

LESSON IDEA

Our planet

SCIENCE

ART & DESIGN



Learn with
Procreate®



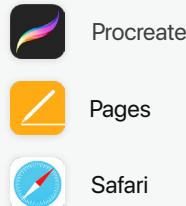
Lesson ideas

Use these Lesson Ideas to spark your imagination for using Procreate in the classroom. Feel free to take them further and make them your own.

Our planet

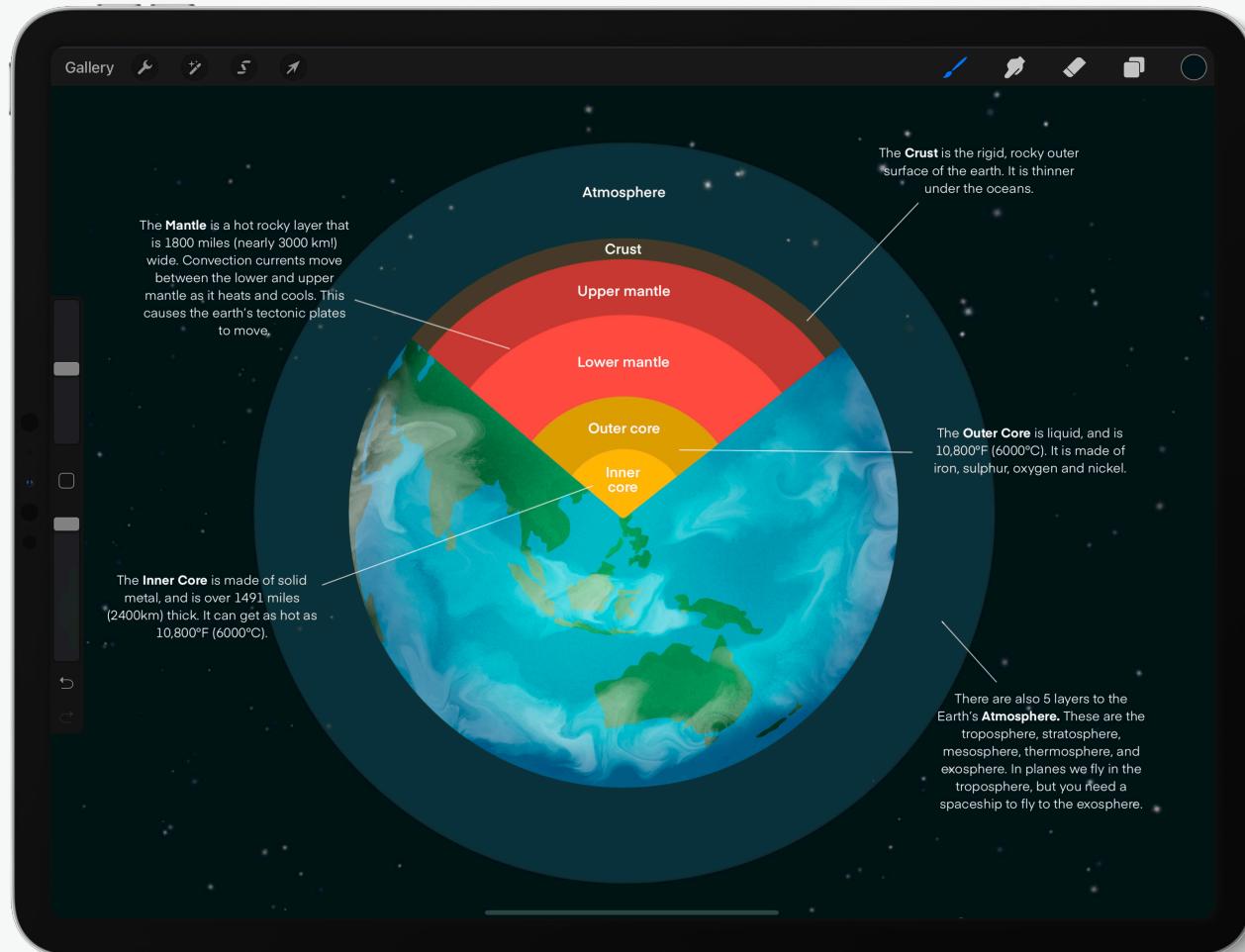
Create an engaging infographic explaining the structure of the Earth and its atmosphere.

All you need is an iPad and the following apps:



Educational Value

- ✓ Students understand the structure of the Earth and geological processes that affect the Earth's surface.
- ✓ Students summarize and visually communicate scientific ideas using digital technologies.
- ✓ Students understand the context of the earth as a planet in the Solar System.



In this guide

- 1 Research
- 2 Make a plan
- 3 Laying down layers
- 8 Label your graphic
- 9 Into outer space
- 12 Annotations
- 13 Take it further

Research

Your research method

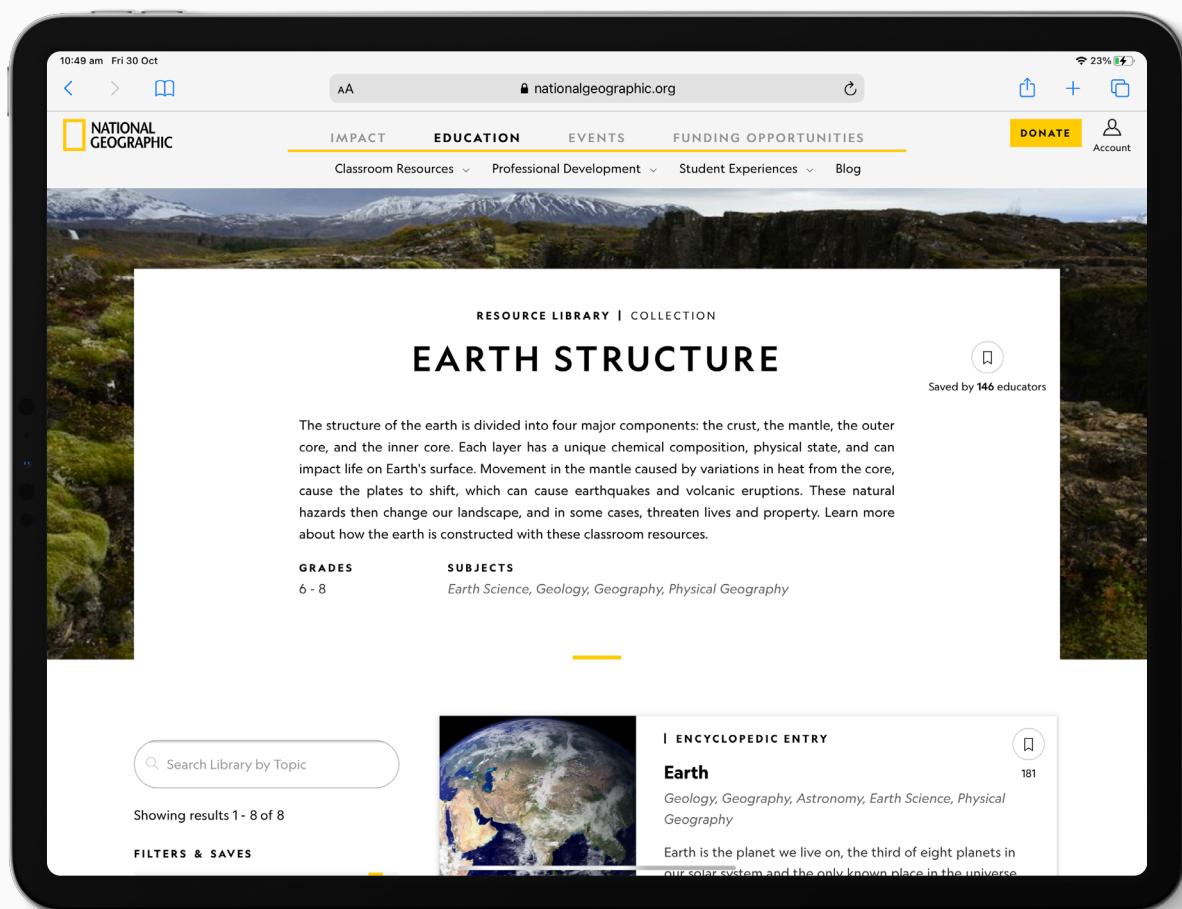
Research in a way that fits how you would like to learn. You might like to use Safari to read about the layers of the earth, look for images, or watch a video.

