

Welcome!



*Please have out the
following materials by
the end of the song:*

- A sharpened pencil
- "Science journal
- Microscope lab Worksheet
- A science partner



Share with your table: How are you on a scale of...

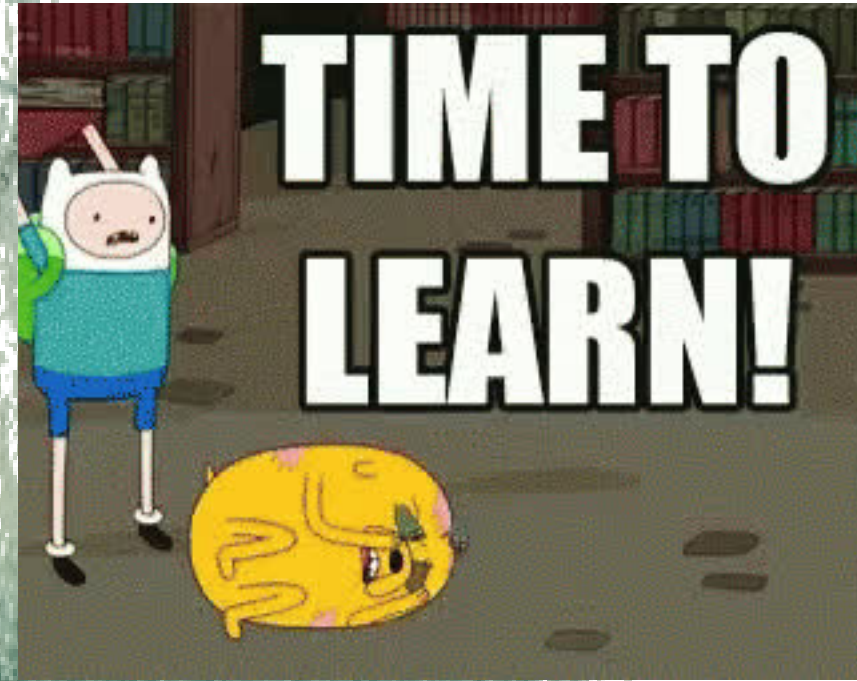
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2



