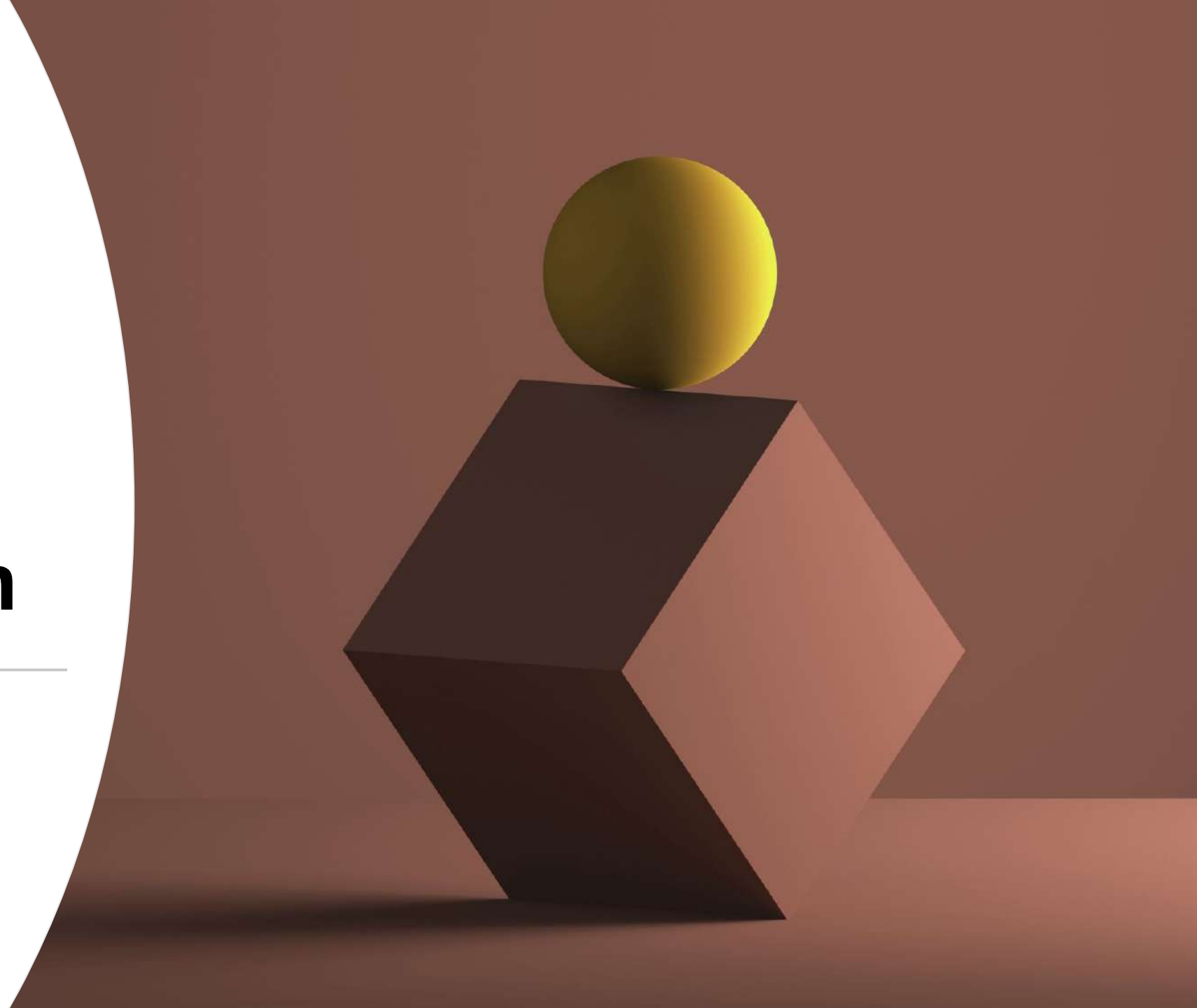
Welcome to Eureka!—Collaboration

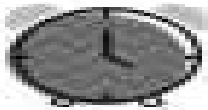
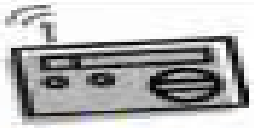
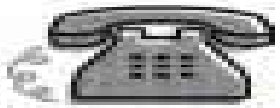
Unit 4 Lesson 1