CROSS-REFERENCING

Always remember to check multiple sources to cross reference your research.

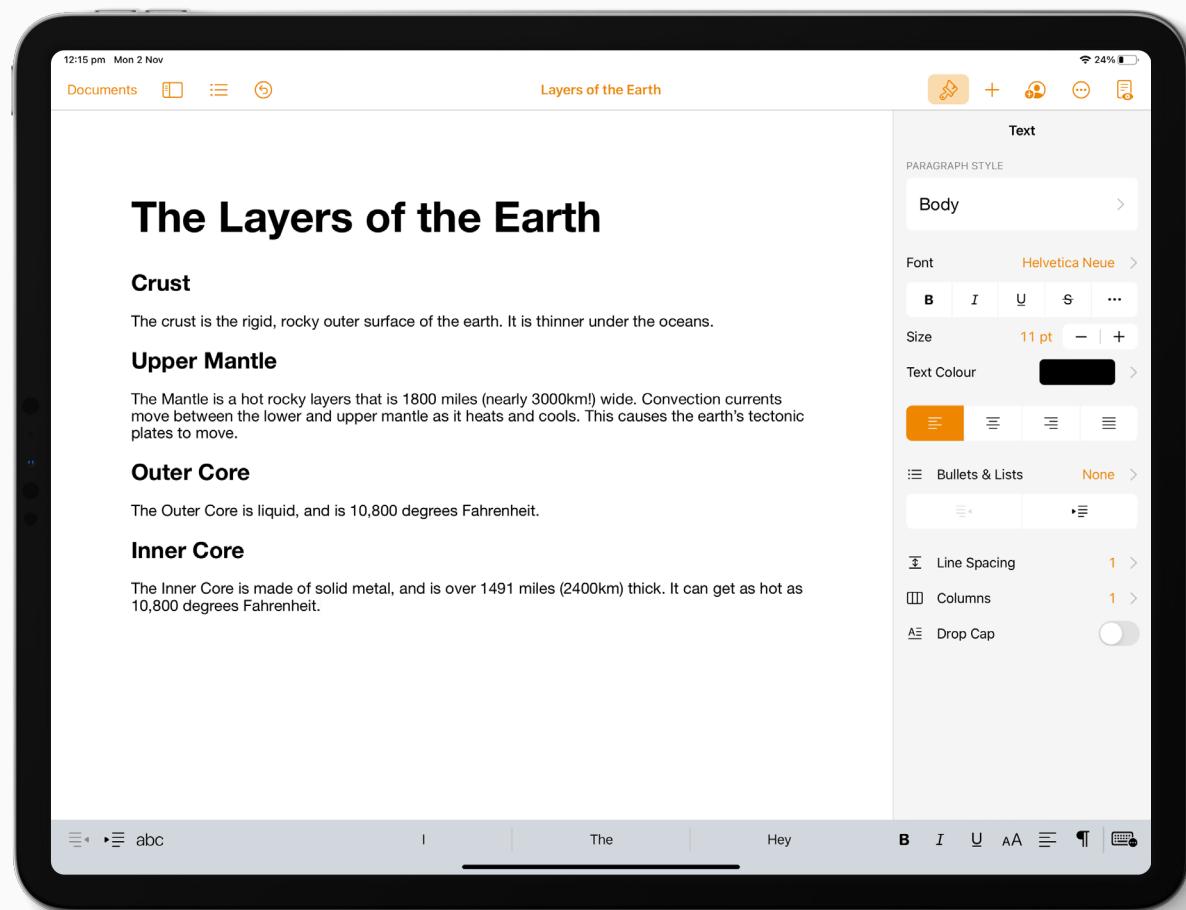
A few sources to get you started are:

- * <https://www.nationalgeographic.org/topics/resource-library-earth-structure>
- * https://en.wikipedia.org/wiki/Structure_of_Earth
- * <https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/earth-interior-structure>



Your own words

Summarize your research using your own words in pages. Consider which information is the most important, and what you would like your readers to learn.



12:15 pm Mon 2 Nov

Documents Layers of the Earth

The Layers of the Earth

Crust

The crust is the rigid, rocky outer surface of the earth. It is thinner under the oceans.

Upper Mantle

The Mantle is a hot rocky layers that is 1800 miles (nearly 3000km) wide. Convection currents move between the lower and upper mantle as it heats and cools. This causes the earth's tectonic plates to move.

Outer Core

The Outer Core is liquid, and is 10,800 degrees Fahrenheit.

Inner Core

The Inner Core is made of solid metal, and is over 1491 miles (2400km) thick. It can get as hot as 10,800 degrees Fahrenheit.

Text

PARAGRAPH STYLE

Body

Font Helvetica Neue

B I U S

Size 11 pt

Text Colour

Text Alignment

Bullets & Lists

Line Spacing

Columns

Drop Cap

abc

The

Hey

B I U AA

Pages

Make a plan

Thumbnail sketches

Open the *Procreate* app and tap the + in the top right to create a new A4 canvas.

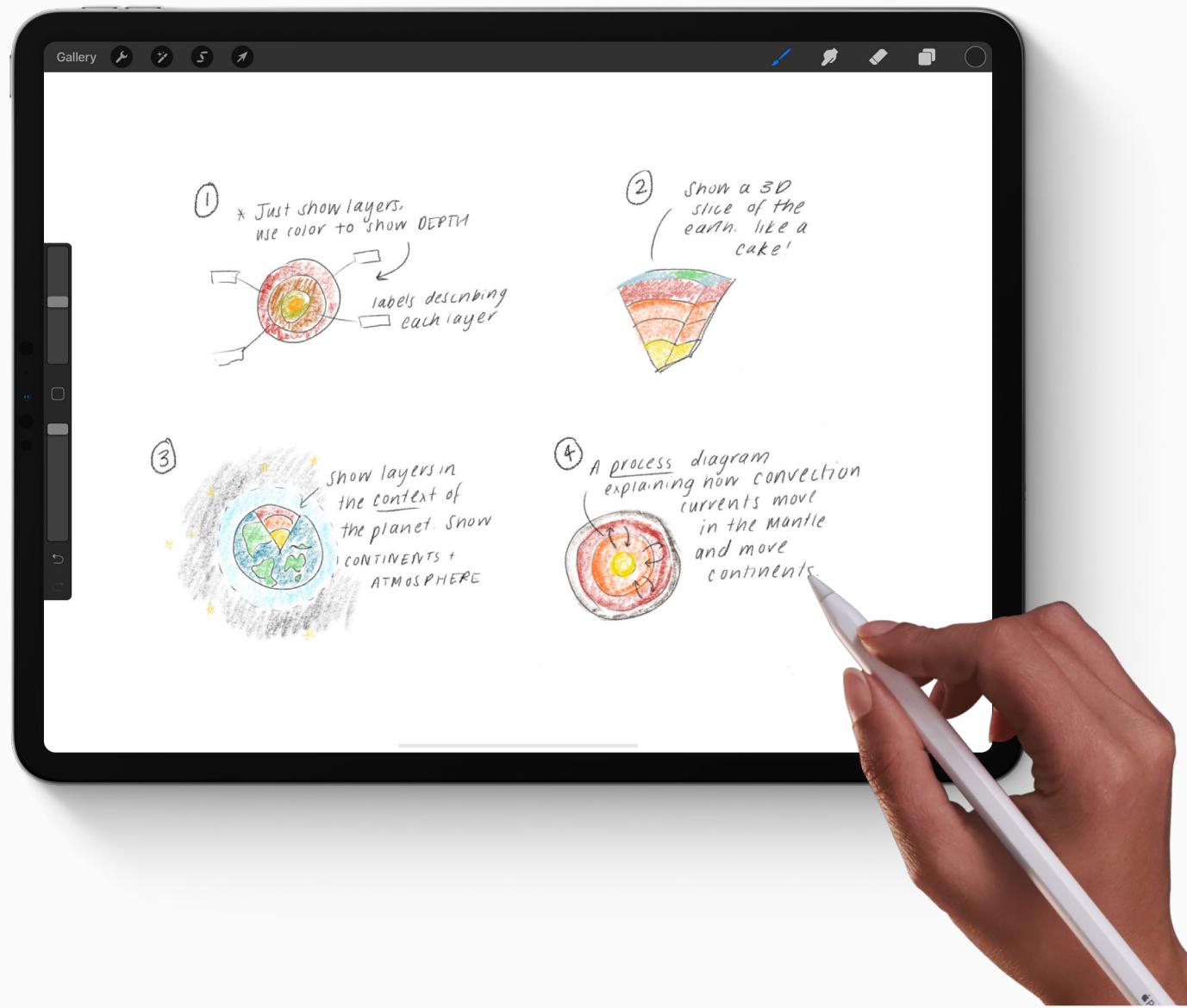
Select a pencil brush, and do a few quick sketches. Explore the different ideas you have for your infographic based on your research.