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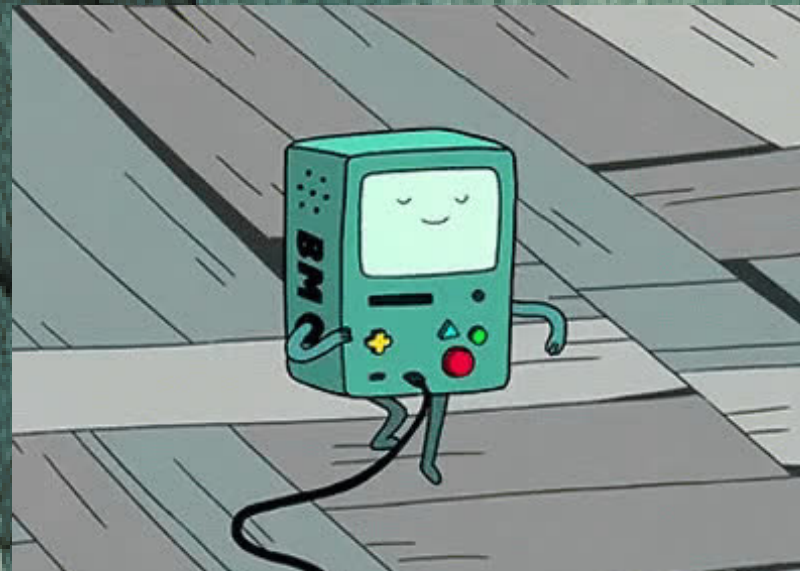
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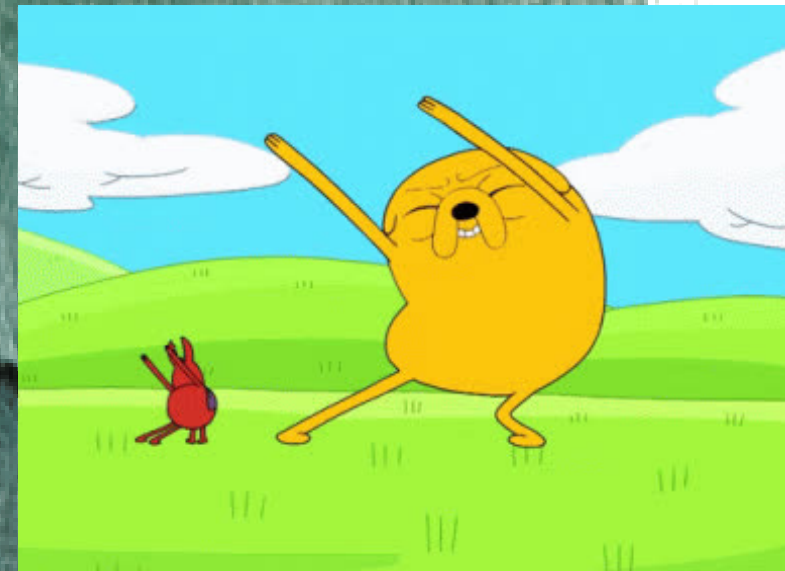
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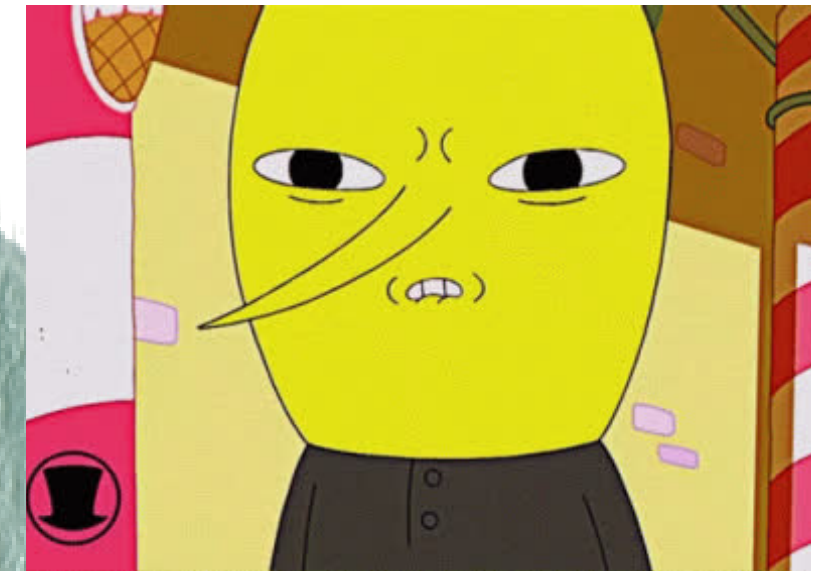
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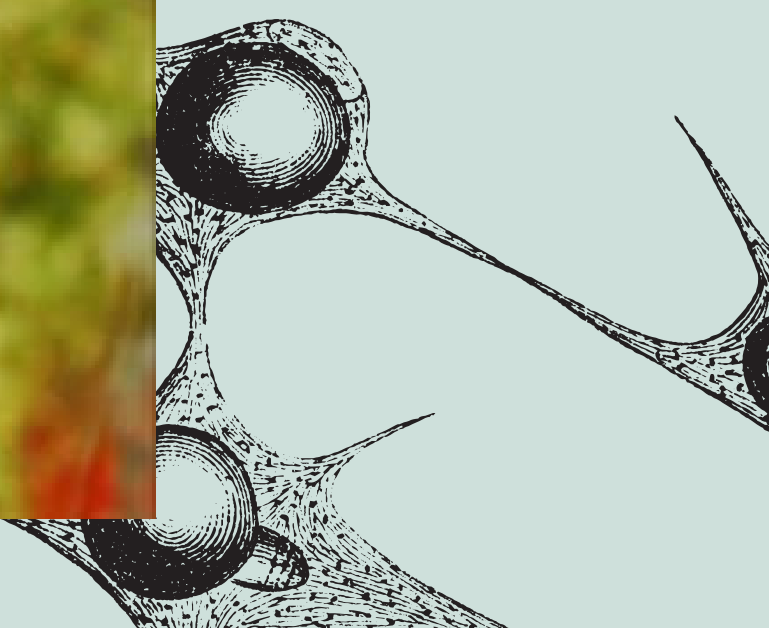
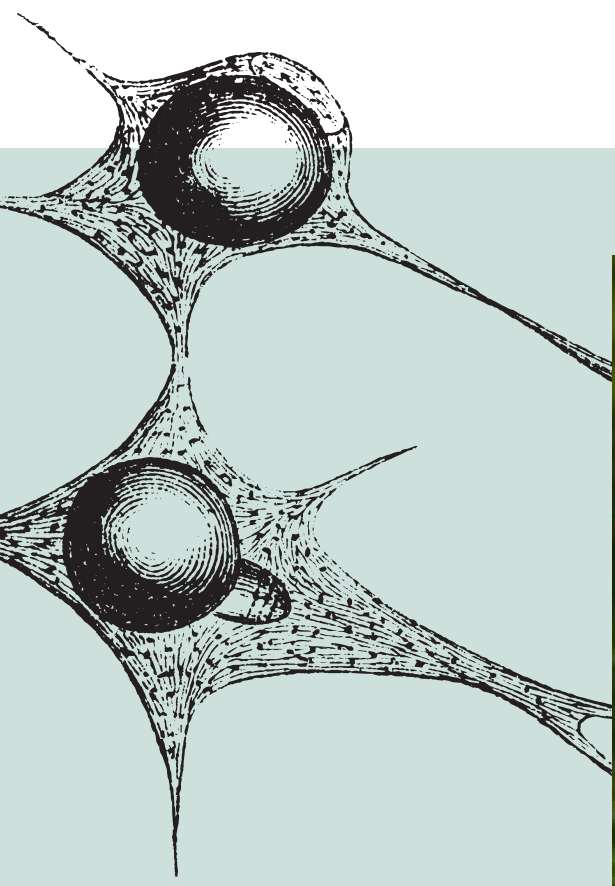
WELCOME BACK! LET'S REVIEW. . .

Today's Agenda:

