

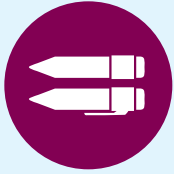
# ADVANCED LEARNING LABS

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

GRADES

4-5

## Lab 4 • Community



### ENGLISH LANGUAGE ARTS

A community is a group sharing common location or common interests. Think of a community to which you belong (could be neighborhood, school, or family). Think of a way this community could be improved or changed.

Imagine your community has a newspaper or newsletter that everyone reads (this may in fact be true!). Write a letter to the editor sharing the ideas you want to be implemented. Be sure to state your opinion clearly and include reasons that are supported by facts and details. Use persuasive techniques to convince the audience, and anticipate any objections. Conclude your letter with a clear call to action for what the next step should be.



### SOCIAL STUDIES

The Declaration of Independence is a document that established the United States as a free nation, separate and apart from Great Britain.

Your task is to read and analyze the Declaration of Independence and RE-WRITE the document (the first and final parts) so that it would make sense to someone reading it today.

To assist you in this task, you may want to listen to this presentation by Katie, an expert with the National Archives, as she leads a group discussion online on the 5 W's of the Declaration of Independence.

Link: <https://bit.ly/2xQYn2M>



### SCIENCE

Go outside and observe a space that has trees, grass or weeds, and evidence of animals living in or visiting the area (such as birds, mammals, and insects) in your community.

Sketch or describe the space. Classify the organisms in the space as producers, consumers, or decomposers. Explain how they are interconnected. Identify and evaluate the positive and negative impacts that humans have on this ecosystem.

How can you share this information with members of your community to educate them about your community ecosystem?



### MINDFULNESS

A Harvard University article says that giving thanks makes you happier.

Make a gratitude jar to remind yourself of all the things for which you are thankful. Place a jar in a central location in your house. Write "I am thankful for \_\_\_\_\_" on ten small pieces of paper and place them next to the jar with a pencil.

Explain to your family that when any of you think of something for which you are thankful, you should write it down and put it in the jar. When you are feeling down, you can pull out a piece of paper from the jar to read!

Create a gratitude jar to share with a family in your community.



## LOGIC PUZZLE

Complete the Sudoku and then try a Kaodoku!

A Kaodoku is a variation of Sudoku with symbols that are only partially given.

Instead of numbers, the cells have smiley faces. There are 3 types of shapes and mouths for each smiley. Each of the 9 possible smiley combinations may only appear once in each column, row, and section.



Follow the link: <https://bit.ly/2SKnmvA>

To learn more about Sudoku, visit <https://www.learn-sudoku.com/what-is-sudoku.html>



## FIELD STUDIES

What do animals at the Georgia Aquarium do in their free time when the aquarium is closed?

Find what different animal communities are up to when no one is looking! Visit the aquarium and watch live-camera footage for 2-3 animals of your choice.

**Link:** <https://www.georgiaaquarium.org/webcam/southern-sea-otter-webcam/>

What differences do you notice between the different animals? How are the animals the same?

Watch the live-cameras at different times during the day. What differences do you notice in the animals' behavior at different times? Why do you think the animals act differently at different times?



## RESEARCH EXPLORATIONS

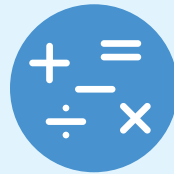
Sociologists research how people within communities behave and interact.

Ask an adult about what games they liked to play at your age. Ask questions to learn more about the games and how they were different or similar to what you play.

What did you learn about how people behaved years ago compared to now? Write a description of the games they played and how they compare to the games you play. Include illustrations.

Would people who are other ages give similar or different responses? How are games kids play in other countries different than the games you play? Review the link below.

**Link:** <https://www.parents.com/fun/games/educational/games-from-around-the-world/>



## MATH

Explore cartography!

Draw three maps: your community, street, and home.

Color the maps ensuring no adjacent or opposite places are the same color. How many colors did you use? Could you use fewer? Why?

Map one room in your home. Use a book to measure wall lengths and heights. Calculate perimeter, area, and volume. Describe how calculations change if you use books of varying sizes. Using the fewest number of colors, map items in the room. Color adjacent items differently. How many colors did you use? Could you use fewer?

Which map was easier or harder to create? Share your maps and findings with a family member.



North Carolina Department of  
**PUBLIC INSTRUCTION**



DUKE UNIVERSITY  
TALENT IDENTIFICATION PROGRAM

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**K-12**

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### Works Cited and Answers

#### **Works Cited:**

**K-5: Four Color Theorem Resources-**

<https://www.crayola.com/lesson-plans/maps-and-math-lesson-plan/>

<https://www.mathsisfun.com/activity/coloring.html>

<https://medium.com/@MatthewOldridge/four-colour-theorem-187b32e03ce7>

**10-12:** <http://weusemath.org/>