

ADVANCED LEARNING LABS

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

TO ENGAGE, ACTIVATE, AND GROW OUR STUDENTS

GRADES

4-5

Time



ENGLISH LANGUAGE ARTS

Reading is a wonderful way to spend time, especially when we connect what we read to ourselves and the world. Choose a fiction or informational book that interests you. As you read, relate to the text in four ways, writing your thoughts in each section:

- Connections: What connections can you make between the text and your own life?
- Challenge: What ideas or positions do you want to challenge in the text?
- Concepts: What key concepts or big ideas are important from the text?
- Changes: What changes in thinking or actions are suggested by the text either for you or for others?

Download the graphic organizer to record: <https://bit.ly/32CCK35>

Share your thoughts in a video diary or journal.



SOCIAL STUDIES

A transition is the process of changing from one state, stage, subject, place or condition to another. Our lives are full of transitions, some minor and some major.

Brainstorm a list of minor and major transitions that people go through in their lives. Get friends and family to help you brainstorm even more. Analyze the list you created and reflect upon the role of time in explaining when and why people make decisions.

Make three generalizations about time and transitions based on your brainstorm and analyze the relationship between the two. A generalization is a statement that is true all, or nearly all, of the time.



SCIENCE

The Farmer's Almanac, in print for over 200 years, is a weather time machine of sorts. The almanac predicts weather far into the future and contains weather data way back in the past.

Visit *The Farmer's Almanac* online to see a year's worth of weather predictions and check to see how accurate they have been in the past. <https://www.farmersalmanac.com/on-the-money>

Compare daily and seasonal changes in weather conditions, including wind speed and direction, temperature, and precipitation. Look for patterns. Track weather for a week.

- What similarities and differences do you see between the forecast of a local news station and that of *The Farmer's Almanac*?
- Which proved to be more accurate?
- How does this affect your perception of the news cast or almanac?



MINDFULNESS

Leo Tolstoy wrote in *War and Peace*, "The two most powerful warriors are patience and time."

Although you can experience benefits of meditation in a short period of time, research shows that the more time you dedicate to cultivating mindfulness, the more effective the result. How might this relate to the quote above? How might patience also relate to the idea of mindfulness?

Create a "battle plan" that utilizes the warriors of time, patience, and mindfulness in an effort to win the battle against stress and achieve a sense of inner peace.



LOGIC PUZZLE

Can you measure exactly 9 minutes with the help of 7 minutes and 4 minutes hourglasses? Make sure you follow the BEST approach. To interact with the puzzle online, visit: <https://www.youtube.com/watch?v=KM5KUIyAJ9I>



FIELD STUDIES

Time is measured in many ways, but how can it be captured? A time capsule is a container storing a selection of objects that are seen as being typical of the present time, buried for discovery in the future.

Check out these super cool time capsules found from around the world: <https://www.littlethings.com/crazy-time-capsules>

Now it's time to make your own time capsule. It can be a capsule about your own life or one that focuses on the current time period in our state, country or world...or all of the above. You can choose to bury it in your own yard, create one virtually or share it with others. Read about a student who created a time capsule to capture life during the COVID-19 Pandemic: <https://bit.ly/30yzog3>

Capture this time of your life!



RESEARCH EXPLORATIONS

Do wormholes exist? As of now, there is no proof that they do or do not exist. In theory, a wormhole is like a tunnel that connects two places that you could use to step between two places in very little time. Think about how much time you could save each day if you could take a step to get from one far-away place to another. Have you ever wanted to travel to Europe? Step inside this wormhole and you're there!

After researching more about wormholes, discuss your findings with your family.

- <https://bit.ly/2DxzxXX>
- <https://academickids.com/encyclopedia/index.php/Wormhole>

Brainstorm together how you would use wormholes in your everyday life. How would things improve? What would you do with all the time you save each day? What could be problematic about using wormholes?



MATH

Weather changes over time, and *The Farmer's Almanac* keeps track on the "Weather History" page: <https://www.farmersalmanac.com/weather-history>

Find historical data for weather going back as far as 1949! Your task is to find the weather for the same date for 15 consecutive years. Record the high and low temperatures for each of those days.

Make a line graph, with two different colored lines: one color to show the high temperatures for the last 15 years and the other color to show the low temperatures. Label your graph appropriately.

Find the mean, or average, high and low temperatures for those 15 years.

What, if any, patterns do you notice? What other observations can you make using the two graphs?



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