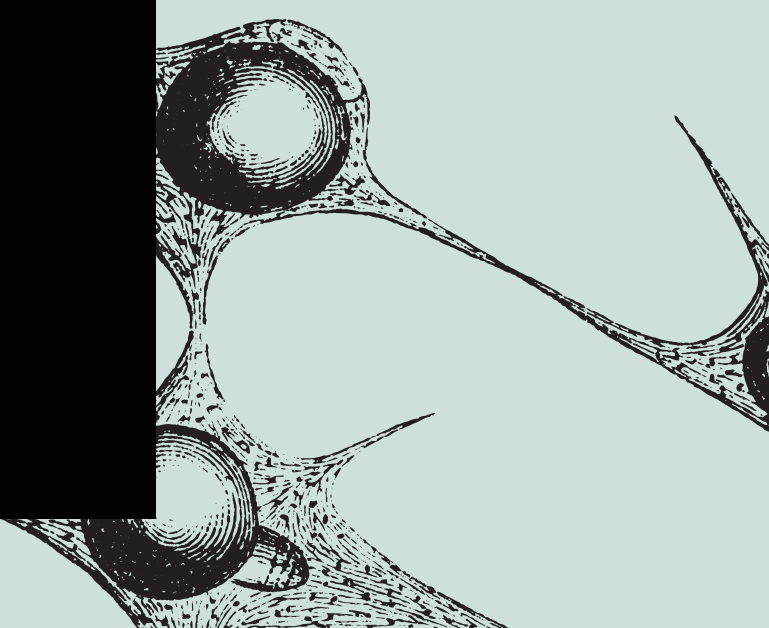
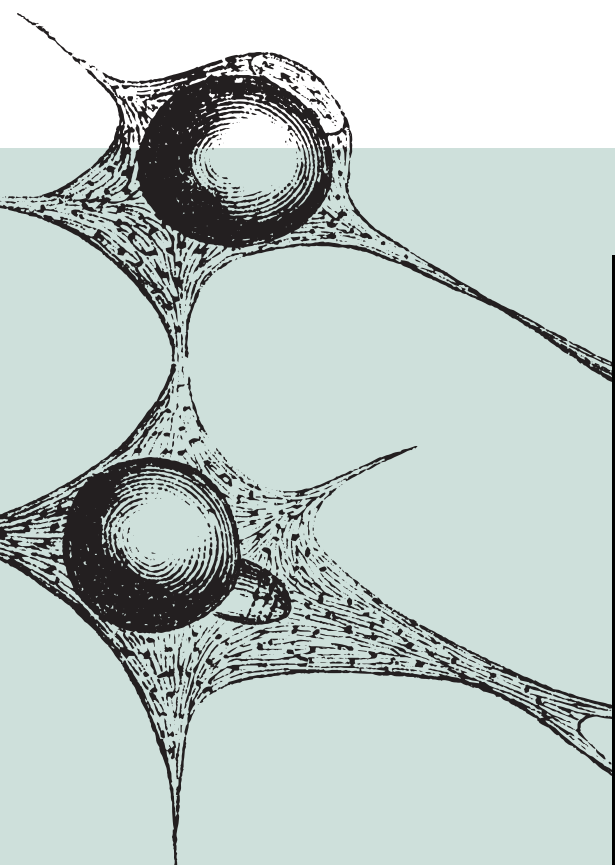
- Close-up Challenge
- Exploring Lenses
- Amoeba Sisters: Microscopes and How to Use a Light Microscope
- Microscope Handling and Safety
- Microscope Exploration
- Discussion
- Exit Ticket



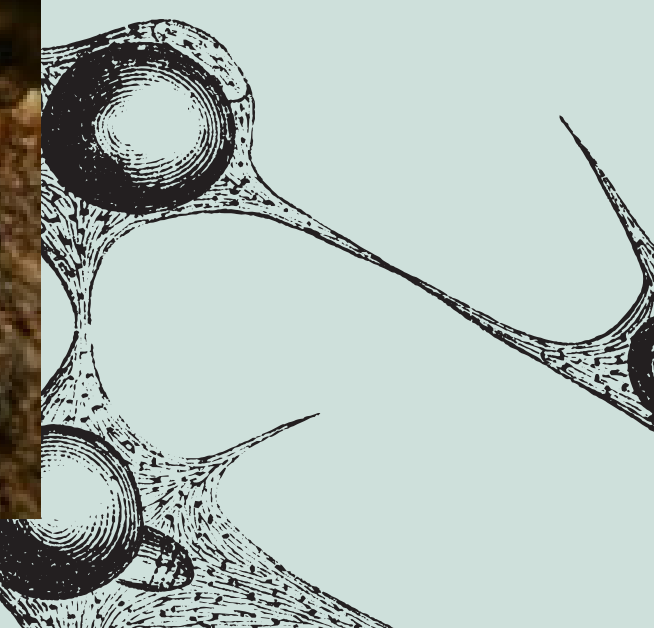
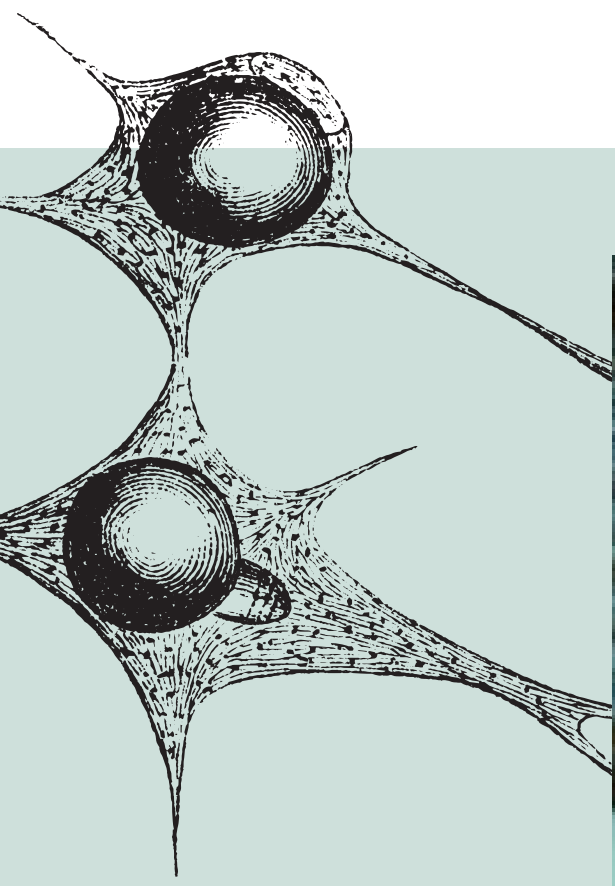
GUESS THE OBJECT IN THIS ZOOMED- IN PICTURE



A TOMATO!



