

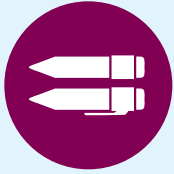
ADVANCED LEARNING LABS

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

GRADES

2-3

Lab 3 • Innovation



ENGLISH LANGUAGE ARTS

“A picture is worth a thousand words.”

Choose a personal photograph (one from your family) or find a picture online with at least 2 people in the photograph. Identify the key details - setting (when and where the story may take place), the relationship between the two (or more) characters, and key events that may be taking place.

Let's innovate!

Write a narrative short story that starts 30 minutes before the photo is taken and ends with the moment depicted in the photo. Use dialogue, temporal transition words (tomorrow, often, suddenly, after, soon, yesterday), and descriptive details to make the narrative compelling.



SOCIAL STUDIES

Oh, the places you'll go! Play “Where am I?” with a friend.

Using a map of the United States, first name a state where the friend is to start. Once the friend has found that state, then give directions so the friend can guess where you are. For example, I start in North Carolina and go three states south, where am I? (Florida!). If I go one state west and two states north, where am I?

You can start in any state, and use directions North, South, East, West, Northeast, Southeast, Northwest and Southwest. Start with two or three directions, and then add more.



SCIENCE

Place a 1L soda bottle (or another object that is at least 10 inches tall) outside in the sun.

Measure the length of the shadow it casts at 5 different times that same day, recording the time and length of the shadow.

As you review your data, when was the shadow the longest and when was it the shortest? Why?

Invent a way to keep the length of the shadow the same all 5 times you measure it. Explain why you think this would work. If possible, test your idea.



MINDFULNESS

On a sheet of paper, draw a large cloud. Then, draw another cloud inside of the first cloud.

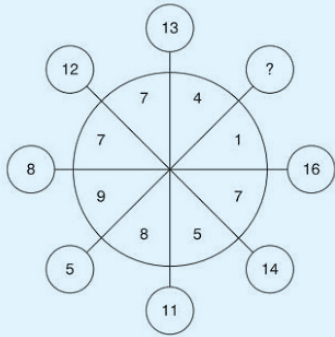
Think of something that recently frustrated you or caused you to worry. Write a few words or sentences about that inside of the smaller cloud. What are three good things that can come from this frustration or worry? Write those in the larger cloud.

Now that you have the silver lining, create a routine that you can use to help you overcome your frustrations. The first one can be ‘think of the bright side.’ Write the steps to your routine around the clouds and post the sheet in a place you can see often as a reminder to think positively when frustrated.



LOGIC PUZZLE

Solve the pattern puzzle below. Find the missing number to replace the question mark.



Answers: <https://bit.ly/2yemUPn>



FIELD STUDIES

How can recycling help our environment? Tour the Materials Recovery Facility (MRF). After you watch, complete the sentences below using the information from the video.

- I already knew...
- I now know...
- I want to know more about...

How could the MRF improve their recycling process to save time and energy?

Share your responses with a friend or family member.

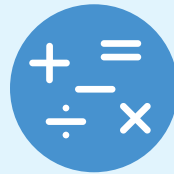
Link: <https://youtu.be/zgLW9CSvpRw>



RESEARCH EXPLORATIONS

Pretend you are an architect who designs innovative buildings (see <https://careerkids.com/pages/architect>). A company came to you requesting that you design a building with the same perimeter as the Pentagon. Research why the Pentagon is pentagon-shaped, and research what the length of each side of the Pentagon is to determine what the perimeter is.

Next, create drawings of 3 buildings of different shapes with the same perimeter as the Pentagon. How will the buildings you designed be used? How does the shape you chose make it good for that use?



MATH

The Duke Lemur Center is home to 14 different lemur species. Watch the video "What is a Lemur?"

Choose 3 species. Count how many of each you observe. Graph your observations in a bar- or pictograph. Which did you observe most and least frequently? Show the differences in 2 number sentences. Re-watch the video; recount the same species. Compare your observations. Did they change? How and why? How could you be more accurate? Based on your observations, design an innovative enclosure for ring-tailed lemurs. Describe what is in your enclosure and why.

Link: <https://youtu.be/3BMqbp9T5s>



North Carolina Department of
PUBLIC INSTRUCTION