Once you're happy with the directions you've explored, pick one to turn into a finished piece.

THINGS TO CONSIDER...

Think about how much detail you would like to show in your infographic.

- * Would you like to show subsections, and geological processes that occur?
- * Would you rather present your viewers with a simple breakdown of the Earth's layers?

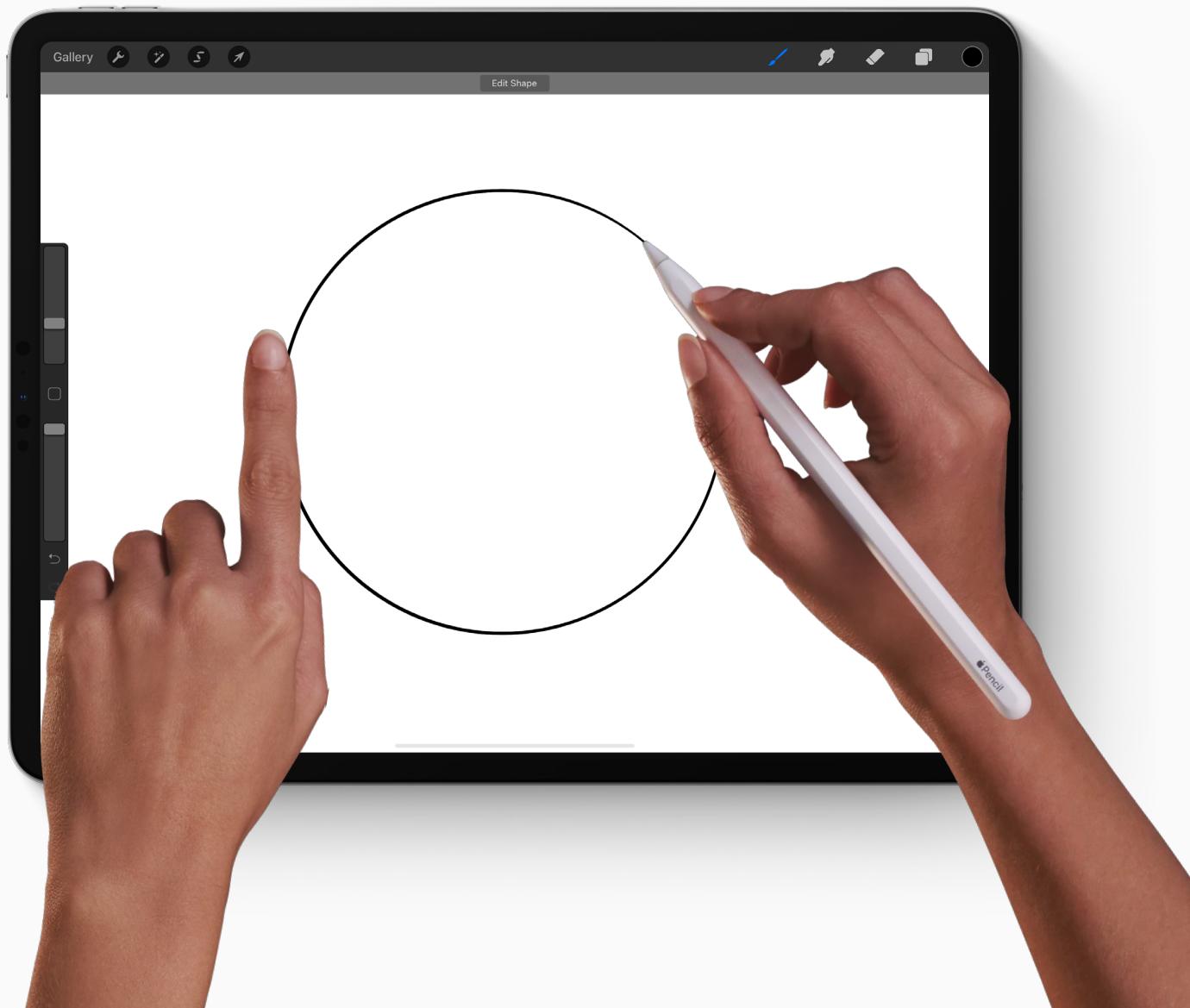
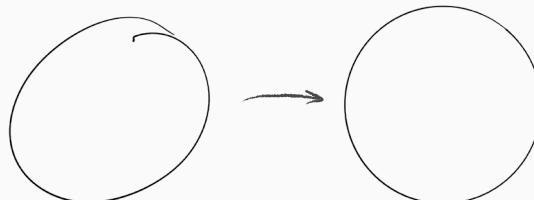


Laying down layers

4.