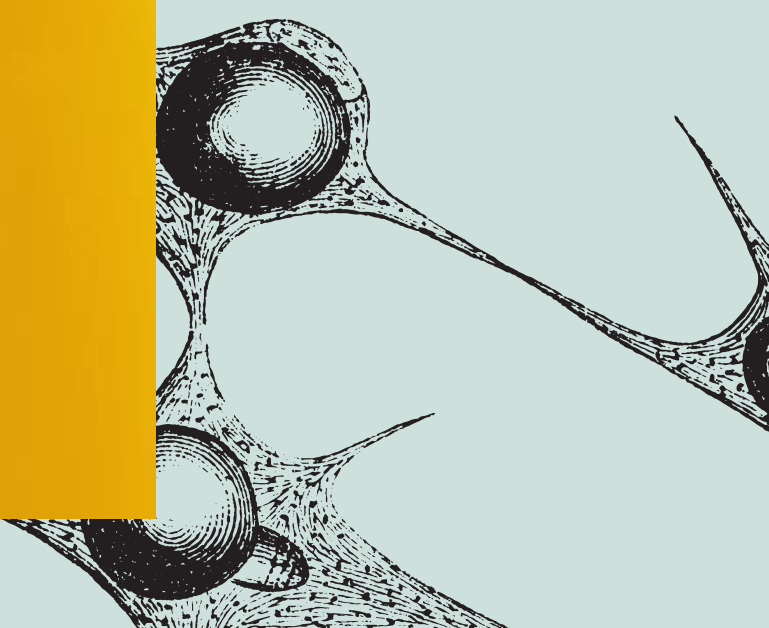
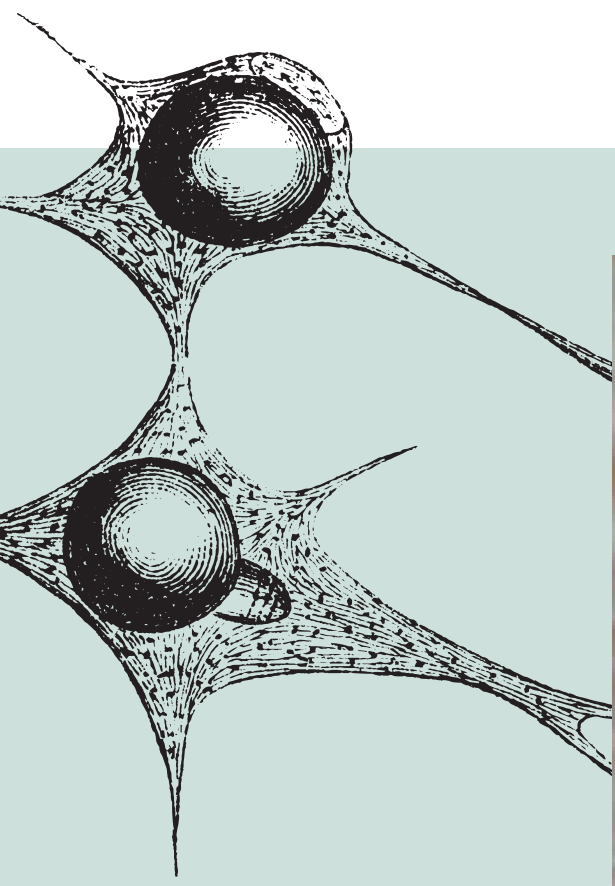
GUESS THE OBJECT IN THIS ZOOMED- IN PICTURE



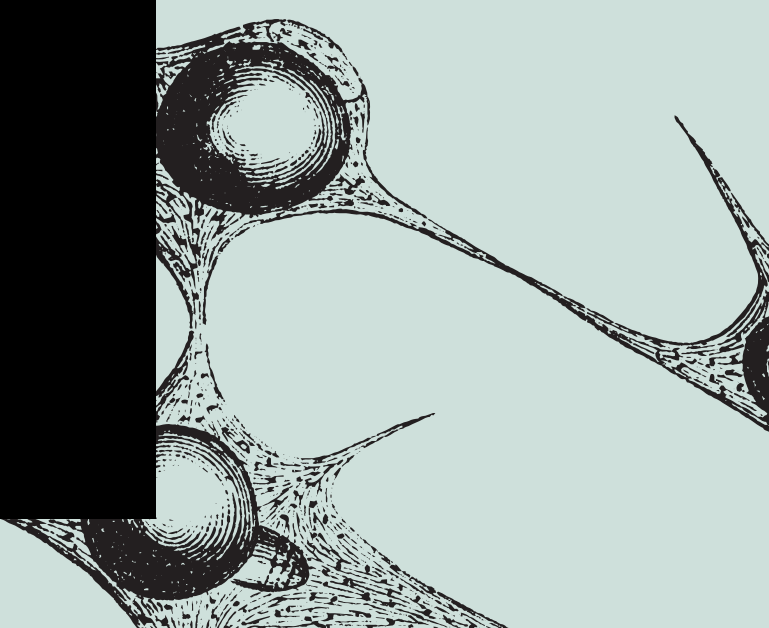
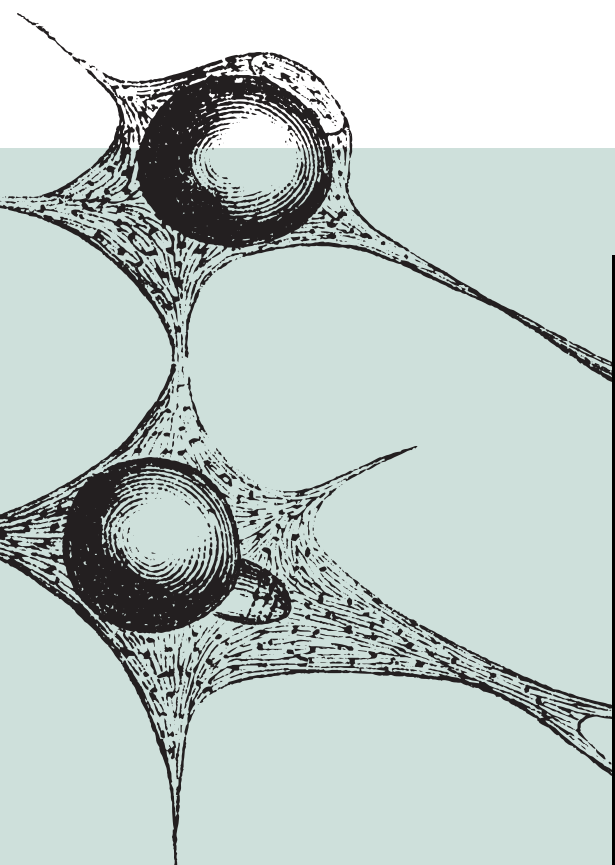
AN OREO!



