

Conflict

Grades K-1

English Language Arts

Sometimes people disagree or have problems getting along. This is called a conflict.

In *Click Clack Moo Cows That Type*, Farmer Brown has a conflict with his cows. Listen to the story:

<https://www.youtube.com/watch?v=ZVD8WRJTFRY>

- What was the conflict between Farmer Brown and his cows?
- How did they solve it?

Pretend two friends are having a disagreement. Write or draw some steps they could follow to help them solve their conflict. What advice would you give people who are having a problem?

Social Studies

Sometimes we can anticipate and avoid conflict, and other times we need to solve a disagreement. It takes practice to learn how to successfully resolve conflict. Think through what you might do in these scenarios:

- A classmate takes your crayons without asking and you take them back which causes the classmate to yell at you. How might you resolve this conflict?
- Your teacher has only one jump rope for recess, but three friends want to play with it. What plan could you make to avoid a conflict?

Write your own scenario and determine two possible outcomes for what might happen next. Which one do you feel is the best solution? How did your beliefs impact your thinking?

Science

Ice and Water Battle!

Ice and water are the same substance in different states. Some environments melt ice into water faster than others. Do you think ice will melt faster in freshwater or saltwater? Test your hypothesis (prediction) in this experiment:

1. Fill two glasses with cold water.
2. In one glass, stir in 3 tablespoons of salt until dissolved.
3. Put the same size ice cube in each glass.
4. Record how long it takes each ice cube to melt.
5. Describe your observations in your science notebook. Use words and drawings. Include descriptions of the ice and water and answers to the following questions:
 - What did you discover by doing this experiment? Was your hypothesis correct?

- How can you apply this learning to thinking about ice on our planet?
- Is there a conflict between ice and water?

Mindfulness

Conflict causes emotions that can “bump you out of your zone.” When we are conflicted, we may not be our best selves. Focus is hard when you are out of your zone. Practice these strategies to use the next time you get bumped out of your zone:

- Look around and find 5 things that are one color.
- Slowly swallow a drink of water and notice how it feels as it moves from your mouth to your throat.
- Push against a wall with both of your hands.
- Take a slow walk and notice your feet moving from heel to toe with each step.
- Find an object to hold. Notice how it feels in your hands. Is it smooth or rough? Warm or cold? Hard or soft?
- Count to 10 slowly while you take deep, slow breaths.

Logic Puzzle

Try to arrange 3 circles, 3 triangles, and 3 squares in a 3x3 grid so that there is only one of each shape in each row (across) and in each column (up and down)?

Tip: Draw the shapes and cut them out, so you can easily move them around until you solve the puzzle!

Field Studies

Water fight!

Watch this video to learn about how the scarcity of fresh water can lead to conflict: <https://www.youtube.com/watch?v=4b2kdcEuWr4>

After you watch the video, reflect on water scarcity.

- What ideas do you have for people to conserve and use fresh water?
- Ask your parents if they remember a time they had to conserve water. What was that like?
- What steps can you take every day to use less water?

Make a poster public service announcement that urges people to conserve water and gives them ideas for saving water.

Research Explorations

Have you ever touched someone and felt a little zap? This is static electricity. This is also what causes a thunderstorm. Research the science behind static electricity, thunder, and lightning by watching this video: https://www.youtube.com/watch?v=fEiVi9TB_RQ

Now, create some static electricity!

In sock feet, rub your feet all over a carpet in your home. Don't pick them up, leave them flat and rub!
Touch something metal in your house. You will feel the static. If it is dark, you might see the static spark!
OR

Blow up a balloon. Rub it all over your head. Slowly move the balloon away from your head. What happens?

Record your findings using words or diagrams in your science notebook.

Math

Play the card game **War** with another person.

1. Deal an entire deck of cards face down to two players.
2. Players flip over a card at the same time. The higher value wins both cards.
3. If the same value is flipped, it is **War!** Both players place two cards face down and one card face up. Continue until the players' top cards are different. Whoever has the highest card, wins all the cards.
4. When you run out of cards, shuffle them and continue playing.
5. The game is over when one person has acquired all the cards or when you end it. Whoever has the most cards wins.

Write a greater than/less than statement for the end of the game using the symbols $<$, $>$, or $=$. If I won all the cards I would write $56 > 0$.

Try adapting the game so it can be played with more than two people.

Grades 2-3

English Language Arts

Often the topics about which people feel most strongly have elements that do not align and are conflicting arguments. As a life-long learner, it is important to be able to compare and contrast the most important points and key details presented in opposing texts on the same topic. This ability to find commonalities and differences allows you to more effectively analyze the opposing arguments, ask pertinent questions, and make informed choices.