QuickShape

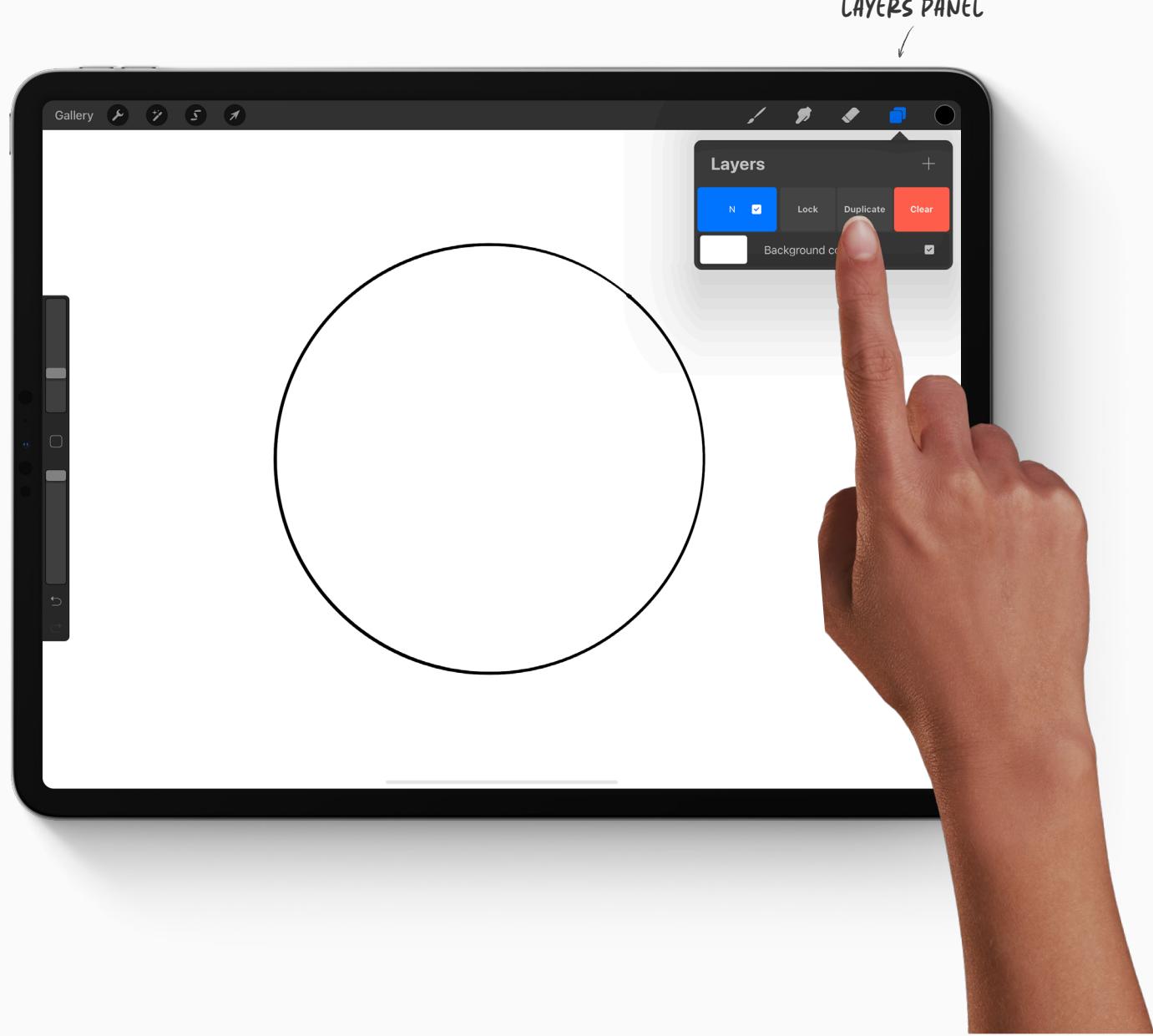
- 1 Go back to the *Gallery* and tap the + in the top right to create a new A4 canvas.
- 2 Tap the brush icon to open the *Brush Library*. In *Inking*, select the *Studio Pen*.
- 3 Draw a large circle and hold for a second to make it a smooth shape. Tap with your other hand, to snap the shape to a perfect circle.



5.

Duplicate

- 1 Tap the two squares in the top right to open the *Layers* panel.
- 2 Swipe left on your circle layer to reveal three layer actions.
- 3 Tap *Duplicate*.

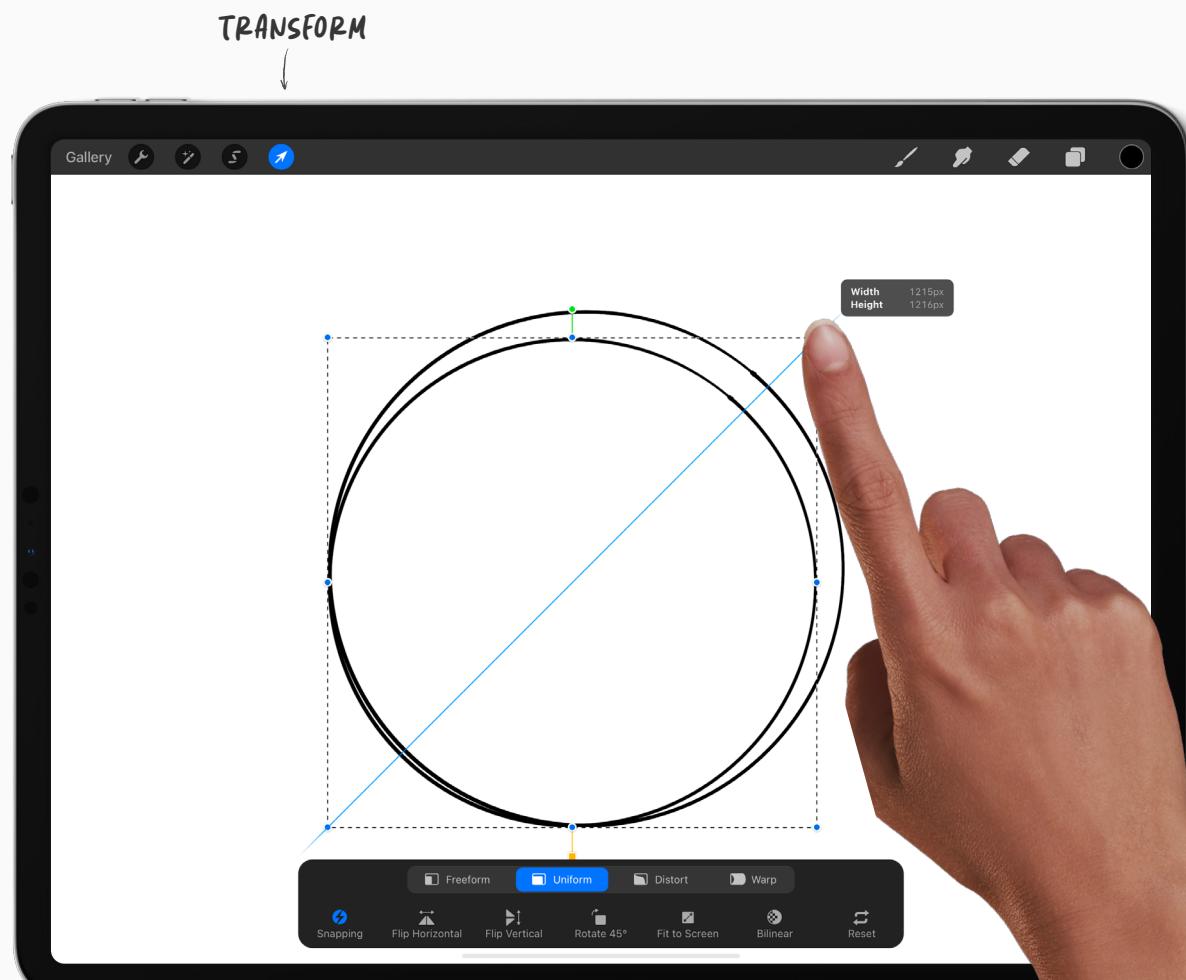
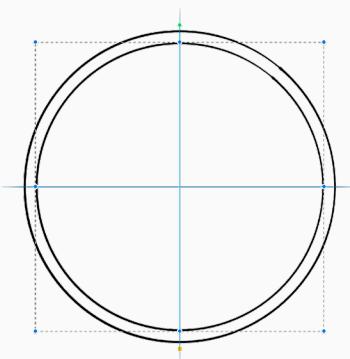


Transform

- 1 On your new layer, tap the arrow icon to enter *Transform Mode*.
- 2 Use the blue corner nodes to resize your circle.
- 3 Move your circle so that it is centred horizontally and vertically.

