

Beyond Our Shells

This lesson helps students identify what makes them unique, not judging something by its outsides, and treating others fairly through kindness, caring, and sharing. There is a heavy science component to this lesson which could coordinate with other science lessons you are doing at this time. Merge the two where possible to extend the lesson beyond this lesson. Project #1 coordinates with this lesson as well, so it is a strong way to end the Inclusiveness Unit if you are doing that project and going through these lessons in order.

Inclusiveness Sub-Concept(s)

Fairness, Kindness

Lesson Timeframe

45 minutes

Required Materials

- ☐ Paper and pencils
- ☐ Two eggs: 1 white egg and 1 brown egg (for the first experiment)
- ☐ Bowl (for breaking the eggs)
- ☐ Egg(s) [number depends on how many you wish to do; at least two, but you may elect to use one egg for each child; plan ahead for whichever approach you take]
- ☐ bowl(s)
- ☐ Vinegar
- ☐ refrigeration

Standards Map

This lesson aligns with CASEL Competencies, National Health Education Standards, and Common Core State Standards. Please refer to the [Standards Map](#) for more information.



DESIGNATED BY CASEL
AS A RECOMMENDED PROGRAM
FOR SOCIAL AND EMOTIONAL LEARNING.
See last page for details.

Lesson Objective

Students will:

- Use chemistry to personify the idea of looking beyond someone's outsides and into what really matters on the inside.
- Build skills in comparison and contrast.
- Discuss what makes two things the same and what makes them different.

Teacher Connection/Self-Care

Ask yourself this question each day this week: How can I treat people in a way that does not show favor for some and not others? Identify one action step you can take to move forward in your quest for fairness!

Tips for Diverse Learners

- While this shouldn't be a problem because students are not ingesting the eggs, if there is anyone with a severe egg allergy, you will want to be mindful of that.
- Using white and brown eggs might lead to conversations about race if you have students of different races or with different skin colors in your class; be prepared to address a complex topic in a way that relates to the lesson and is appropriate for your learners. [This Teaching Tolerance guide](#) is a good resource to prepare for these conversations.
- You might also choose to dye two white eggs so they are each a different color, vs. focusing on brown and white. You might also use different colored apples to accomplish the same goals of the Inspire section of this lesson. You will need to use eggs for the Empower section.



Share

3-5 minutes

Open with a review of the words inclusiveness and fairness. Ask students if they can remember our definitions:

Inclusiveness: Including others, inviting them in, and welcoming them with open arms.

Fairness: Caring for and sharing with others so that things are equal and everyone is included.

Remind students that when we don't know someone, or when we don't take the time to care for someone and share with them, it's easy to forget to be fair with them. It's easy to forget that even if we each have unique things about us that make us different, we also have things that make us very much the same.



Inspire

7-10 minutes

Explain to students that they are going to investigate two eggs and do some comparing and contrasting.

On a piece of paper at their desks, ask students to draw a T-chart. You may need to model this on the board.

- At the top of the left column, they should write **SAME**.
- At the top of the right column, they should write **DIFFERENT**.

You can also choose to do this exercise as a class vs. students working individually. Adjust the instructions below accordingly.

Instructions:

- Hold up a brown egg and a white egg for students to see.
- Ask students to write or draw what is the **SAME** about the two eggs.
- Then, ask students what is **DIFFERENT** about the two eggs. Ask them to write or draw their responses.

When the writing is finished, invite students to share their answers. Consider asking for just one answer and then allowing students to pick another student to share an answer. When the "SAME" column is exhausted, move on to the "DIFFERENT" column.

Going deeper:

Now, crack the eggs open into two separate clear bowls without letting students see and walk around the room.

Ask: Which one is the white egg and which one is the brown egg? Can you tell? Why not?

Invite student responses.



Empower

10-12 minutes

Remember that being different is not a bad thing. Being different is great!

Ask: *Why is being different and unique a good thing?*

Sometimes kids and adults alike forget this, though. Sometimes we let our differences get in the way of including others, of being fair, and of being kind. But, when it comes to our insides and who we really are, much like the eggs, we have a lot of the same qualities inside.

To help us remember this, we are going to do a science experiment. We are going to find out what happens to eggs when we put them in vinegar for two days.

Instructions:

- On their T-Charts, have students write down their prediction on the following question: “What will happen to eggs if we put them in vinegar for two days?”
- Ask students to share their predictions and why they think this way. Explain that they will be checking if their predictions were correct in two days.
- Then, follow the instructions for making “naked eggs” here: <https://www.exploratorium.edu/cooking/eggs/activity-naked.html>

Experiment Summary:

What will happen is the vinegar will dissolve the outer shell, leaving a translucent, bouncy egg (which will bounce from an inch or two off the table but will break and create a mess if dropped from higher up!). You could do this with one brown egg and one white egg, or with two eggs of the same color, or with one egg for every student. You could write each student’s initials on an egg. The idea will be to demonstrate that, once the shells are gone, you can’t tell a difference between/among the eggs.

NOTE:

The egg(s) will need to be stored in the refrigerator so plan ahead to use a refrigerator in the staff room or school kitchen.



Reflect

7-10 minutes

After two days (checking and, if able/willing, changing the vinegar after the first 24 hours), bring the eggs back to the classroom. Remove each egg from the vinegar and wipe it clean. Show students what happened to the egg. You could put students in small groups, and classroom helpers could monitor the egg examination. Return to the student predictions. Were they correct?

Reiterate the idea that just because we see something on the outside, it is what is on the inside that matters. You can remind students how easy it is to take off that outer layer and reveal the really cool, unique, and wonderful inside. Plus, once our outer layers are off, we are much the same inside!



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LEARNING.

The Collaborative for Academic, Social, and Emotional Learning (CASEL) has been reviewing evidence-based SEL programs since 2003. Kindness in the Classroom® meets CASEL's SElect Program and is included in the CASEL Guide to Effective Social and Emotional Learning Programs.

Kindness in the Classroom® met or exceeded all of CASEL's criteria for high-quality SEL programming. Kindness in the Classroom® received CASEL's highest designation for high-quality SEL programming.

<https://casel.org/guide/kindness-in-the-classroom/>