During the summer of 2021, Museum of the Earth ran an illustration club to accompany its temporary exhibit on Women in Paleontology. Many of the first women involved in paleontology contributed as scientific illustrators, a profession that exists and is important to this day. Though scientific illustrators are well educated about the subjects they draw and very skilled, anyone can look closely at the world they way they do, and learn something about it!

Though the illustration club was aimed at adults and teens, during each class an activity was available for the younger members of the audience. They featured different fossils and all kinds of art materials. The coloring pages that went along with those activities are compiled here!

Table of contents:
1-- Intro
2-- Dot to dot bryozoan- pencil
3-4—shading gastropod or snail shells- pencil
5-- Coloring gastropod or snail shells- colored pencils
6-7-- Lining and coloring crinoids- pens, colored pens
8-- Shading a mastodon skull - chalk or soft pastel
9-11-- Creating a mosaic on an ammonoid- colored papers, scissors
12-- Using watercolors to paint flowers- watercolor paints,
   Recommend sturdier paper to print this out on, such as cardstock
13-14-- Painting crystals- paints (any kind you like)
   Recommend sturdier paper to print this out on, such as cardstock
CONTOUR LINES: Bryozoan: Outlining is one of the most basic tools an artist has to show the shape of something. It is called Contour line drawing. Use a pencil to connect the dots, starting at one and ending at sixty-eight, to create the outline of the bryozoan!
SHADING- Gastropod: An artist uses shading to create areas of light and shadow on a drawing. Using a pencil, practice filling in the boxes from darkest to lightest (hint: do not shade in the white box) using any of the techniques demonstrated below, then use those values to fill in the snail shell!

Some ways to shade:

- **Hatching**
- **Cross hatching**
- **Stippling**
- **Scribbling**

<table>
<thead>
<tr>
<th>Black</th>
<th>Cross hatching</th>
<th>Stippling</th>
<th>Scribbling</th>
</tr>
</thead>
</table>

Black 6 5 4 3 2 1 White

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Ecphora quadricostata
An artist uses shading to create areas of light and shadow on a drawing. Using a pencil, practice filling in the boxes from darkest to lightest, then use those values to fill in the shell!

Some ways to shade:

- Hatching
- Cross hatching
- Stippling
- Scribbling

Black

White

| 6 | 5 | 4 | 3 | 2 | 1 |

"Turritella" mortoni postmortoni
COLOR- Gastropod: Color can bring a picture to life! Below is a list of colors with numbers associated with them. Color each of the numbered spaces in with the corresponding color pencil.

1 = Brown  
2 = Orange  
3 = Yellow  
4 = White  
5 = Gray

“Turritella” mortoni postmorton
PEN & INK LINE DRAWING- Crinoids: Artists use lines to show where the edges of things are! Lines have many qualities, like thickness and straightness, that can change how a drawing looks. Experiment with all kinds of lines using a pen!

Practice drawing lines by connecting the outside circle to the star on the inside!

If you want, you can try to give the lines you make feelings: make them happy or sad or mad or excited by using your pen in different ways!

Then use your new line-drawing abilities to complete the dot-to-dot of the crinoid!

Illustrations by Nico Tutoni and Maria Altier. 2021
Color can be used in all kinds of ways- to make a drawing look real, or to make it look fantastical. Try experimenting with will differently colors when you color in this crinoid and the piece of the crinoid stem! Use colored pens or crayons!
Most shading and coloring doesn’t stay within the lines. When one color fades into another, that’s a gradient! Using gradients of dark to light can create soft shadows or the illusion of round surfaces. On the drawing below, color anything numbered “3” a dark color using chalk, soft pencil, or oil pastels. Leave anything labeled “1” white. Then smudge the “3”s into anything labeled “2” so that it creates a gradient between the “3”s and “1”s! You can use your fingers, or a Q-tip, or get creative!
MOSAICS: Ammonoids: Not every artist uses pencils and paints! Cut up pieces of colored paper and glue them into the chambers of these ammonoids to make them into beautiful mosaic collages!

Imitoceras rotatorium
Medlicottia intermedia
Watercolor is a kind of paint that is activated with water - adding water will make the color lighter, and you can create gradients by putting the paint onto already wet paper! It’s also great for layering different colors on top of each other, because it’s so transparent. Using watercolor, paint in the flowers according the directions.

**Paint the Rose:**
Paint the **Stigma** pink, and add more water to make it lighter as you spread the paint from **1** to **2** to **3**.
Add white to **3**.

**Lily Anatomy:**
Paint the **Stigma** yellow.
Paint the **Ovary** light green.
Paint the **Anther** brown.
Paint the **Petals** orange, pink, white, or purple.
Paint the **Stem** dark green.
PAINT - Geodes & crystals: There are many more kinds of paint than watercolor. Using any kind of paint you want, color in the quartz crystals!