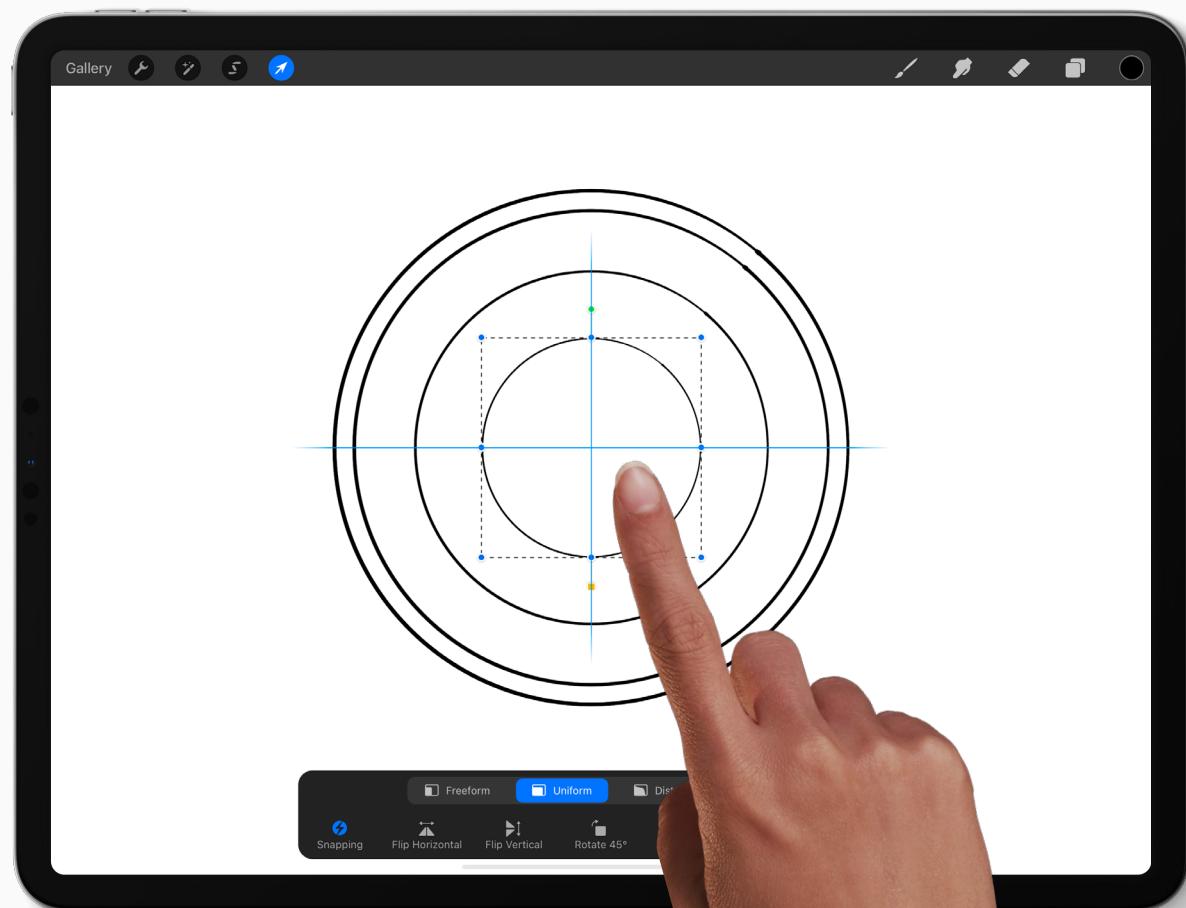
SNAPPING IN PLACE

Turn on *Snapping* in the bottom left corner to activate blue guide lines, that will help you centre your circles.



Repeat

Repeat until you have as many layers as you need based on your earlier research. Make each on their own separate layer in your file.



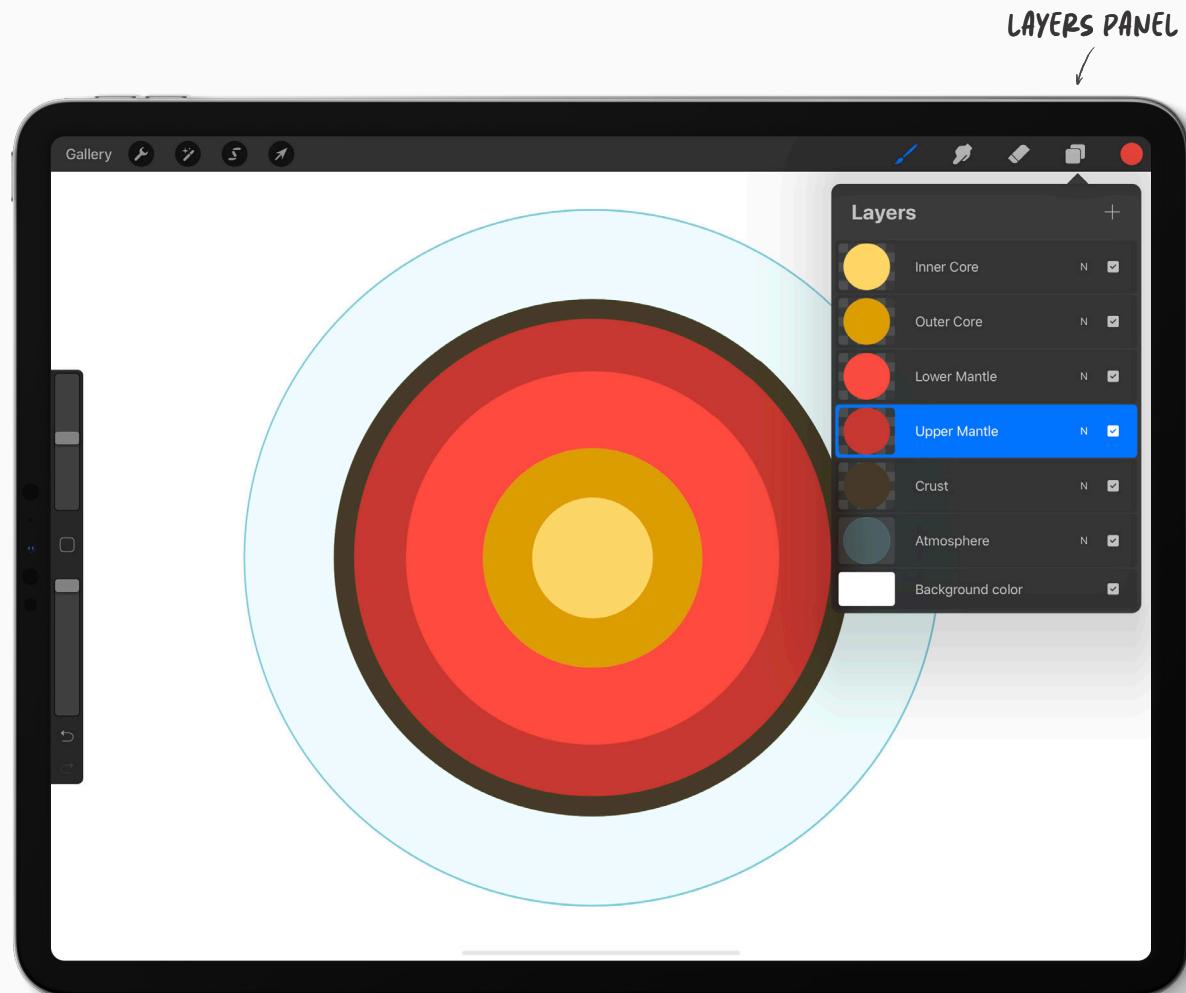
Color

Use ColorDrop to color each of your layers.

You might like to add some texture and detail for each layer informed by your research.

NAME YOUR LAYERS

Don't forget to name your layers after the structures in the earth they represent. Tap each layer in your *Layers Panel* to rename it.

