



# STEM CAREER ADVENTURES

## Ophthalmologist: Building an Eyeball

### Adventure Description:

In this adventure, you will think like an ophthalmologist and build an eyeball!



### Activity

#### Step 1: Background on Ophthalmologists (5 minutes)

- Ask students if they have ever heard of an ophthalmologist.
- Explain to students that ophthalmologists are a special type of doctor who knows all about eyes. Show **Handout: Ophthalmologists**. Discuss how ophthalmologists help children and adults who have a problem with their eyes or may need glasses to see better.
- Take a quick class poll: How many people wear glasses? How many people in your family wear glasses? Write the results on the board. Explain to students that an ophthalmologist is an expert on eyes and can help people decide if they should wear glasses so they can see better!

#### Step 2: Learning about the Eye (5 minutes)

- Explain to students that they will now draw what an eye looks like. Students should look in a mirror or should look at a friend's eye while they draw.
- Once students are done, ask students to brainstorm what they think eyes are made of. Ask if students think that eyes have parts or not.
- Next, explain to students that there are many parts of the eye. Each part of the eye has a job! Show **Handout: Parts of an Eye**. Ask students if they included all parts of the eye in their drawing.

Please contact Allison Bischoff, Director of Teacher Support , at [allison@rozzylearningcompany.com](mailto:allison@rozzylearningcompany.com) or 314-272-2560 with questions.



## Step 3: Building an Eye Ball (20 minutes)

- Explain to students that they will now build their own eye ball!
- Provide students with **Handout: Steps to Build an Eyeball**. As a class, read through the steps. Explain that they will be in charge of choosing what materials to use to build each part of the eye ball.
- Explain to students that they will first build the iris. Have students select which building materials they want to use. Allow students to build for 5 minutes.
- Explain to students that they will now build the pupil. They will have 5 minutes to build.
- Now, have students build the sclera. They will have 5 minutes to build.
- Lastly, have students build the eyelid. They will have 5 minutes to build.

## Extra Time: Creating Contacts or Glasses (10 minutes)

- Explain to students that ophthalmologists look at someone's eyes to see if there is a problem or if someone has trouble seeing. If someone has trouble seeing, they might need glasses!
- Show **Handout: Glasses and Contacts**.
- Explain to students that they will now build glasses or contacts to go over their eye ball.

## Materials List

### Provided online:

- Handout: Ophthalmologists
- Handout: Parts of an Eye
- Handout: Steps to Build an Eyeball
- Handout: Glasses and Contacts

### Not provided (each student or group needs):

- Art supplies
- Building materials
- Scissors and tape

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