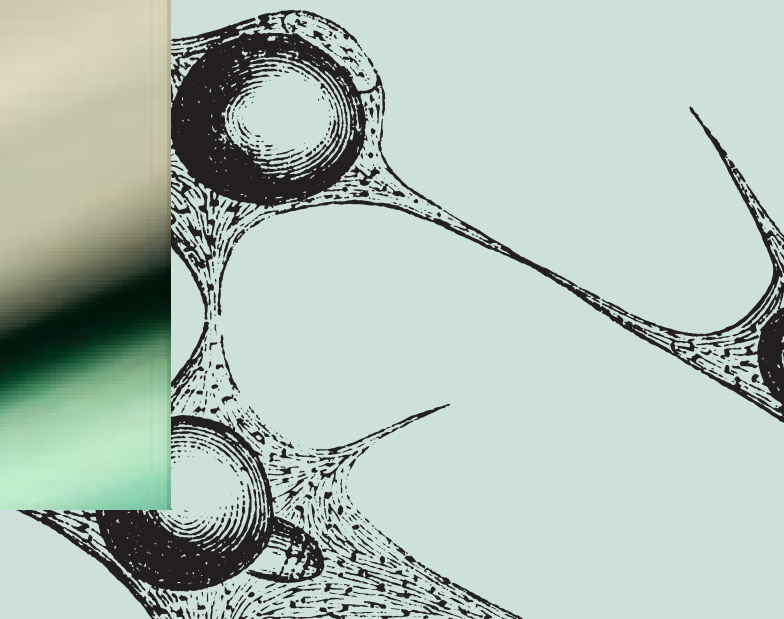
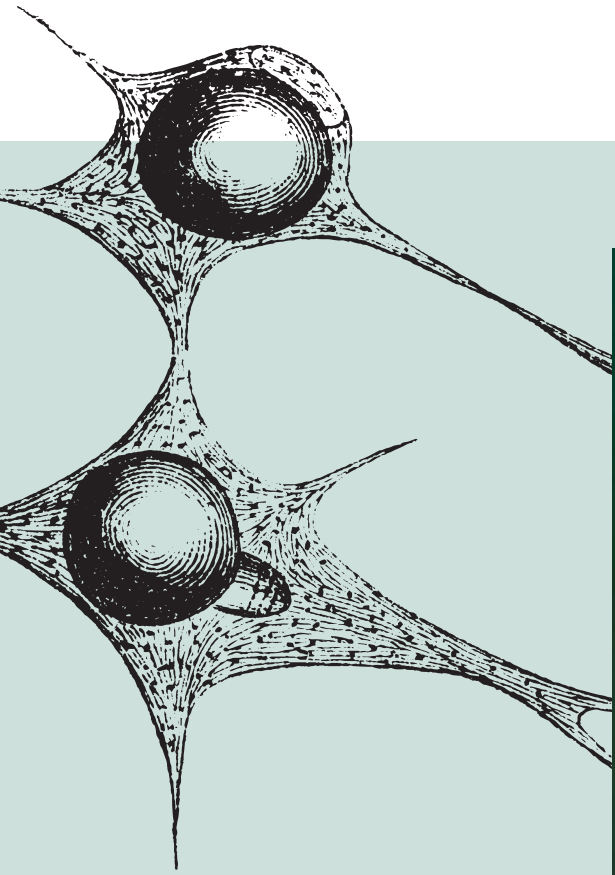
GUESS THE OBJECT IN THIS ZOOMED- IN PICTURE



A PENCIL!



