

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

Perspective



ENGLISH LANGUAGE ARTS

Select a novel or short story to read. While you are reading, analyze what different characters do, say, and think throughout the text to determine how the author has developed and communicated his/her unique perspective.

Track the characters using a chart. Label the columns: character, character's perspective, and how the author develops that perspective. After you have collected this information and analyzed it, evaluate what techniques the author used to develop different perspectives.

Was it effective? Why or why not? Explain in a short essay.



SOCIAL STUDIES

Sometimes our perspective on historical figures changes over time. For example, North Carolina Governors Zebulon Baird Vance and Charles Brantley Aycock were both popular and successful governors. Both have many schools named after them, you can visit both of their childhood homes as state historic sites, and Vance even has a county named for him.

In the 21st Century, however, they are not always viewed favorably. Many citizens have advocated for their names to be removed from monuments and schools. Research why the perspective on these two individuals has shifted over time.

Could individuals we honor today be considered inappropriate for honor in another hundred years? Record a podcast discussing this controversy and how perspectives shift over time.



SCIENCE

Imagine you are a farmer who grows large crops of corn to sell. You must decide if you will use insecticides, herbicides, and fertilizer to address issues such as pests, weeds, and soil infertility. Keep in mind the impact of your choices. Read to see how common these practices are in the United States.: <https://bit.ly/3eTfRe0>

If you choose to use these products, what will happen to these chemicals when it rains? Could your neighbors be impacted? If your crops fail, how will people shopping for fresh corn be impacted?

Make a diagram or chart recording the different stakeholders involved and their opinions on how corn is grown. Which stakeholder's perspective should be followed, if you are prioritizing the health of humans as your deciding factor?



MINDFULNESS

Artist Alex S. MacLean takes photos from a different perspective. As a pilot MacLean spends a lot of time looking at the world from the air. Watch this video about MacLean's work: <https://bit.ly/2CE4ARV>

See more of his artwork: <http://www.alexmaclean.com/>

After viewing MacLean's artwork, decide what you like or do not like about it. Why do you think MacLean chose to express himself in this way? How does the perspective change MacLean's art?

Take a picture or draw a picture from an unusual perspective. You could get super close or very far away. You could take the picture from above or below the item. Just be sure it is not the way you normally look at the object. Put your art somewhere to remind you to look at things from all perspectives.



LOGIC PUZZLE

What makes a maze difficult to solve? Is it possible to look at a maze mathematically or is it dependent on the perspective of each person? The eye can easily become lost in a set of parallel passages. Are you looking down on the maze, solving it by eye? With a pencil? What if you're walking around inside the maze? Try this one: <https://bit.ly/3hwKBmP>

Now make your own maze using the online coding program, Scratch: <https://scratch.mit.edu/>

For help, try the video at this link: <https://bit.ly/3eSQucu>

Can't get enough of mazes? Check out 9 of the "Most Impressive Mazes You'll Find Around the World:" <https://www.rd.com/culture/impressive-mazes/>



FIELD STUDIES

When we look up in the clear night sky, we see stars, airplanes, maybe the moon, planets, possibly the International Space Station, and sometimes meteors (e.g., shooting stars). What would Earth look like if we had a different perspective? Study these photos:

- Historical photos: <https://go.nasa.gov/3hkpe8g>
- Satellite image: <https://epic.gsfc.nasa.gov/>
- Live from the International Space Station: <https://www.youtube.com/watch?v=EEIk7gwjgIM>

What do you notice from the images? What surprises you? Can you see landforms? Weather systems? Can you tell where one ocean ends, and another begins?

Reflect on these questions as you write a poem or create a piece of art to share what you have noticed about changing your perspective of the night sky to include Earth.



RESEARCH EXPLORATIONS

How has space flight changed the men and women who have taken this unique journey? Listen to former NASA astronaut and NFL linebacker, Leland Melvin, talk about how going to space changed his perspective on life: <https://youtu.be/le-UZ5MR7F4>

Read the testimonials from NASA scientists about how man's journey into space has changed their perspectives and influenced their careers: <https://earthobservatory.nasa.gov/features/EarthPerspectives>

Create a children's book which tells the story of seeing Earth from space and the difference it makes in people's perspectives on life. Include illustrations in your children's book that will be sure to engage the reader.



MATH

Watch the video to learn how to create a perspective drawing with one vanishing point. Practice drawing prisms from different angles: https://www.youtube.com/watch?v=zrLBNYA-KNE&feature=emb_logo

Once you have practiced drawing, plot the points $(-3,4)$, $(-3, 10)$, $(-8, 4)$, and $(-8,10)$ on a coordinate grid. Use the x-axis as the eye-level line and use the origin as the viewpoint. Use your new skill to create a perspective drawing for the rectangle you plotted.

Reflect the original rectangle over the y-axis and the x-axis to create more perspectives. How are your drawings similar? Different? Add to your drawing to create a piece of art.



North Carolina Department of
PUBLIC INSTRUCTION



Perspective Reference Guide

2-3 Logic Puzzle:

Solution: If we assume that the blocks are stacked without any glue, then this is the configuration of the blocks, with 3 blue, 1 green and 1 red.

If we assume that the blocks are fastened together in some way, then we don't need one of the blue supporting blocks from the bottom layer.

4-5 Logic Puzzle:

Solution: The blue car and red car will crash into each other. They are in the same lane going in opposite directions. The pink car is safely in the other lane.

One way to see this is to cut the two lanes apart. You end up with a single strip of paper, but this time it is twisted twice, so it is no longer a Mobius strip. (It has 2 sides rather than 1.) You can see from the photo that the red and blue cars are on one side of the strip, heading toward each other.

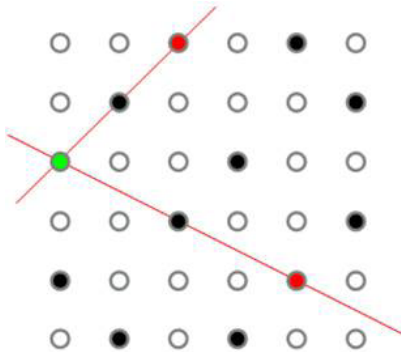
4-5 Math:

Answer: https://drive.google.com/file/d/13csWWKfqDkr_NvB2d8-yW3-3kpEyBi8m/view?usp=sharing

Source: <https://www.1001mathproblems.com/search/label/2D%20spatial%20reasoning>

8-9 Logic Puzzle:

Solution:



10-12 Logic Puzzle:

Solution: All the tools are random things that are not going to help you. All you have to do is pour some water into the pipe so that the ball swims up on the surface.

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GRADES
K-12

Perspective NC Standards Alignment

Grade Span	English/ Language Arts	Social Studies	Science	Math
K-1	L.1.4	1.C.1.1	1.E.1	NC.1.G.2
2-3	RL.3.6	3.H.2.2 3.H.1.3	3.E.1.2	NC.3.NF.4
4-5	RL.5.6	4.H.1.1 4.H.1.2 4.H.1.5	4.P.3.2	NC.4.NF.1
6-7	RL.7.6	6E.1.1	6.E.2.4	NC.6.NS.8
8-9	RL.8.6	8.H.1.3	8.E.1.4	NC.M1.A.SSE.b NC.MIA.CED.1
10-12	RI.11-12.4	AH1.H.4	BIO.2.1.4	NC.M2.G-CO.5