Standards & Objectives

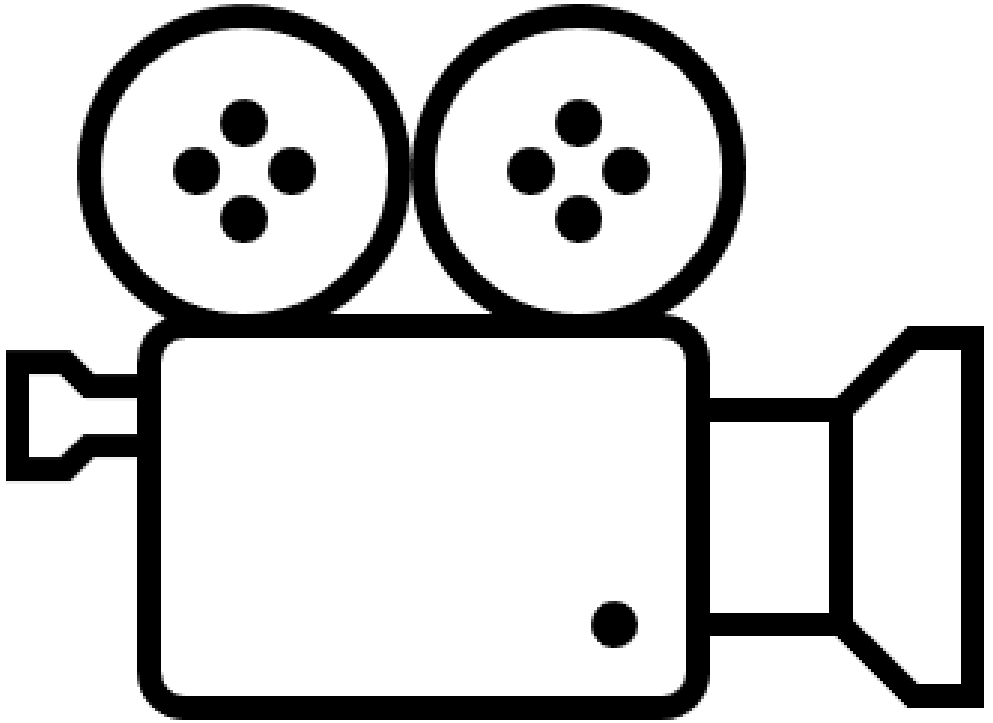
- **Speaking and Listening –** I can discuss and practice collaboration, following agreed upon rules and maintaining assigned roles. [SL.4.1, SL.4.1b]
- **Reading –** I can integrate ideas from two texts and speak knowledgeably on the best practices of collaboration. [RI.4.9]
- **Writing –** I can write clearly about my own collaboration experience, supporting my opinions with facts and details. [W.4.4]

EUREKA! STUDENT INVENTOR SCOREBOARD

 AIRPLANE	
 ALARM CLOCK	
 MICROSCOPE	
 PAPER	
 RADIO	
 TELEPHONE	

Welcome to Eureka!

Play video: Welcome to Eureka!



A Note from Thomas Edison:

Welcome, widgets. As your judge, and as the owner of 1,093 patents (by far the most of any of these puppet clowns), I have the awesome responsibility of giving you your first challenge. How, you might ask, did I, one man with only twelve weeks of formal schooling, achieve so much? Hard work, hard work, and more hard work. And not just my own hard work: in Menlo Park, New Jersey, I started the first industrial lab, hiring scientists, technicians, and mathematicians to carry out research and development to further my ideas. Honestly, I am not a huge fan of working with people, and I don't know that my employees were so thrilled to work with me, but we put up with it because we knew that many minds lead to excellent innovation! So you will also be working in lab groups. Go find them.