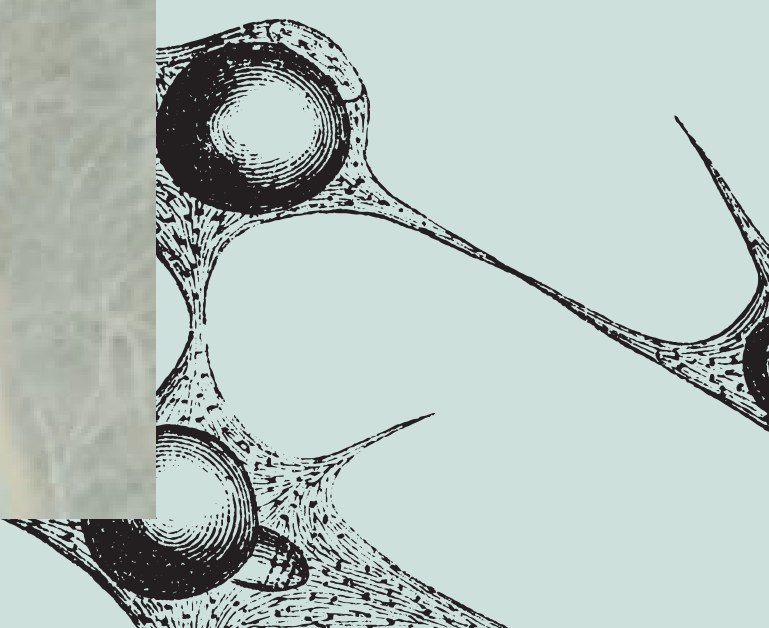
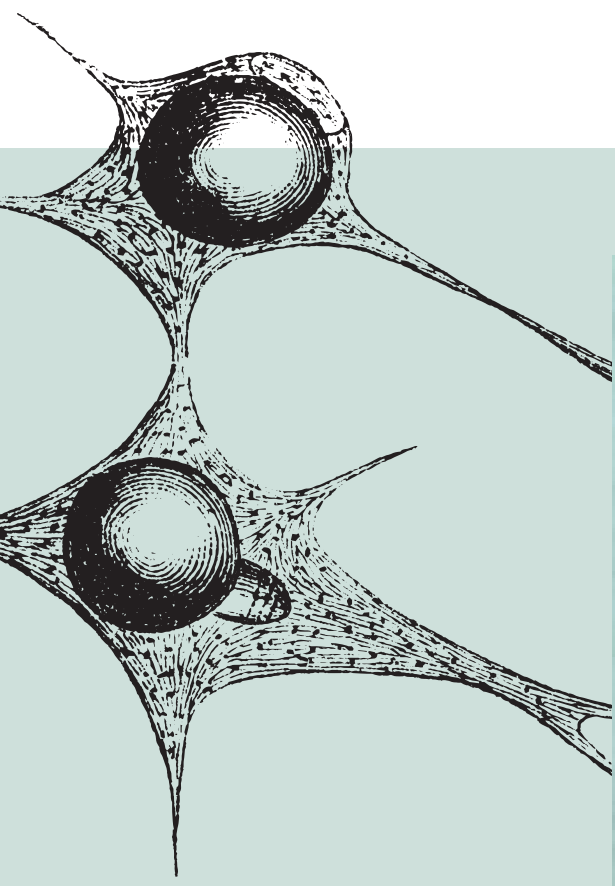
GUESS THE OBJECT IN THIS ZOOMED-IN PICTURE



A TOOTHBRUSH!



GUESS THE OBJECT IN THIS ZOOMED- IN PICTURE



A TEABAG!

