ADVANCED LEARNING LABS

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

TO ENGAGE, ACTIVATE, AND GROW OUR STUDENTS

GRADES 2–3

Movement

ENGLISH LANGUAGE ARTS

Movement is a word with multiple meanings. One definition of movement is a change or development. The actions of characters in a story help to create changes and developments that move the story along. It is their actions that help contribute to the sequence of events in a story.

Using a story you've already read or one you're reading currently, create a magazine cover for one of the novel's main characters. Include the following that contribute to important events in the novel:

- details about the character's external features, or physical appearance
- details about the character's internal characteristics, or personality traits
- titles for "articles" on the main character's thoughts and actions
- titles for "articles" on other characters' reactions to the main character

SOCIAL STUDIES

One definition of movement is the act of changing physical location. Another definition is the moving parts of a system. Watch this video about Malcolm McLean, a small-town truck driver from North Carolina, and how he impacted the modern global economy: https://bit.ly/3hgXG3T

Using a multi-flow thinking map, analyze the causes of the change in movement of goods and its effect on people, ideas and communities. Use this link for reference: https://www.thinkingmaps.com/why-thinking-maps-2/

Research the movement of goods, people and ideas that have impacted the community in which you live. Create another multi-flow thinking map that illustrates the cause and effect relationship of movement of the above on your community.

SCIENCE

A trebuchet is a type of catapult that uses a long arm to throw an object. The trebuchet uses simple machines and energy to create movement. Watch this video to learn more: https://youtu.be/W5RFoowvGkw

Notice how the machines work together and how the mass of the object affects the distance it travels.

Follow these directions to build your own mini trebuchet: https://bit.ly/3eFdtrh

Experiment with objects of different weights to see how your objects move differently through the air. Record your results. Then, change another aspect of your trebuchet, perhaps the length of the sling, and record those observations. Document the changes you made to the design of the trebuchet in your science notebook.

MINDFULNESS

There are many types and of mindful movement that have been around for ages. Qigong is one such practice; it is a Chinese health and wellness practice that focuses on a combination of movement, meditation and breathing.

Watch this Qigong video: https://www.youtube.com/watch?v=eAQzFqdc7Hs. Try these movement practices for a week and reflect upon any differences you see in terms of the connection between your mind and body.

Teach these movements to someone you know. Explore other movements that you could add to create your own mindful movement practice.

LOGIC PUZZLE

Hungarian engineer, Endre Pap, is credited with creating an interlocking ring puzzle called "Hungarian Rings." Similar to a Rubik's cube, rings are moved to align colorful balls.

Try your skill at Hungarian Rings: https://ruwix.com/online-puzzle-simulators/hungarian-rings/

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

FIELD STUDIES

One definition of a movement is a group of people working together to advance their shared political, social or artistic ideas. Movements are powerful ways to make change, but how do you do it?

Watch this TEDTalk on how to create a movement: https://bit.ly/2E2ttHm

After watching, think about if you agree with the speaker regarding his thinking of what the most important factor is in starting a movement. Are there things you would add? What about the idea? Timing? Risk? How do these three things factor into the making of a movement? Are there other important elements to consider?

Create a co-TEDTalk to build upon the one you viewed and the idea of elements necessary to create a movement. Think about a movement you'd like to start or be part of. Go for it!

RESEARCH EXPLORATIONS

Migration is defined as the seasonal movement of animals from one region to another. At the end of every fall, millions of monarch butterflies embark on a journey that takes them over 2,000 miles.

Research more about where monarchs live, where they travel, and why. Add: Use this link to start your research: https://kids.nationalgeographic.com/animals/invertebrates/insects/monarch-butterfly/. Then, create a map to show the points from which their migration starts and ends.

Write and perform two episodes of a news report (like a weather report, but instead a "migration report") complete with a colorful map to announce the two times per year monarchs migrate.

MATH

The "value" of a digit depends on which "place" it is in. Move the digit to a different place and the value changes. Play "Some Sum." The object is to find the largest sum that can be made by adding two 2-digit numbers. Make a stack of 10 cards: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

To play:

1. Draw a card. Decide if it goes in the ones or tens place.
2. Draw another card. Place it in the ones or tens place. (Cards cannot be moved once placed.)
3. Continue until you have drawn 4 cards and have two 2-digit numbers to add.

Play a few rounds. Afterwards, consider your strategy: Are there certain numbers you place easily? What are they? How would your strategy differ if you were aiming for the lowest sum OR subtracting?

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