

ADVANCED LEARNING LABS

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

TO ENGAGE, ACTIVATE, AND GROW OUR STUDENTS

GRADES
10-12

Perspective



ENGLISH LANGUAGE ARTS

Choose a selection written by a British author after 1950. Highlight words in the text that engage you in different ways, including words that create vivid imagery or make you want to read more.

Write a letter to your English teacher about these word choices and how your perspective of the text would be different if the author had chosen other words.

How did these word choices contribute to the meaning of the text? What language did you find particularly engaging? What made this language engaging?

Would the meaning of the text change if you rewrote it from your perspective by replacing the previously selected words with modern or slang verbiage?



SOCIAL STUDIES

Create a comic based on your analysis and perspective of the importance of a conflict or compromise in American History.

Select a conflict or compromise from American History. Be sure to examine primary sources such as oral histories or historical documents to help make your comic historically accurate.

A great resource for primary sources is the Library of Congress - <https://www.loc.gov/>

Your comic strip should contain:

- 4-6 panels
- Explicit statement of the conflict or compromise you are researching.
- Statement of how this conflict or compromise has shaped American politics, economics, or culture.
- A Works Cited page that includes at least 2 primary sources.



SCIENCE

Research the importance of the ant population in a local ecosystem.

- How have they sustained themselves over time?
- Why are they an important contributor?
- What is your perspective on the importance of the ant population?

Write a speech or song from the perspective of an ant, persuading others of its importance in the local ecosystem. Be sure to include how you have contributed to the stability of your ecosystem and kept your ecosystem stable over the centuries.

For fun – a typical day on the Smithsonian Entomology Ant Cam: <https://www.ustream.tv/recorded/61345262>



MINDFULNESS

Create your own “My Perspective Map.” Use this as a graphic tool to help understand what shapes you as an individual.

1. Write your name in the center of a sheet of paper and circle it.
2. Answer these questions by writing around your name on the paper:
 - o Who am I?
 - o What describes me?
 - o How do I portray myself to others?
 - o What do others think of me?

After your map is complete ask the following:

1. What could change on my map?
2. How much control do I have over these changes?
3. How might changes on my map affect decisions I make in life?

Record your answers in a journal.



LOGIC PUZZLE

A Ping Pong Ball in a Hole

Your last good ping pong ball fell down into a narrow metal pipe, embedded in concrete, one foot deep.

How can you get it out undamaged, if all the tools you have are your tennis paddle, your shoelaces, and your plastic water bottle, which does not fit in the pipe?



FIELD STUDIES

Many consider the life and work of designer Eva Zeisel captivating.

Use her motifs and patterns as inspiration to design your own tessellating pattern using a potato stamp and acrylic paint. Follow the directions from the Smithsonian Design Museum here: <https://s.si.edu/2CuKhXd>

After completing your potato art, answer the following:

- How do you feel about Eva's perspective when you think of tessellating patterns and usefulness of her artwork?
- What does this pattern and your color selection say about your perspective?

Research for more information about Eva Zeisel and her artistic perspective through the Museum of Modern Art: <https://www.moma.org/>



RESEARCH EXPLORATIONS

Look for things that are of interest to you – figurines, pages from an old book, rocks, etc. Create your own "World In A Box" of things that symbolize your unique perspective. All you need is a box, glue, tape, and interesting odds and ends. This link provides examples: <https://hirshhorn.si.edu/explore/a-world-in-a-box/>

On an index card answer the following questions:

- Why did you include the items that you selected?
- Analyze these items. What do they tell you about your perspective of things that are important to you?
- What does this perspective tell you about yourself?

Tape your index card on the back of your box for future reference, and share with someone what you learned about yourself during this project.

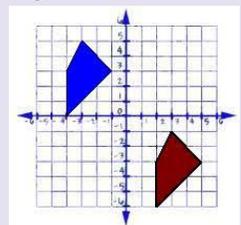


MATH

Perspectives can change in mathematics, through transformations. We will begin with parallelogram ABCD with coordinates A(4,-4), B(8,8), C(15,3) and D(8,-1). Consider the following transformations and predict how the lengths, perimeter, area and angle measures will change:

1. A rotation of 270° counterclockwise about the origin.
2. A dilation of scale factor 5 about the origin.
3. A translation to the right 6 and down 4

How does your perspective change with each transformation? Which transformations preserved the size and/or shape, and which did not? Generalize: Which types of transformation(s) will produce congruent figures?



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.

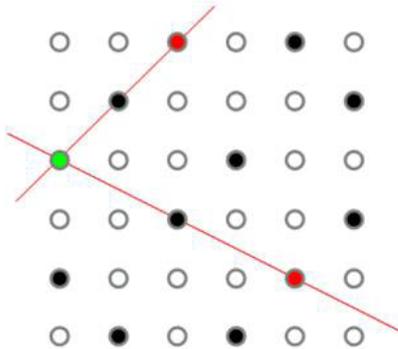
4-5 Math:

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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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