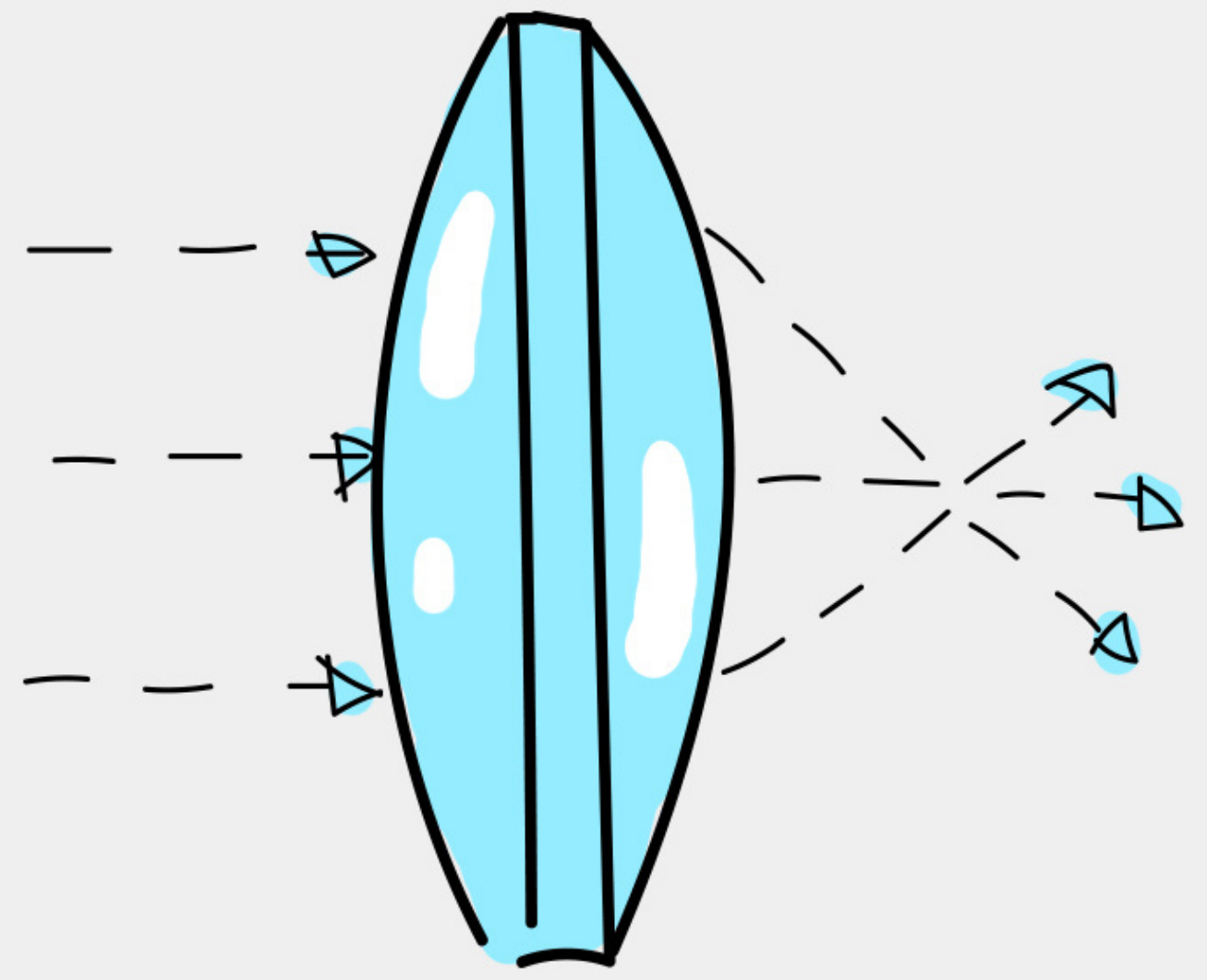
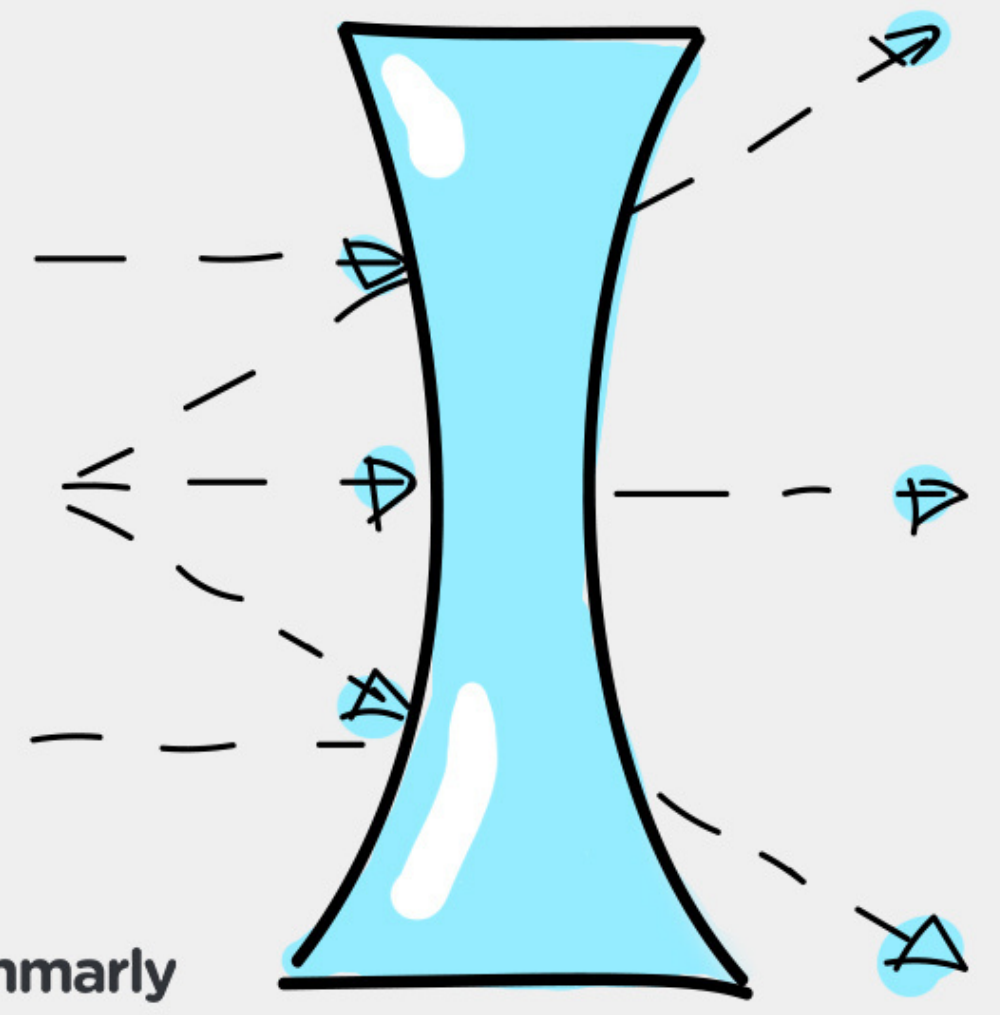


What are some tools that can help us view objects that are very small or very far away?

What are some tools that can help us view objects that are very small or very far away?

