

DIATOM AND PHYTOPLANKTON ART MOBILE:
MODELING / STEAM ACTIVITY (GRADES PRE-K-2ND)
CREATED FOR CABRILLO MARINE AQUARIUM
BY CATHERINE TERRONES, AQUARIUM EDUCATOR

FLOAT LIKE PLANKTON!

DIATOM + PHYTOPLANKTON ART MOBILE: MODELING ACTIVITY



MATERIALS:

THICK PAPER + SCRAPS OF PAPER

STRING

CRAYONS OR COLORED PENCILS

GLUE (IF NEEDED)

PENCIL (OR HOLE PUNCHER),

CHOPSTICKS (OR CLOTHES HANGER)

PHYTOPLANKTON IDENTIFICATION SHEET



Step 1 : Choose 3 to 5 types of Plankton you would like to model. Use the photos at the end of the exercise to model your plankton on real examples.

Step 2: Use the Circle Templates here or draw a plankton in a circle on your own paper. Color your plankton. Decorate with extra bits of colorful paper if that helps model its shape and design.

Step 3: Cut out the circles and/or mount them to slightly thicker paper

Optional: Write the name of the type of plankton on the back of the circle

Step 4: Hole Punch Paper

Step 5: Cut your strings at different lengths

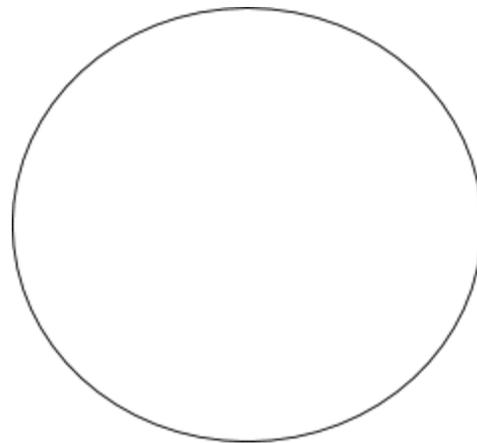
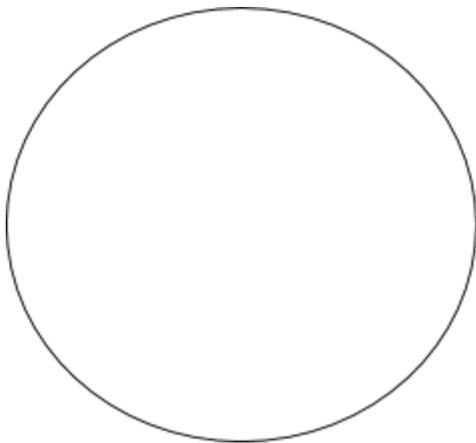
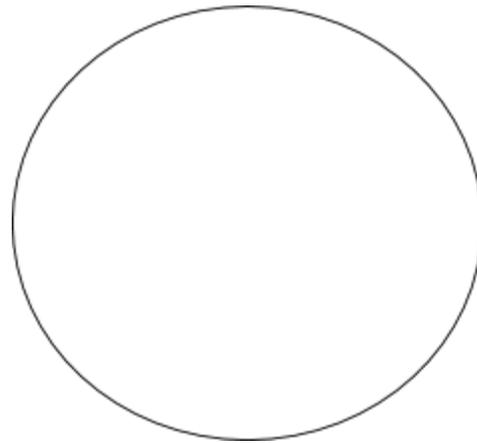
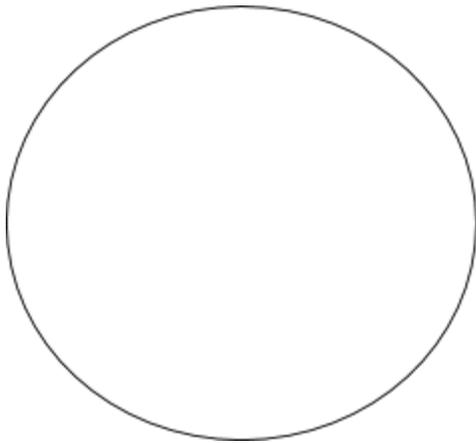
Step 6: Tie a string to each hole on the plankton picture. Then tie your plankton to a chopstick or onto a hanger, and hang it somewhere the plankton can float!

