

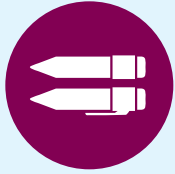
# ADVANCED LEARNING LABS

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

GRADES

4-5

## Lab 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 and imagine that photo is being used to sell a product in a magazine.

Write a paragraph that would accompany that photo to explain the product for sale. Citing relevant details from the photograph, use persuasive techniques to promote the product.

Finally, come up with an innovative product name and a "catch-phrase" for your product.



### SOCIAL STUDIES

Finding your location anywhere in the world is possible when you know how to use the imaginary gridlines called latitude and longitude to find out where you are.

Take an imaginary tour around the world using Google Earth to some famous landmarks. You will travel there by using Google Earth using the list of destinations you will find on this travel guide. After you have returned, you can develop your own itinerary of your favorite places to share with your family and friends.

Link: [https://drive.google.com/file/d/1df2aXCGHn6\\_bawmaJ8Qsl3PxlA1S8Wtn/view](https://drive.google.com/file/d/1df2aXCGHn6_bawmaJ8Qsl3PxlA1S8Wtn/view)



### SCIENCE

Draw a picture of what the moon looks like. Draw a picture showing the possible positions of the sun, earth, and moon relative to each other that would match your view of the moon.

Now, imagine that you traveled to Antarctica, how might any of these pictures change? Explain why. Use a picture if that helps your explanation.



### MINDFULNESS

What do you see in your reflection?

Reflective writing is a process where a writer records and communicates their thoughts about something in their life (ex. an experience or a feeling). Reflective writing is also an opportunity for a writer to be innovative and explore their learning and develop self-knowledge. Write a 15-line poem reflecting on your life.

Address these 3 things:

1. How have you changed in the last 3 years?
2. What makes you unique and special?
3. How do you want to grow and change in the next 3 years?

Illustrate your poem, showing the journey you wrote about.



## LOGIC PUZZLE

Solve the following if C, A, and T are different numbers

$$CAT = (C + A + T) \times C \times A \times T$$

Can you think of another solution if A=T?

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



## FIELD STUDIES

Imagine your class takes an annual trip to the San Diego Zoo. However, this year it will have to be a virtual trip.

You have been tasked with creating this innovative trip and serving as the virtual tour guide. Visit and explore the San Diego Zoo online, see link below.

**Link:** <https://zoo.sandiegozoo.org/animals-plants>

Create an agenda for your virtual tour detailing what plant and animals exhibits/attractions your class should visit during a 2-hour "visit". Add details and facts about the plants and animals you want to highlight during the trip.

Turn it into a scavenger hunt to share with friends and family.



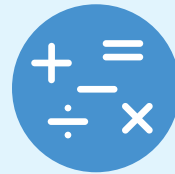
## RESEARCH EXPLORATIONS

Pretend you are an architect who designs innovative buildings (see <https://careerkids.com/pages/architect>).

Your task is to design a treehouse, following these steps:

- Conduct market research – ask at least 5 people what they would want in a treehouse.
- Research hardwood varieties and choose a type of tree for the treehouse.
- Draw a floor plan of your treehouse, incorporating the tree you chose and what people want.

Present your design and explain your decisions to a family member or friend.



## MATH

Most lemurs are herbivores. Scientists offered different fruits and vegetables to lemurs - corn, zucchini, cauliflower, squash, yams, red peppers, green beans, and eggplant.

**Link:** <https://docs.google.com/document/d/1-GvnCtFqrHOimUZoncWWtHFwBPQKuOixFa0n-ETKpgU/edit?usp=sharing>

From the graph in the link above, what 3 foods were most and least popular with all lemurs? How might scientists studying lemurs use this information? What do you observe about the species' favorites? How can you balance foods lemurs prefer with those they don't? Using each food twice, design a 7-meal menu that a primatologist could use to feed all lemurs.



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