- *What do these objects have in common?*

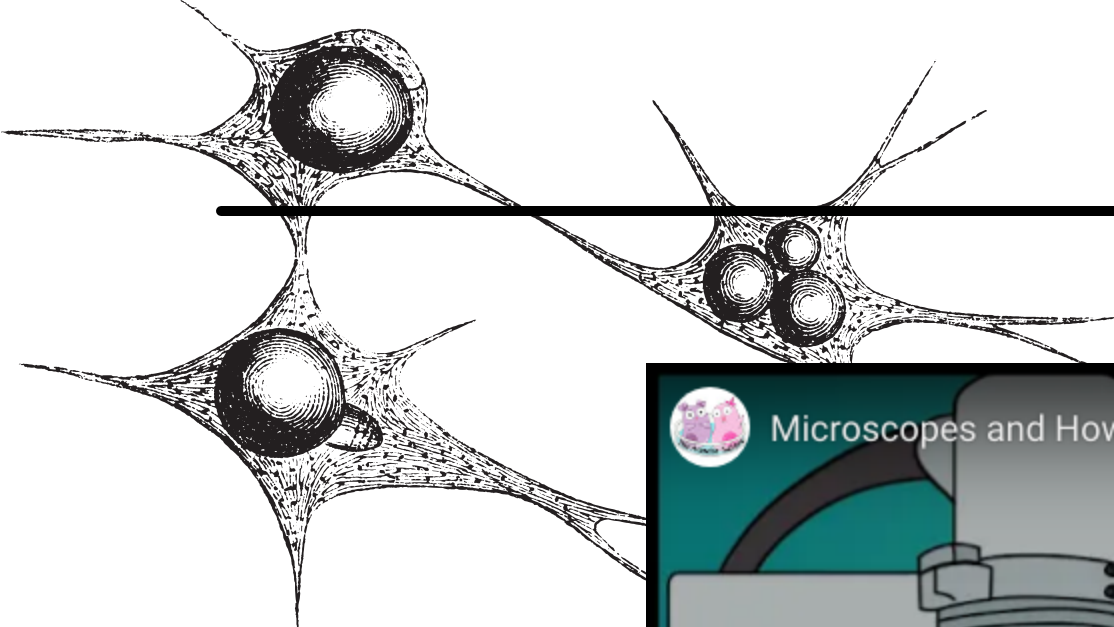
CONCAVE VS. CONVEX



Partner Activity: Exploring Lenses

Talk to the person next to you about the following. . .

- Describe the curvature or shape of each lens. Are they the same on both sides?
- If the curve of a lens is different on one side than the other, how do you think that will affect the image when you look through it? What if the curves on both sides are the same?
- Look through the lens. Do objects appear bigger, smaller, or the same? What do you notice about the curves of the lens you're looking through?
- Compare the lenses with each other. Do you think there's a connection between the lens curvature and how objects appear through the glass?



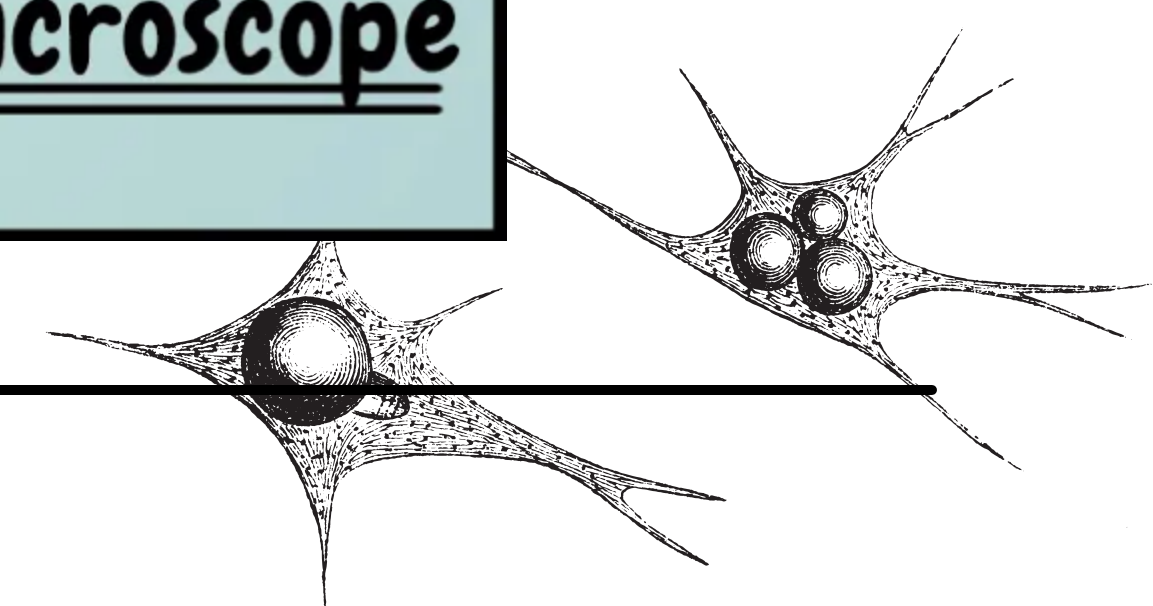
Microscopes and How to Use a Light Microscope

Share

Wheee!

Microscopes and How to Use a Light Microscope
with the Amoeba Sisters

Watch on YouTube



Closer Look at a Microscope:

Look at the microscope. What parts do you see?



Safe Handling and Proper Use



Safe Handling and Proper Use

CARRYING:

Always carry your microscope with two hands, one grasping the arm or back slot and the other supporting the base.



Safe Handling and Proper Use

TABLE PLACEMENT:

Set the microscope on a flat, solid support and in a position where it will not easily be knocked off. Coil the cord to avoid tripping over it.



Safe Handling and Proper Use

CLEANING:

Use only lens paper to clean lenses. **Never** use your finger, paper towels or spit to clean the lenses. Do not remove any parts for cleaning.



Safe Handling and Proper Use

FOCUS:

Always be aware of where the slide is when moving the stage up and down using the focus knobs. It's possible to move the stage too close to the lens and crush the slide.



Safe Handling and Proper Use

SAFETY:

Glass slides are easy to break, so treat them delicately. If a glass slide breaks, tell Jeff or James immediately. We can help you clean the glass.



Microscope Exploration

Fill out the microscope worksheet as you work. Follow the directions carefully.

After you finish the individual work and group work, glue the half sheet inside your science notebook and wait.

We'll go over them together as a class.



CLASS DISCUSSION: WHAT DID YOU NOTICE?

What are some similarities and some differences we noticed between the slides you looked at?

How were your sketches different from people at your table who drew the same slides?

Did you discover anything surprising when you increased the magnification?

What possible uses are there for a microscope outside a classroom?

What are some ways we could use microscopes in the future?