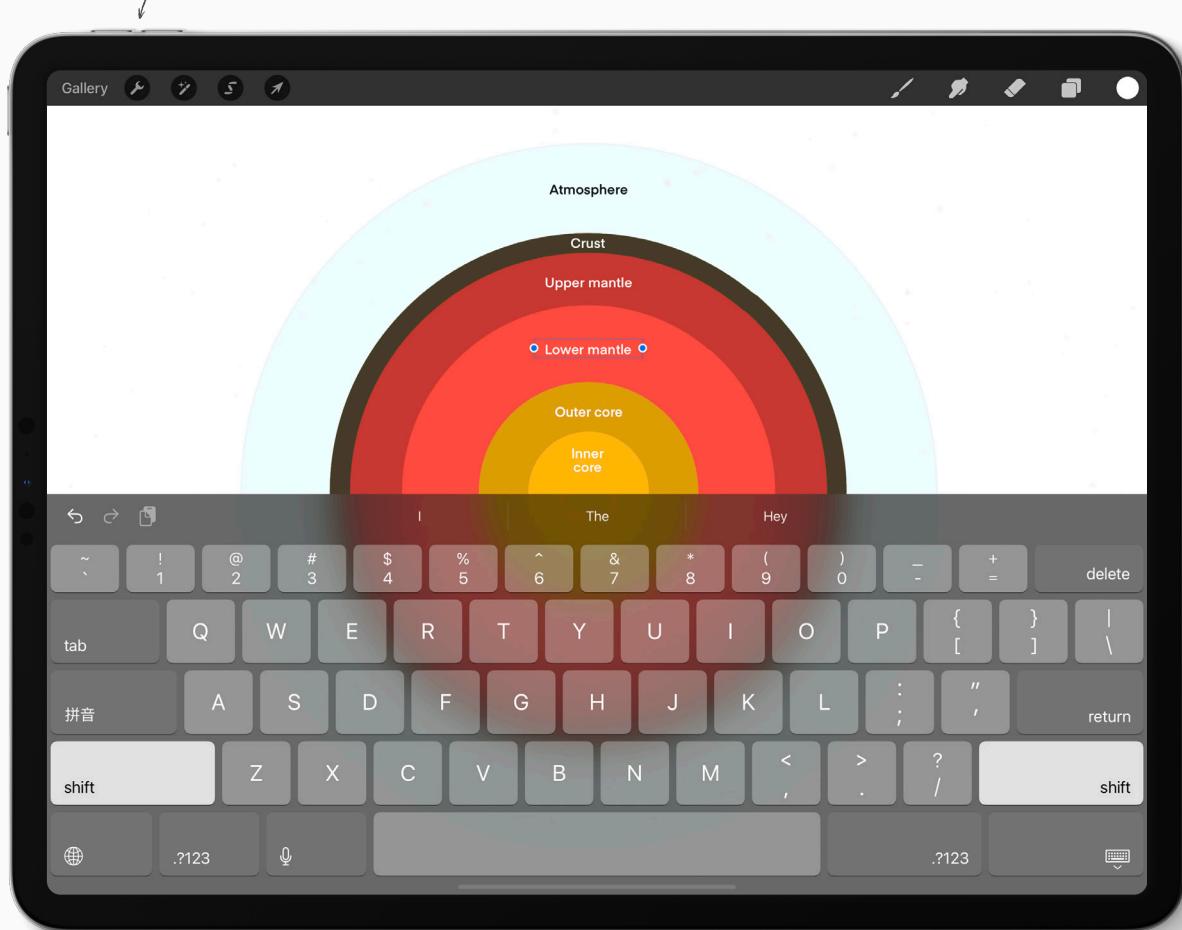
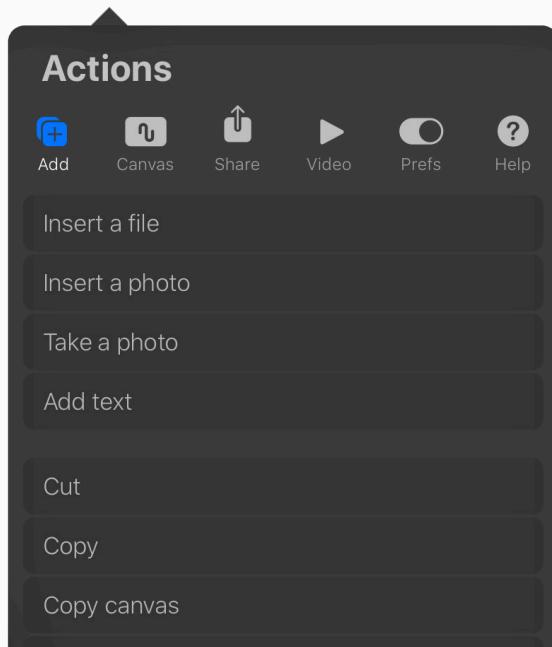


Label your graphic

Add text

Tap the wrench icon in the top left to open the *Actions menu*, tap *Add* and then *Add text*.

You can use these textboxes to add labels to each of your layers of the Earth.



Into outer space

Background color

Give the earth some context and place it in space.

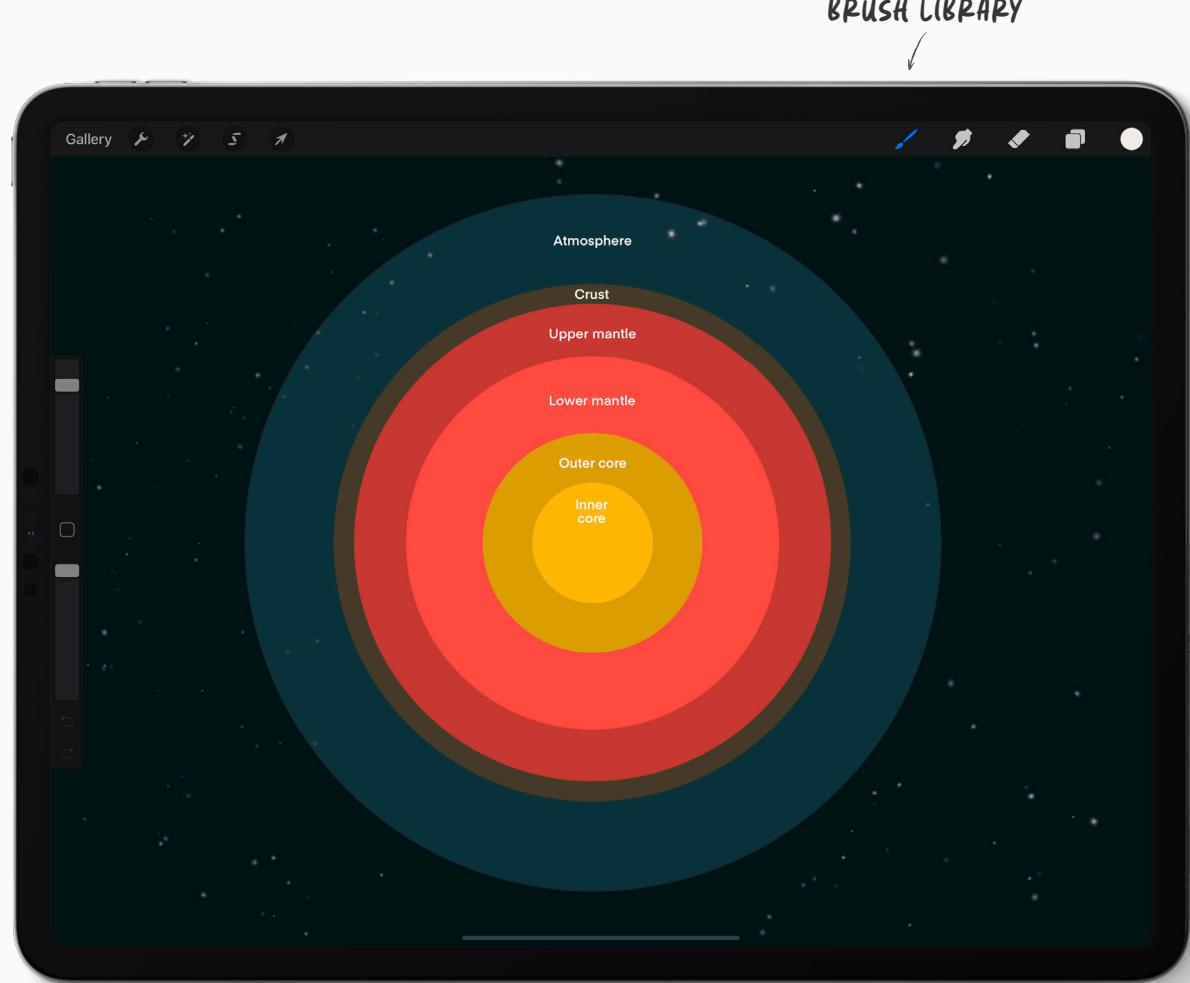
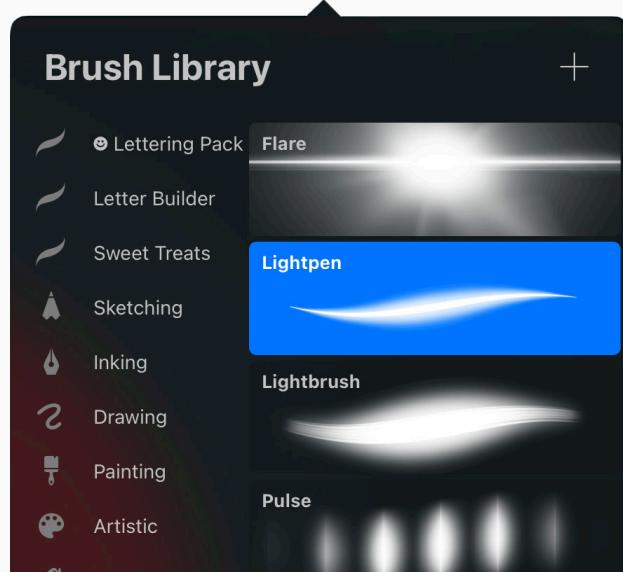
- 1 Tap the two squares to open the *Layers panel*.
- 2 Tap the bottom layer, named *Background Color*. This will open the *Color Disc*.
- 3 Use the *Color Disc* to select a background color.



