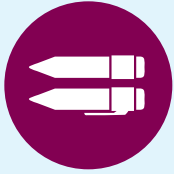


ADVANCED LEARNING LABS

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

GRADES
10-12

Lab 1 • Change



ELA

Choose a text written before 1960 by an American author. As you read, annotate for the major theme. Consider if there is a secondary theme presented in the text. If there is an additional theme, analyze how the author interweaves the development of these themes in order to build conflict between characters.

Write a letter to the author that expresses your analysis of the development of the theme(s) and how it impacted you as the reader.



SOCIAL STUDIES

There have been numerous innovations in technology since 1900 that have changed people's daily lives across the world.

Choose two technology advances:

- one that you think has had the most positive influence on society
- one that you think has had a negative influence on society.

Create a comparison chart to explain your answers using historical events.



SCIENCE

At present, with much of the world at a stop, some large cities/areas of the planet that usually have polluted air, are experiencing smog-free skies.

Explain the science behind this change.

What might be the short-term impact on the local and surrounding ecosystems?

Design a way to test/measure that impact. Predict what happens when the area opens up again and people go back to work.



MINDFULNESS

Choose five friends at random and leave them unsolicited, positive messages through notes or a video using your favorite social media platform or via a message to their phone.

Focus on sharing your favorite characteristics and memories of that person.



LOGIC PUZZLE

Word Garden:

This isn't your typical word search!

Use deductive reasoning to uncover hidden phrases that will lead you to a mystery theme.

Link: <https://tinyurl.com/yamgg24n>



FIELD STUDIES

Enjoy a virtual trip with TGR Foundation and Discovery Education to the Facebook Headquarters.

Consider how your interests and talents align to the careers described in the virtual tour.

What would be the next three steps you would take to learn more about that career?

Find a professional in that career you can contact for more information. See link below.

Link: <https://tgreduexplore.org/careerconnections>

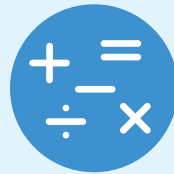


RESEARCH EXPLORATIONS

Go for a 30-minute walk, practicing good social distancing. Every 3 minutes, record how many people and how many dogs you see during that block of time.

Using the data, construct a 2-way frequency table and calculate the conditional, joint, and marginal probabilities. Are the events independent? How do you think the data would have differed:

- (a) if you walked 4 hours earlier or later
- (b) at the same time of day before the pandemic



MATH

Redesign a space where you live to work for you better!

How would you optimize the current space given the size constraints to meet both your current and ideal needs?

Create a design proposal that includes all the relevant measurements and geometric concepts.

Helpful hint: Use or make grid paper to help you with scale.



North Carolina Department of
PUBLIC INSTRUCTION