Questions to ask students as they work:

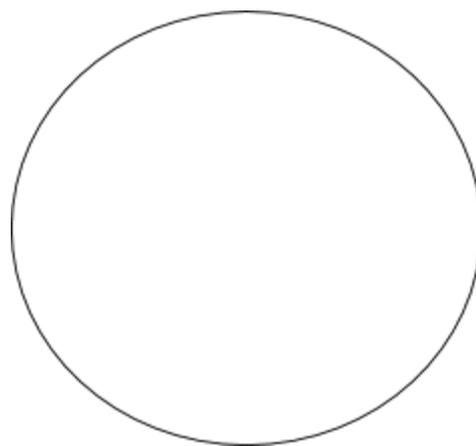
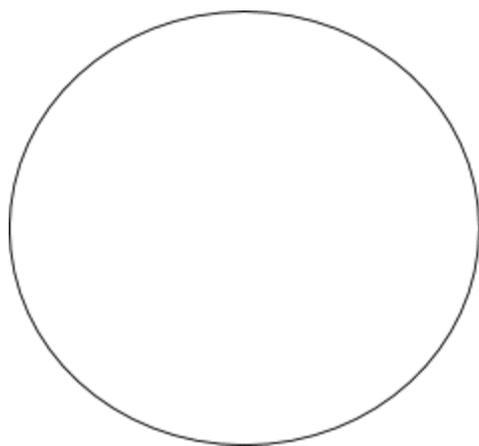
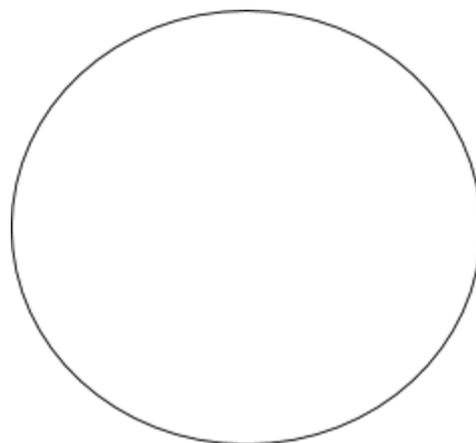
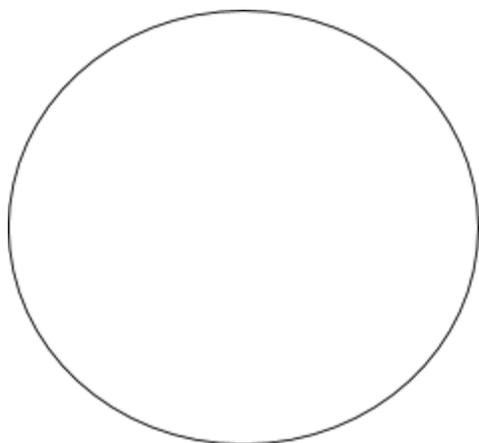
- What shapes do you see?
- Why might these shapes help these organisms float?
- Can you count how many and what types of those shapes you see?
- What colors do you see?
- Can you recreate and model some of the colors and shapes like you see in the Phytoplankton examples?
- What do you notice about the plankton?
- In what ways do you think plant plankton are different from animal plankton?

On the next few pages you will find: A Template you can use for making your Phytoplankton, a Phytoplankton ID Chart and links to really cool enlarged photos of Diatoms and other Phytoplankton.

Phytoplankton TEMPLATE. Use these spaces to model your plankton. Then cut out the circle when ready for the next steps:



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Phytoplankton Identification Guide

Dinoflagellates



*Noctiluca**



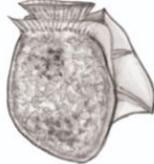
*Akashiwo**



*Alexandrium**



*Lingulodinium**



*Dinophysis**



Prorocentrum



Ceratium

Diatoms



*Pseudo-nitzschia**



Coscinodiscus



Chaetoceros



Asterionellopsis



Laderia

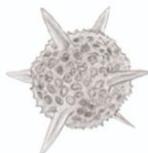


Pleurosigma

Acantharians/Radiolarians



Acanthometra



Radiolarian

Ciliates



Tintinnid

* HABs (harmful algal blooms)



Additional Resources:

Links to *really* cool phytoplankton photos:

[Phytoplankton Photo Gallery - UCSC](#) - Click this link, then once on the page, click on any name in blue and see the most amazing color photography of common phytoplankton!

Learn more about plankton:

[Earth Observatory NASA: Plankton](#)

[Australian Museum: Phytoplankton](#)

[Phytoplankton and Marine Plants - Marinebio.org](#)

Multi-Media and Designing Extensions:

If you would rather make models of the plankton and build them from a wider variety of materials you might choose to build something from materials you can find around the house.

For a simple multi-media activity; helpers/educators can source the materials, organize them, and make them available with proper adhesive/connections and help.

For more complex activity: learners might source their own materials and then build the plankton with what is available.

Starter Materials Suggestions: Egg cartons, toothpicks, cardboard, bottle caps, cardboard or cereal box scraps, paper and paper scraps, string, packing materials, natural materials from the garden or park.

Have fun building and learning more about phytoplankton!

