Makerspaces offer a whole lot more!



3D PRINTING SESSIONS

Learn the basics of 3D Printing! During this session, you will be able to pick out your very own model from the 3D Gallery and be guided through the preparation process for a 3D print. Once the set-up is complete, your model will be added to the 3D Print Queue and you will be able to collect it once contacted by Makerspace staff.

(Suitable for adults and children, 8 years and up)

Duration: 45 minutes · Price: Free

Available at Springfield and Ipswich Makerspaces



MAKERSPACE CHALLENGES

Compete in the ultimate Makerspace Challenge to test your creative skills! Challenges change regularly and can be completed using the technology and software currently available in the Ipswich Libraries Makerspaces. Challenges are held in 2 different mediums:

paper crafting and 3D modelling

View the current challenges online or come into a makerspace to find out more! Price: Free

Available at Springfield and Ipswich Makerspaces



ASK - A - CHAMPION

Want to find more about creativity and innovation in the Makerspace? Want to learn more about our 3D Printers? or just have a general question or comment about the Makerspaces? Get in contact by clicking on the Ask-a-Champion link on the website or typing in the link below and a Makerspace Champion will be in contact with you.

<https://www.ipswichlibraries.com.au/ask-a-champion/>

EXPLORE MORE POSSIBILITIES!

<https://www.ipswichlibraries.com.au/ipswich-libraries-makerspaces/>



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