

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

Movement



ENGLISH LANGUAGE ARTS

What we say and how we say it is powerful and has the ability to move people-to make them think, feel and/or act, potentially creating a movement for change. Think about a topic that is important to you, possibly something you want people to do or stop doing.

Create a report or presentation on it - sequencing your ideas logically in a way that flows, making sure you have appropriate facts and relevant, descriptive details to support your main ideas.

Practice presenting your report in a way that moves your intended audience. Remember to connect with your audience by considering your voice level, tone, body language and eye contact to get your intended message across and hopefully, move them to learn, think and act on it.



SOCIAL STUDIES

In *Understanding the Changing Planet: Strategic Directions for the Geographical Sciences*, the author states, "Without the movement of goods people and ideas cities falter, economies wane and societies wither."

- What do you think this statement means?
- How has the movement of goods, ideas and various cultural groups influenced the development of regions in the U.S.?

Choose a region of the U.S. and research the impact of the goods, ideas and cultural groups on the region. Create a map of the region and include symbols for the people, goods and ideas/innovations that are part of that region. Then reflect upon how the region might be different without the movement of one of those key elements. Who and/or where else might be impacted?



SCIENCE

Moving your body is one way to keep it healthy. Exercising can help more than just your muscles. The Walking Classroom is used by thousands of students nationwide. Educational material is narrated like a podcast so that students and teachers can learn while they move. Read more on their webpage: <https://www.thewalkingclassroom.org/>

Listen to a sample podcast, read about student experiences, and see a few videos of students in action.

- How does movement affect learning?
- With which classes do you think this type of learning would work best?
- Why is exercise not only important for the muscles, but also your brain?

Write a letter to your teacher encouraging them to try the walking classroom. Explain the benefits and how this would work best in your schedule.



MINDFULNESS

Mindful movement can help you align your mind and body, resetting your nervous system and clearing and calming your mind so that you are able to focus. Here are four practices that are designed for children your age: <https://www.healthykidslearnmore.com/Healthy-Kids-Learn-More/Educator-Resources/Take-5ive/Mindful-Movement-K4-8>

Each movement practice has a different focus or purpose. Read each description and choose the practice that best fits your needs or interests. Try these movement practices for a week and reflect upon any differences you see in terms of the connection between your mind and body. Are there movements that you learned about in your research that you see represented in these exercises? If not, are there movements you learned about that you could add or combine to create your own mindful movement practice?



LOGIC PUZZLE

In 1974, a Hungarian architect named Erno Rubik, created a hands on cube with moveable pieces. He did this to explain 3 dimensional geometry and called it the "Magic Cube." Though he created it, it took him over a month to solve.

Try your skill at Rubik's Cube: [https://rubiks-cu.be/](https://rubiks-cube.com/)

Another moving puzzle to try is the Color Wheel: <https://www.puzzleatomic.com/GAMES/colorwheels/colorwheels.html>



FIELD STUDIES

Let's take a tour through the legacy of Dr. Martin Luther King, Jr. and others during the Civil Rights Movement. We'll start our Virtual Learning Journey here, with "Marching Forward:"

Describe some of the major events that Dr. Martin Luther King Jr. attended. What was the overlying purpose for each event and how did he support that purpose?

What is the difference between human and civil rights? Provide examples of each.

How did the actions and beliefs of individual activists, such as Rosa Parks and John Lewis, drive the momentum of the Civil Rights Movement as a whole?

Create a reflective journal with your thoughts and feelings on the events that occurred during the Civil Rights Movement.



RESEARCH EXPLORATIONS

Robotics or animatronics? It depends on the purpose. Robots are designed to be programmed to carry out specific tasks. Animatronics are a type of robot that combines puppetry and mechatronics (machines and electricity). Typically used for entertainment, the first animatronics to be viewed in public were debuted at the 1939 World's Fair, and in Disney's Mary Poppins (1964) the animatronic birds were the first animatronics shown in a movie.

Additional research resources:

- <http://www.theatrecrafts.com/pages/home/topics/animatronics/>
- <https://bit.ly/2E25IVk>

Create a working hand (the first step in animatronics, "puppetry" without the electricity): <https://www.greenkidcrafts.com/diy-robot-hand-steam-activity/>



MATH

In any given number, moving the decimal point to the right, increases the value of the digits, and moving the decimal place to the left, decreases the value of the digits.

Example: $12.45 < 124.5$ and $12.45 > 1.245$

Create a "Rule Book" for a confused decimal point. In the book, provide guidance to the confused decimal as to where it should move when adding, subtracting, multiplying, and dividing. Include numerical examples, as well as visuals to aid the decimal point.

- Why does the decimal move at all?
- How will the decimal know when it has been moved to the correct place?
- What changes occur in decimal movement when performing the different operations?



North Carolina Department of
PUBLIC INSTRUCTION



Movement Reference Guide

K-1 Logic Puzzle:

Solution: Pick up the 2nd glass and pour its contents into the 5th class and set it back down in its place empty.

6-7 Logic Puzzle:

Solution example:

1. Start trip with 1000 bananas
2. Travel 200 miles and have 800 left. Leave 600 at 200 mile point, keep 200 for 200 mile trip back to start.
3. Pick up another 1000 bananas
4. Travel 200 miles and have 800 left. Pick up 200 from stashed and carry 1000 and have 400 more stashed.
5. Travel an additional $333\frac{1}{3}$ miles, you're left with $666\frac{2}{3}$, stash $333\frac{1}{3}$ there ($533\frac{1}{3}$ mile point), you have $333\frac{1}{3}$ left
6. Travel back $333\frac{1}{3}$ miles to 200 mile point and pick up 200 stashed (leaving 200 still at 200 mile point), go back the other 200 miles.
7. Pick up another 1000
8. Travel to 200 mile point, leaving 800 bananas, pick up remaining 200 stashed
9. Pick up 1000 bananas travel $333\frac{1}{3}$ miles to $533\frac{1}{3}$ mile point, you're left with $666\frac{2}{3}$ bananas.
10. Pick up all $333\frac{1}{3}$ that were stashed
11. You are back at 10
12. Make remaining $466\frac{2}{3}$ mile trip,

$1000 - 466\frac{2}{3} = 533\frac{1}{3}$ bananas left at the end.

10-12 Logic Puzzle:

Solution: 40 minutes <https://www.mathsisfun.com/puzzles/baffling-bath-water-solution.html>

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GRADES
K-12

Movement NC Standards Alignment

Grade Span	English/ Language Arts	Social Studies	Science	Math
K-1	L.1.5	K.G.1.3 K.G.1.2 1.G.1.3 K.G.2.2 K.G.2.2 1.G.1.2	1.P.1.2 1.P.1.3	NC.1.G.1
2-3	RL.3.3	3.G.1.4 3.G.1.3	3.P.1.1	NC.3.NBT.2
4-5	SL.5.4	5.C.1.3 5.B.1.2	4.L.2.2	NC.5.NBT.1
6-7	6-8 Grammar Skill	6.G.1.2 6.E.1.1	6.P.1	NC.6.NS.5 NC.6.NS.6
8-9	RL.9-10.10	8.H.3.1 8.G.1.4	8.L.1.2	NC.M1.F-IF.7 NC.M2.-CED.2 NC.M2.-CED.3 NC.M2.A-REI.1
10-12	W.9-10.2	AH1.H.6.2	EEn.2.5.5	NC.M1.A-REI.1