Starry night

Fill your night sky with stars using the *Lightpen* brush.

- 1 Tap the brush icon to open the *Brush Library*.
- 2 Open the *Luminance* brush set, and select the *Lightpen* brush.
- 3 Experiment with *Brush Size* and *Opacity* to fill your canvas with stars. Tap to get little dots of light.



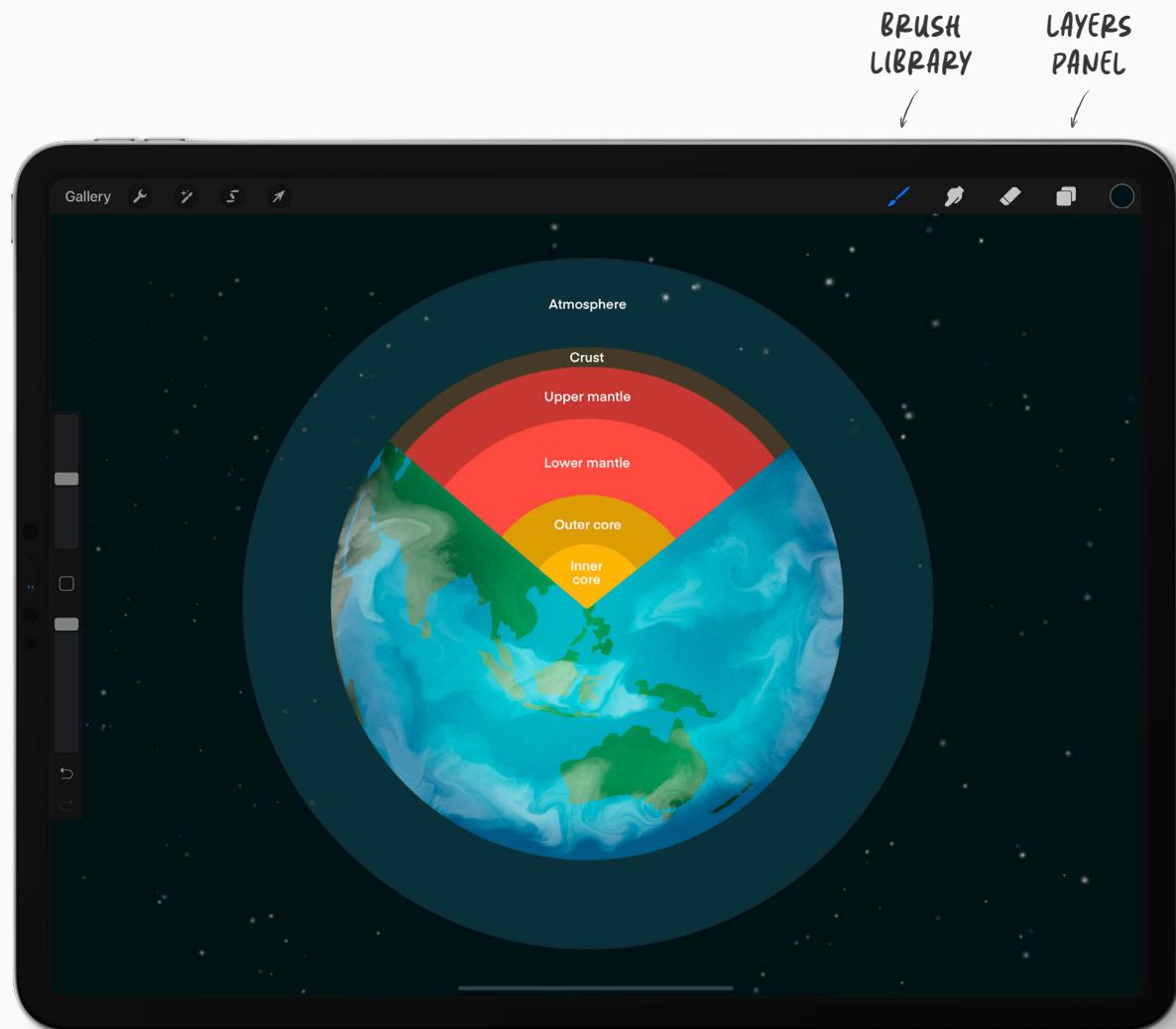
The Earth's Surface

You might like to add a new layer, and draw the Earth's surface, to help your viewer's understand what they are looking at, and how far down each of the earth's layers go.

- 1 Open the *Layers Panel* and tap the *+* icon to add a new layer.
- 2 Have fun experimenting with different brushes and colors to illustrate the globe in your own artistic style.

HINT

Don't forget you can use *Safari* to find a reference image of the globe. You can insert this image into your artwork and trace over it on a new layer to help you get your countries in the right position.



