ADVANCED LEARNING LABS

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

TO ENGAGE, ACTIVATE, AND GROW OUR STUDENTS

GRADES 6–7

Movement

ENGLISH LANGUAGE ARTS

A misplaced modifier (i.e., a word, phrase, or clause that gives additional meaning) can make a sentence confusing. Here is an example of a modifier that has been misplaced: I served cake to the children on paper plates. "On paper plates" was added to the sentence to help us know how the cake was served, but as written, it reads that the children were on the paper plates.

Try moving words in these sentences to make the meaning clearer: 1. He nearly stood in line at the store for four hours. 2. She saw a cat and pigeon on the way to the store. 3. Grandma bought a dog for my sister named Sparky. 4. He threw the ball to the man made of orange rubber.

Now write a sentence with a modifier purposely misplaced to make the sentence humorous. Illustrate it. Share with someone and have them correct it.

SOCIAL STUDIES

The Silk Road was a network of trade routes that connected Asia to Europe for over seventeen centuries and increased cultural, political, and religious interactions. The Silk Road's most famous traveler was Marco Polo. Read and view these links:
Video overview: https://bit.ly/395XAJr
Silk Road defined: https://bit.ly/2WuVvBH
Biography of Marco Polo: https://bit.ly/2OzWex1
Heritage of the Silk Roads: https://bit.ly/30pq4tJ

After synthesizing the information, determine what effects this movement had on societies and regions over time. Think in terms of patterns of change and specific effects on particular cultures. Have other movements (e.g., colonization efforts, Triangular Trade, Trail of Tears) of people, ideas, or goods had any of the same effects? Why or why not? Develop a presentation to share with your classmates.

SCIENCE

When someone mentions a wave, what do you visualize? An ocean wave? A microwave? A wave of light? A sound wave? What do all these waves have in common? Check out this explanation and demo of the difference in longitudinal, transverse, and surface waves: https://scienceprimer.com/types-of-waves

Now attempt to find in nature or create examples of each. Think about items that you can use to do this (e.g., rope, slinky, shoestring, water, etc.). Record your observations in a science notebook. Answer the question: what makes a wave a wave? Draw examples of the different kinds of waves. After your activity, follow this link to learn more about waves: https://www.physicsclassroom.com/class/waves/Lesson-1/What-is-a-Wave. Take the quiz at the end to check your understanding.

MINDFULNESS

Place your pencil or other drawing utensil on a blank sheet of paper. Sit quietly and notice your breathing.

Visualize your breath as it moves from your nose and/or mouth. How does it move? Does it move in a straight line or does it curve? Draw the movement on your paper. Play with different lines as you breathe. Are your lines dark and wide or light and thin?

Change your breathing. Breathe faster or slower. How does this change what your drawing looks like? Draw lines on your paper and match your breathing to the lines. Try using different colors. What do the colors mean?

Place your art in a place that will remind you to take to be mindful of your breathing.

LOGIC PUZZLE

Cori, the camel, is 1000 miles from the market. She has 3000 bananas. She can carry a maximum of 1000 bananas and eats one banana for each mile traveled.

What is the greatest number of bananas Cori can get to the market?

Create a diagram to show your thinking.

FIELD STUDIES

Imagine that you can travel anywhere that you want in the world- one spot or a series of locations. Use the Internet and/or books available from the library to plan the trip.

Create a spreadsheet to calculate all costs and to keep up with links to important destinations. Consider cost of transportation methods (e.g., plane tickets, luggage fees, rental cars, fuel costs, subway fares, etc.). If there are places you want to visit that require a fee, include that in your spreadsheet. Include links to places you plan to visit or stay. Don't forget to include the cost for food and lodging. Also take into consideration how many people are going on the trip with you. How much will the trip cost in total? How much will it cost per person? After you have finished, share the information with an adult to see if they can review it to see what other expenses you may have missed.

RESEARCH EXPLORATIONS

The International Space Station (ISS) orbits 250 miles above the Earth with an orbital inclination of 51 degrees, which means the path varies. Research the orbit of the ISS. How often does it travel around the Earth? How does Earth's gravity affect the path? Can you predict its path?

- Follow the directions at the ISS map link to see the shape of the orbit: https://bit.ly/3jlb6xr
- For live tracking of the ISS use this site: https://spotthestation.nasa.gov/tracking_map.cfm

Plan a time you can see the ISS. Will you be able to spot it from your home? Where is the best place to spot it that is near you?
Create a public service announcement of 140 words or fewer making your friends, family, and neighbors aware of how to spot the ISS and the importance of the ISS.

MATH

A pilgrim enters the town of Duonai and would like to visit the temple. Unfortunately, the pilgrim is penniless and the town charges a tax depending on the path taken. Moving in different directions can cause the tax to go up or down.

Can you get the pilgrim to the temple without paying any taxes? Watch the video for further details, but be sure to pause it at 1:51 to work out your problem: https://www.youtube.com/watch?v=6sBB-gRhfjE&disable_polymer=true

- Were you able to solve the problem mathematically?
- Give the problem to a friend or family member. Can they solve the problem?

Explain your solution to the problem to your friend or family member.

North Carolina Department of
PUBLIC INSTRUCTION

AIG
ALL DAY, EVERY DAY

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 1/3 miles, you're left with 666 2/3, stash 333 1/3 there (533 1/3 mile point), you have 333 1/3 left
6. Travel back 333 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 1/3 miles to 533 1/3 mile point, you're left with 666 2/3 bananas.
10. Pick up all 333 1/3 that were stashed
11. You are back at 10
12. Make remaining 466 2/3 mile trip,

1000-466 2/3 = 533 1/3 bananas left at the end.

10-12 Logic Puzzle:

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

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