

# ADVANCED LEARNING LABS

Collaboration between NC Department of Public Instruction and AIG Teachers across the state

TO ENGAGE, ACTIVATE, AND GROW OUR STUDENTS

GRADES  
10-12

## Time



### ENGLISH LANGUAGE ARTS

Science fiction is a popular genre among many readers, young and old. Going back in time to correct mistakes or traveling ahead to see the future makes time travel a common topic in this genre.

Choose three short stories about time travel from Daily Science Fiction and read them:

<https://dailysciencefiction.com/story>

If time travel did exist and you could travel forward or backward in time where would you go? Why would you travel to that time and what would you do when you arrive?

Create a diary entry of your experience. Make sure to include any emotions you faced while on your adventure.



### SOCIAL STUDIES

Introduced as an executive action by President Obama in June 2012, Deferred Action for Childhood Arrivals (DACA) was intended to give temporary protection against deportation to certain groups of young undocumented immigrants who were brought to the United States as children. View the timeline of DACA legislation changes: <https://bit.ly/2E3ILg9>

Explore both sides of the issue: How have DACA policies evolved since the initial action of the 2012 legislation? How has the American view of immigration changed since this time? What is the most convincing argument to continue with DACA? What is the most compelling reason to end a program like DACA?

Complete a Venn Diagram with the pros and cons of this program. Use this tool to help you write a speech or essay defending your opinion.



### SCIENCE

The Amazon Rainforest is the largest tropical ecosystem on the planet. Using the interactive map (<https://tinyurl.com/ydxyhrw6>) research the ways the rainforest is being exterminated. Analyze how deforestation will impact citizens globally and here in the United States. What problems do conservation experts expect our planet to experience over time - a decade, 50 years, a century? What are some ways that Americans can help solve this problem today?

Here are the directions to create your own rainforest in a jar: <https://bit.ly/3eLvBQk>

Over time you will notice the water cycle beginning as condensation rises to the top of the jar. Observe how the water cycle changes over time. Each day keep notes in a science notebook to record observations of your rainforest in a jar.



### MINDFULNESS

Time Management – an important skill for all to master, but especially high school students.

Steven Covey, author of the bestselling, *7 Habits of Highly Effective People*, has developed a creative and easy way to help people manage their time. It is called the Four Quadrant Weekly Plan. By dividing your “to-do” list into four categories you can become more organized and proactive – leading to less stress.

Watch this video for a description of the Four Quadrant Weekly Plan: <https://www.youtube.com/watch?v=Z459cW8C3i0>

Try out this time management plan this week. Draw your quadrants and get started! At the end of the week, reflect on how your implementation of this plan helped you to manage your time.



## LOGIC PUZZLE

Four children, each one a different age, go to bed at different times. Follow the clues to figure out what time Larry goes to bed.

1. The oldest child goes to bed 30 minutes earlier than Harold.
2. Donald sleeps later than Vincent.
3. Donald is 6 years old.
4. The youngest child sleeps at 8:00 PM.
5. The child who sleeps at 8:30 PM is either the 6 year-old or Harold.



## FIELD STUDIES

Travel to the National Zoo in Washington, D.C., and pick an animal to watch on the live webcam: <https://nationalzoo.si.edu/webcams>. Observe how the animals interact with other animals in their habitat. How do they pass their time? Do they appear to have a routine? If so, what activities are part of their routine?

If you love animals or are intrigued by their habitats and behaviors, maybe a career at the zoo would interest you! Start your research here for some of the careers available: <https://nationalzoo.si.edu/education/wildlife-careers>

Make a chart of any careers that may be interesting to you and determine what coursework you can complete now to help you plan for the future. Research universities that offer this degree program to help you know where you might study further.



## RESEARCH EXPLORATIONS

Since the days of Martha Washington, American First Ladies have had the opportunity to directly affect U.S. policy through their influence. Their roles within their husbands' administrations varied, but first ladies often found themselves in a position to subtly set the national mood and establish the country's priorities.

Explore America's First Ladies through the Smithsonian's online portrait gallery: <https://bit.ly/3gCOmar>

Select three of your favorite first ladies to conduct further research. How has the role of the First Lady changed throughout time? What contributions to American History have been made, perhaps through policies or practices that have endured the test of time?

Create a Google Slide/PowerPoint presentation with your favorite first ladies. Be sure to include what you've learned and explain why each is your favorite.



## MATH

Using the United States/World Population Clock (<https://www.census.gov/popclock/>) complete the following activities:

- Draw a line graph of the top 10 most populous U.S. counties.
- Research the population of your county.
- Create ratios of your county compared to the largest counties in America. What factors influence the size of the county's populations (large vs small), compare average incomes, education levels, attractions, sports, university presence, demographics, etc?

Predict the world/U.S. population next year, five years, and a decade from now. Explain your reasoning.

Summarize your data by answering these questions:

- What could be done to increase population in your area or other areas?
- What might cause a decline in population?



North Carolina Department of  
**PUBLIC INSTRUCTION**



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**K-12**

## Time Reference Guide

### **K-1 Logic Puzzle:**

Solutions:

Challenge 1

12:00, 1:05, 2:10, 3:15, 4:20, 5:25, 6: 30, 7:35, 8:40, 9:45, 10:50, 11:55

Challenge 2:

1:01, 1:11, 1:21, 1:31, 1:41, 1:51,

2:02, 2:12, 2:22, 2:32, 2:42, 2:52

3:03, 3:13, 3:23, 3:33, 3:43, 3:43

4:04, 4:14, 4:24, 4:34, 4:44, 4:54

5:05, 5:15, 5:25, 5:35, 5:45, 5:55

6:06, 6:16, 6:26, 6:36, 6:46, 6:56

7:07, 7:17, 7:27, 7:37, 7:47, 7:57

8:08, 8:18, 8:28, 8:38, 8:48, 8:58

9:09, 9:19, 9:29, 9:39, 9:49, 9:59

10:01, 11:11, 12:21

### **2-3 Logic Puzzle:**

Solution: <https://www.aimsedu.org/2013/04/08/timemarches-on/?highlight=time>

### **4-5 Logic Puzzle:**

Solution is included in the video: <https://www.youtube.com/watch?v=KM5KUIyAJ9I>

### **6-7 Logic Puzzle:**

Solution: 4:22

### **8-9 Logic Puzzle:**

Solution: 4:00

### **10-12 Logic Puzzle:**

Solution: Larry goes to bed at 9:00 pm.

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## Time NC Standards Alignment

Grade Span	English/ Language Arts	Social Studies	Science	Math
<b>K-1</b>	W.1.1	1.H.1.1 <b>1.H.1</b> <b>1H.1.2</b>	K.E.1.1 K.3.1.3	NC.1.MD.4
<b>2-3</b>	RL and RI.3.10	3.H.2.1 <b>3.I.1.10</b> <b>3.H.1.3</b>	2.E.1.3 2.E.1.4	NC.3.MD.3
<b>4-5</b>	RL and RI.5.10	EX.5.G.1.2 <b>5.I.1.4</b> <b>5.G.1.4</b>	5.E.1.1	NC.5.MD.2
<b>6-7</b>	W.6.3	7.G.1.2 <b>7.G.1.3</b>	7.P.1.3	NC.7.RP.1 NC.7.RP.3
<b>8-9</b>	RL.8.2	FPPFL.2.4 <b>EPFMCM.3.4</b>	EEn.2.1.3	NC.M1.A-CED.1
<b>10-12</b>	W.9-10.3	AH2.H.3	EEn.2.5	NC.M1.S-ID.1