

ADVANCED LEARNING LABS

A partnership between the North Carolina Department of Public Instruction and Duke TIP
TO ENGAGE, ACTIVATE, AND GROW OUR STUDENTS

GRADES

6-7

Lab 7 • Interactions



ENGLISH LANGUAGE ARTS

Choose a member of your house to participate.

Draw a triangle, a circle, and a line on a piece of paper. Consider what attributes you would give each shape. Each of you picks which shape best fits the personality of the other person. Plan your explanation by creating a graphic organizer in order to determine, organize, and make connections between the attributes of the shape and those of the person.

Write down three to five attributes on the paper and why they fit that person. Write a cohesive paragraph explaining what attributes the person and that shape have in common. Be sure to include relevant facts, concrete details or quotations from the person in your explanation. Read your paragraphs to each other.



SOCIAL STUDIES

Throughout history as technology has advanced different countries and societies have begun to interact and share ideas more frequently.

Watch the video linked below to review Globalization and some of the positives and negatives associated with the increased interactions between societies. **Link:** <https://www.youtube.com/watch?v=JJ0nFD19eT8>

What role do you think everyday citizens have in mitigating the effects of globalization? As groups of people look towards more socially conscious brands how do you think that will affect large corporations?

Write an op-ed article using evidence to support your opinion to explain your answer.



SCIENCE

Baking can be very similar to a science experiment! You have to monitor and adjust your ingredients based on how they may react while cooking, just like materials used in a science experiment.

Many families have been baking more bread in the past two months. While the ingredients go into the oven a goopy mixture, the baked bread has a larger volume and a solid structure with air holes inside. Identify what is happening to the molecules to give rise to the larger volume and the air holes. Explain your reasoning.

Predict the possible different sources for the gases inside the bread. How do you think you could increase or decrease the volume of the bread?



MINDFULNESS

Choreograph a signature dance! Science has proven that the interaction of music and dance can improve health.

This week:

1. Decide on a motivating song.
2. Write down 3 inspiration sources (other dances, nature, etc).
3. Find a space to move freely.
4. Start moving! Get warmed up by trying different steps.
5. Piece moves together and don't be afraid to get silly!

Make this dance something you can do together and build on for years to come!

Link: <https://www.healthline.com/health/fitness-exercise/benefits-of-dance>



LOGIC PUZZLE

I Scream, You Scream, We All Scream...for Logic Puzzles!

Place the Ben & Jerry offerings in the grid to solve the puzzle. Share with a friend or family member and see if they solve the puzzle quicker than you!

Link: <https://bit.ly/3gf8yPV>



FIELD STUDIES

This week you'll look at how we interact with space by doing a virtual tour of NASA's Simulated Lunar Operations Laboratory.

Link: <https://www.nasa.gov/specials/slope360/>

What part of space do you think NASA should explore next? How can non-space related businesses support and engage in space exploration?

Explain why interacting with space is important.



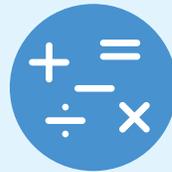
RESEARCH EXPLORATIONS

Sociologists study how people interact in groups. How each person behaves can change how the group interacts. Each day for four days, choose a one-hour block of time and tally every time someone gives a compliment to someone else in your family. Then, read how to give and receive compliments at this link:

Link: <https://www.psychologytoday.com/us/articles/200403/the-art-the-compliment>

For two days, be intentional about giving as many genuine compliments as possible. Then, each day for four days, choose an hour and tally every time someone gives a compliment to someone else in your family.

How did your family interactions change after you gave a concentrated dose of compliments?



MATH

If you've interacted with nature, you've probably noticed some patterns! Much of nature is built by the Fibonacci sequence. Watch the video (part 2) for a look into how math and nature interact (watch part 1 if you don't know Fibonacci numbers). At the end of the video, what anomaly does she discover? Watch part 3 to learn more about other patterns in nature. What patterns can you find in nature? Can you find any anomalies? If a plant started with 4, 9, or 15 leaves how would you expect patterns to develop? How would they be alike and different?

Links:

Part 1: <https://youtu.be/ahXIMUkSXX0>

Part 2: https://youtu.be/IOIP_Z_-0Hs

Part 3: <https://youtu.be/14-NdQwKz9w>



North Carolina Department of
PUBLIC INSTRUCTION



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GRADES

2-9

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Works Cited and Answers

Works Cited- Math:

2-3 and 4-5 activity based on Fractal Leaf Art from Math Engaged -
<http://mathengaged.org/resources/activities/art-projects/fractal-leaf-art/>

Field Studies:

For more information about the future of spaceflight, read "Future of Spaceflight and NASA Missions Information" <https://www.nationalgeographic.com/science/space/space-exploration/future-spaceflight/>

English Language Arts:

- 8-9 May serve as mentor texts:
- "Did I Miss Anything?" by T. Wayman
 - A&P by J. Updike

Logic Puzzle

6-9 Solution: <https://bit.ly/2ZuCpht>

Advanced Learning Lab 7

NC Standards Alignment

| Math | |
|-----------------------|--|
| K-1 | N/A for Lab 7 |
| 2-3 | NC.2.MD.1, NC.2.MD.4; NC.3.MD.2, NC.3.NF.4 |
| 4-5 | NC.4.NF.2, NC.4.NF.3, NC.5.NF.1, NC.5.NF.4 |
| 6-7 | NC.6.RP.1 |
| 8-9 | Not aligned to a specific NCSCOS standard |
| 10-12 | N/A for Lab 7 |
| English Language Arts | |
| K-1 | N/A for Lab 7 |
| 2-3 | W.3.3 |
| 4-5 | W.5.3 |
| 6-7 | W.7.2.c. |
| 8-9 | W.9-10.3d W.9-10.3e |
| 10-12 | N/A for Lab 7 |
| Science | |
| K-1 | N/A for Lab 7 |
| 2-3 | 3.P.2 |
| 4-5 | 5.P.3 |
| 6-7 | 6.P.2, 6.P.2.2 |
| 8-9 | 8.P.1 |
| 10-12 | N/A for Lab 7 |
| Social Studies | |
| K-1 | N/A for Lab 7 |
| 2-3 | 3.G.1.3 |
| 4-5 | 5.C.1.2 |
| 6-7 | 7.H.2.3 |
| 8-9 | 8.C&G.1.1 |
| 10-12 | N/A for Lab 7 |