Annotations

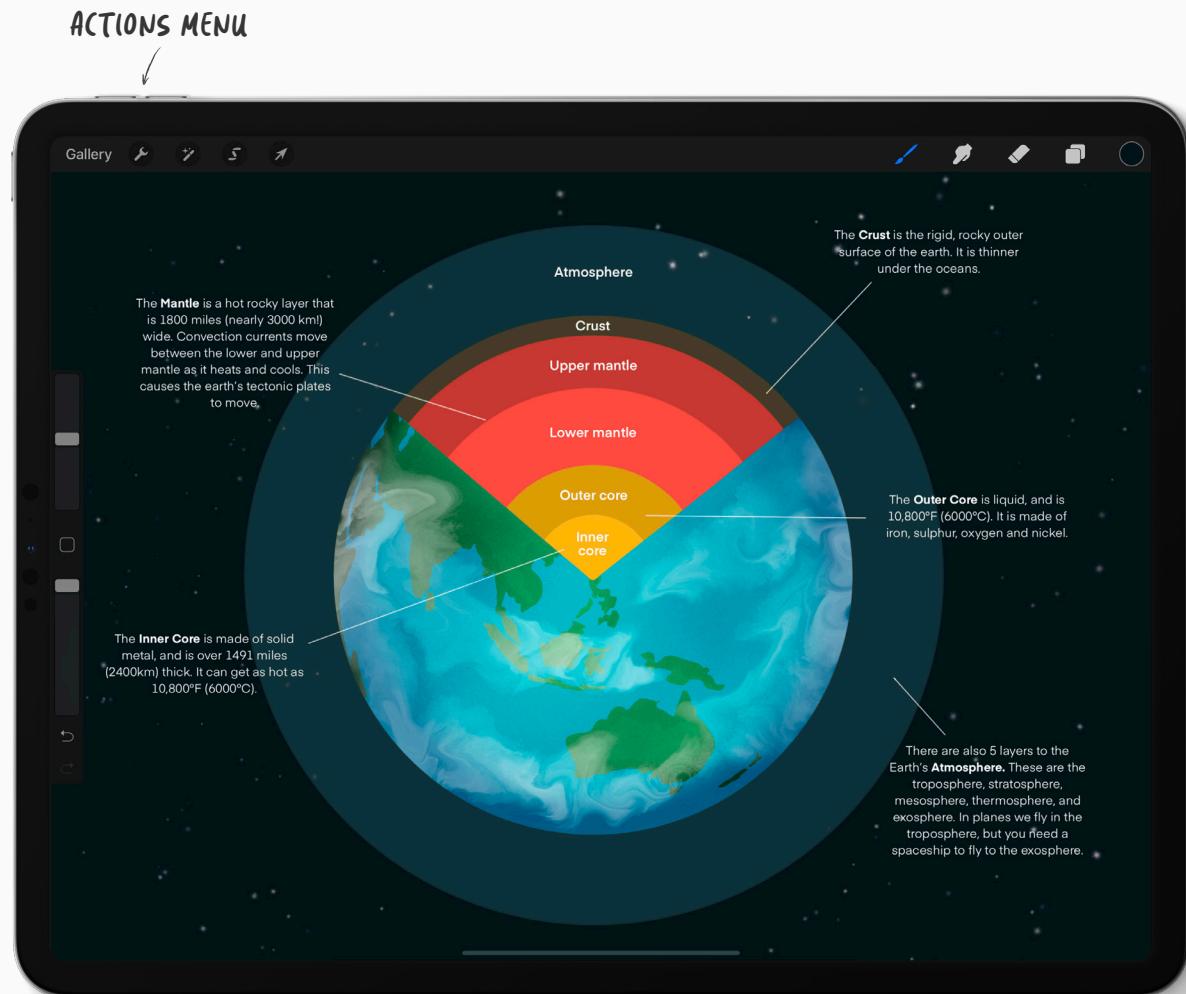
Extra information

Add notes to your infographic using the text tool.

- 1 Tap the wrench icon in the top left to open the *Actions menu*, tap *Add* and then *Add text*.
- 2 In the text field, summarise your research in your own words. You might like to workshop your words in *Pages* first.
- 3 Use the *Transform* tool to scale your text to the size you would like.
- 4 Use the brush tool to draw pointers that connect your information to the relevant part of your infographic.

HINT

Don't forget QuickShape. Hold your pen on the canvas once you've drawn your line to make it perfectly straight.

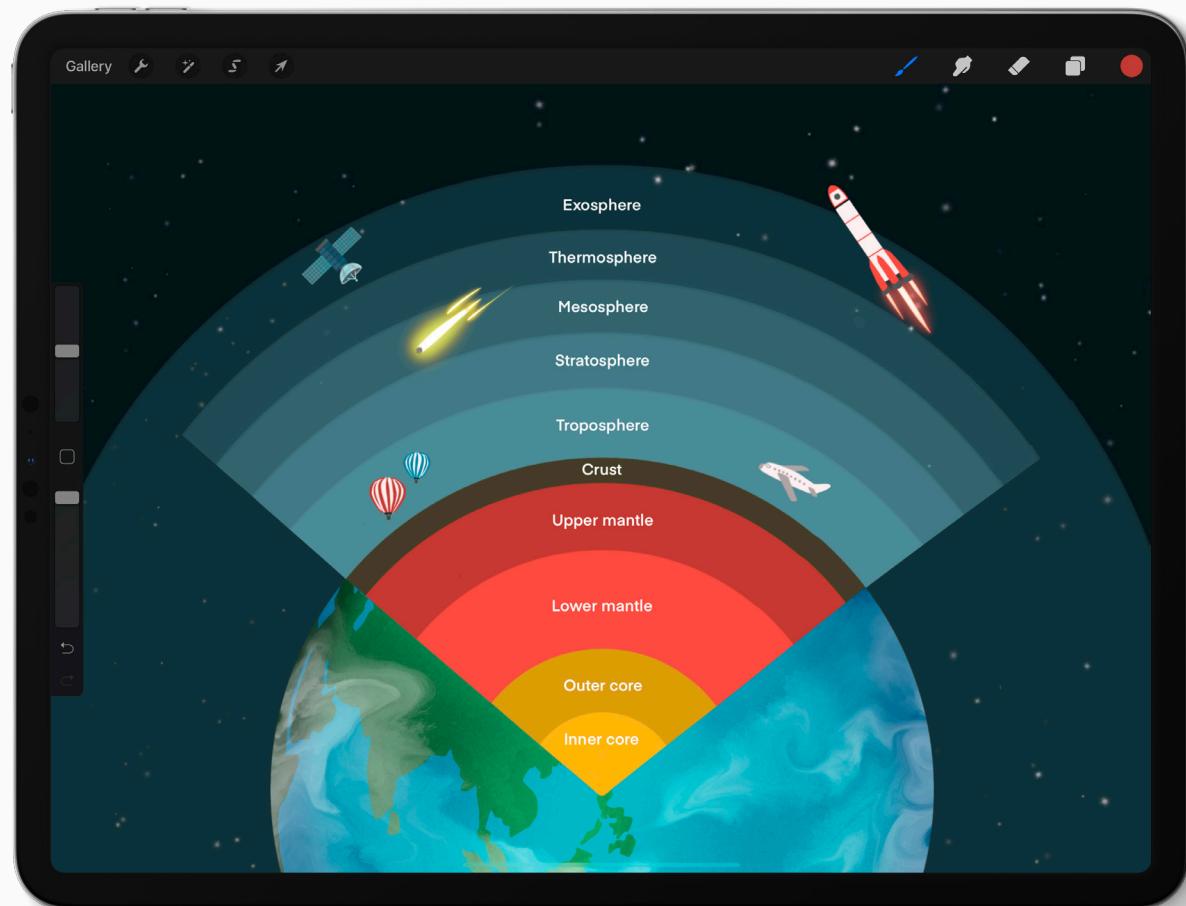


Take it further

Into the Atmosphere

The Earth's layers go far beyond the ground we stand on. Take it further by researching the Layers of the Atmosphere, and adding them to your infographic.

- ★ What are the names of each layer of the Atmosphere? At what altitude do they start?
- ★ How far up can human's breathe?
- ★ What occurs at each level? You might like to add some illustrations to communicate what happens there.



Create

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To dive deeper into the full creative potential of Procreate, see our Handbook at procreate.art/handbook



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