Search <http://www.kidrex.org/> to find two articles with conflicting viewpoints about one of these topics: climate change, hunting, video games or wearing a mask. Read each article thoroughly and create a double-bubble thinking map (<https://bit.ly/3a6Pf8L>) comparing and contrasting the main ideas and key details of each. After analyzing the conflicting arguments, make your own choice as to what your opinion is on the subject.

Social Studies

Civic engagement means actively working to make a difference as a citizen in the life of the larger community by addressing issues of public concern or conflict, protecting public values and making changes to benefit the health of the community.

This often happens through public discourse (public conversation) with other citizens, citizen groups and/or elected officials.

Brainstorm all the communities that you are part of - there are many; your family, school and neighborhood are just a few. Choose one community from your brainstorm to focus on. Think about something you would like to protect, protest or change within that community and create a proposal supporting the change you'd like to see. Invite others who are a part of that community to discuss your proposal and share their thoughts and ideas with you regarding the same. Work together to come up with a solution.

Science

One natural conflict in our world is the relationship between predator and prey. Animal differences can make them incompatible as friends, but the perfect match for nutrition. It's a conflict, of sorts, that sustains the circle of life and our ecosystem.

Create a predator vs prey game to play with friends and family. Perhaps it's a virtual game, or live action. Maybe you will create a card or board game. Consider these questions: What do animals need to survive in an ecosystem? How does reproduction change the ecosystem? How does aging and death of animals affect the ecosystem? When is there a good balance in an ecosystem?

Need some inspiration? <https://learn.concord.org/resources/164/the-predator-prey-relationship>

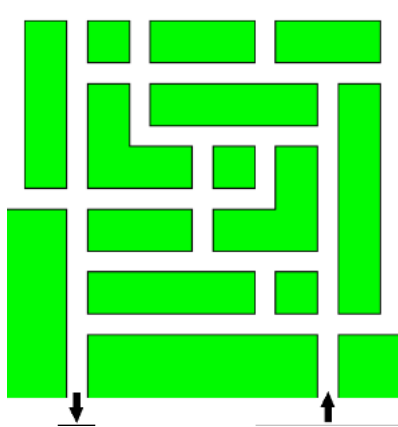
Mindfulness

Pebble meditation was created by Thich Nhat Hanh, a renowned peace activist. Each pebble represents an object and its qualities. The idea is we already have these special qualities within us.

- The first pebble represents a flower and the qualities of love, beauty and curiosity.
- The second pebble represents a mountain and the qualities of bravery, strength and confidence.
- The third pebble represents still water and the qualities of quiet, calm and focused.
- The fourth pebble represents the sky (space) and the qualities of freedom, happiness and peace.

Find four pebbles and paint, draw, design them to represent each of the four elements: a flower, a mountain, still water and sky. Once your pebbles are ready, practice using them when you're feeling uncomfortable, conflicted or upset and channel the positive feelings represented in each pebble.

Logic Puzzle



Field Studies

Conduct social science field work to see what you can discover about conflict.

Ask at least 15 people the following questions: How do you define conflict? Is conflict always a bad thing? Why or why not? How do you manage conflict? After surveying, look at your data and sort/categorize your answers. Are there common definitions? What is the consensus on conflict as positive or negative? The reasoning? Are there conflict management techniques that show up consistently in your data? Are there similarities in statements according to gender, age or race? Does the location of the conflict or person(s) involved in the conflict impact the strategies used?

Create an informational pamphlet or self-help video about conflict for your peers, including facts learned and helpful strategies.

Research Explorations

There are 5 researched styles of conflict resolution. These styles are described through animals:

- Avoidance (I Leave)– Turtle or Ostrich
- Competing/Forcing (I Take Charge)– Lion or Shark
- Accommodating (I Give in)– Chameleon or Teddy Bear
- Compromising (We Meet Half-Way)– Zebra or Fox
- Collaborating/Harmonizing (We Both Win)– Dolphin or Owl

Take this conflict management style quiz: [https:// bit.ly/3eQ3zDo](https://bit.ly/3eQ3zDo)

Quiz your friends and family. Compare your results to theirs. What do you notice? How can you use this knowledge to resolve conflicts in the future?

Create a "family portrait" with the animals your style matches.

Math

Working in opposite directions can equal conflict. Inverse operations in math undo what other operations do. This sounds like conflict, but addition and subtraction can work together to solve the same problem.

How can using subtraction help you solve an addition problem? How can using addition help you solve a subtraction problem? Be the mediator between an argument between addition and subtraction.

Write a letter to each operation to explain how they can overcome their mathematical conflict and how inverse operations really can help each other. Use equations as evidence to prove your point.