Sincerely,

Thomas Edison

FIND YOUR LAB MATCHING GAME

1. Read your clue and circle any words that provide details about your invention.
2. Find your group by discussing your clues with your classmates, and listening for other clues that match yours.
3. Sit together and raise your hands so the host can confirm you are correct.
4. Create a name card for your lab and write an invention slogan.

What is an invention?

- something new
- something that does something
- something you build
- something that can help humans improve their lives.

What is an invention?

An invention is an object or process that someone MAKES that is NEW and DIFFERENT and was created to DO SOMETHING

What is collaboration?

My brother and I learned that our chores go more quickly when we practice collaboration.

- working together
- everyone contributing
- sharing ideas
- helping teammates

A Note from Jacques Cousteau:

Bonjour, tadpoles! Inventing—it is like a boat trip. Lab mates are at once alone and together amid the hostile seas. (Alas, this season they will not let me put you on a boat amid hostile seas to demonstrate this. I swear to you, the thing with the jellyfish was not something we could have prevented! And no one, including the jellyfish, suffered any permanent damage! The network, it spoils all my fun.)

But I digress. Here is the thing: you must work together in this Quest. You must listen to one another. You must let everyone have a turn. You do not know—ze quiet one in ze corner could save your life. I mean . . . fix your invention. Oui!

It is not the easiest thing, collaboration. So today, we practice! You see the collaboration wedge? I am not giving that away for freebies!

Sincerely,

Jacques Cousteau

Rules for Collaborating

Things TO DO when collaborating	Things NOT to do when collaborating
Take turns talking and listening. Stay on task. Ask good questions. Make suggestions in a positive, constructive way. Consider everyone's ideas. Help others and ask for help when you need it. Contribute!	Don't interrupt others. Don't work alone. Don't be mean when making suggestions. Don't only use your own ideas.

A Note from Jacques Cousteau:

It is all well and good to talk the collaboration talk, but what about when you must walk the collaboration walk, to put these rules into practice yourself? This is the big one, my wiggly fishies. If you succeed in this challenge—and by succeed, I mean work together thoughtfully and well, and then write about how you did it—you will earn your first wedge to get your Wheel of Invention rolling.

Sincerely,

Jacques Cousteau

JACQUES'S COLLABORATION BUILDING CHALLENGE

Devise a way to pick up a standard ping-pong ball from the table, pass it around among the group (each lab member must be in control of it for three seconds), and then put it in the basket.

- Do not touch it with your hands. That includes covering your hands with any kind of glove-like item!
- Do not drop it.
- You may use up to two pencils, ten pieces of tissue, and a box of rubber bands.

You may use trial and error and test your experiment or components of your experiment as you build. Keep your ping-pong ball under control at all times!!

Notes on group work:

You will work in your lab to complete this building challenge. In order to be successful, you will need to work together! Ensure that all lab members are given an opportunity to express their opinion and that everyone is contributing to the process. Listen carefully to what the other members of your group have to say. Their ideas may help you come up with a new idea of your own.

For this challenge, one team member will be assigned the role of building manager.

The building manager leads the decision-making process. This does not mean that the building manager has to do all of the work, or that the group uses all of the building manager's ideas! But sometimes, when a group has many ideas, it can be hard to decide which one to try first. The building manager should listen to the lab and help make that decision. He or she can call for a vote, or, if there's a tie, break the tie. If there are several tasks to be accomplished at the same time, the building manager can assign them. If you don't know what you should be doing to help, ask the building manager.

Share with the Audience

1. What went well?
2. What was the most enjoyable part of the activity?
3. What are you most proud of? What was hardest?

INTROSPECTIVE INVENTORS

- Can you think of anything particularly clever or helpful that a lab mate did during the episode?
- What was a challenging moment, and how did you address it?
- What are you looking forward to?
- What is a lesson you'll take away from today and apply to the rest of the Quest?

EXIT TICKET

Why is collaboration important?