Grades 4-5

English Language Arts

It is important to be able to compare and contrast the most important points presented in opposing texts on the same topic, as well as the point-of-view they represent and/or perspective from which they are written. This allows you to more effectively analyze the opposing arguments, ask pertinent questions and make informed choices.

Choose at least three articles with conflicting viewpoints relating to one of the following topics: immigration, public vs. private education, homelessness, healthcare, or criminal justice system. Read each article thoroughly and create a triple Venn diagram (<https://bit.ly/30sHmr5>) comparing and contrasting the main ideas and perspectives or point-of-view of each. After analyzing the conflicting arguments, make your own choice as to what your opinion is on the subject.

Social Studies

Humans and the environment are mutually dependent upon each other. Their relationship can be either one of harmony or conflict. Research the positive and negative effects of human activity on the physical environment of the United States, past and present.

Create a U.S. Top 10 list of Harmonious Environmental Heroes, individuals from both past and present, who have had a positive impact upon the physical environment of our country.

Let's reflect on your list of heroes. Do you notice commonalities in terms of people, locations and/or causes involved in this conflict of man vs. nature/the environment? Are there ways that we could mitigate this conflict and make sure the needs of both people and the environment are met?

Science

Often our differences end in conflict. But, there's proof that some animals have figured out how to create unlikely friendships, despite their differences.

Watch a few of the short videos on the National Geographic website: <https://www.nationalgeographic.com.au/tv/unlikely-animal-friends/>

Notice the types of animals that have become friends. In what ways are the animals the same? In what ways are they different? What behaviors do you see that could help in survival?

How could humans learn about solving their own conflicts from the example of these animals?

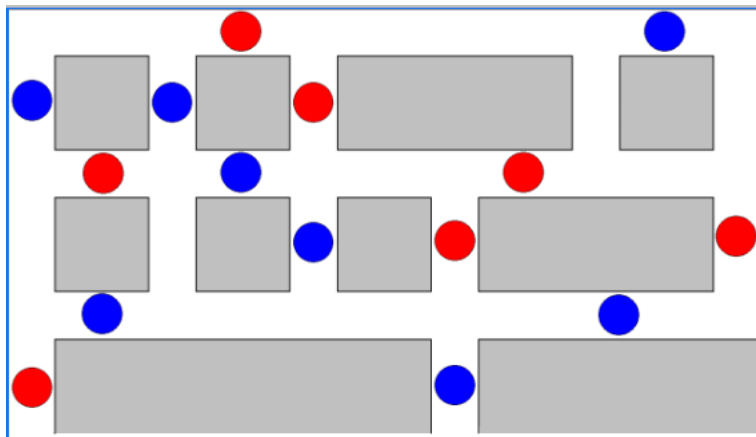
Mindfulness

Michael de Montaigne, a french essayist from five centuries ago, once said, *“There is as much difference between us and ourselves as there is between us and others.”* How might this quote relate to the idea of internal conflict? How do you typically handle conflict with others? And within yourself?

The many conflicting thoughts and feelings churning within us at any given time can be really difficult, but we can do something about it:

1. Stop fighting with yourself and breathe.
2. Ask yourself why you might be feeling the way you do.
3. Ask yourself what you need to do to feel better.
4. Listen to yourself and act on what you hear.
5. Put this into practice when you’re feeling conflicted and reflect upon its impact.

Logic Puzzle



Field Studies

There are conflicting ideas regarding climate change. Learn more through a virtual tour of NASA’s Climate Kids website: <https://climatekids.nasa.gov/climate-change-meaning/>

Consider the following questions after your tour:

- What about climate change interests you most?
- What do you think about climate change?
- What’s something that worries you about climate change?

Read more about Time’s 2019 Person of the Year Greta Thunberg, a Swedish teenager who has confronted the conflict through educating others, even adults: <https://time.com/person-of-the-year-2019-greta-thunberg/>

Research Explorations

Have you ever done something you knew was wrong, but you did it anyway because your friends were doing it? You felt like it was a bad idea, but everyone else was so happy, that it seemed okay at the time? Experiencing this is one example of cognitive dissonance. Cognitive dissonance is the discomfort experienced when a person holds two or more conflicting beliefs.

Watch this short video and do your own research on dissonance: <https://bit.ly/3a3WEG2>

When have you experienced cognitive dissonance? If that situation came up again, how could you prevent the dissonance? Talk to your family about times they have experienced cognitive dissonance. What are some examples of cognitive dissonance in social justice issues? How can you help educate others in cognitive dissonance?

Math

Inverse operations in math undo what other operations do. While this sounds like conflict, explain how the inverse operations of multiplication and division can work together to solve the same problem.

How can using division help you solve a multiplication problem? How can using multiplication help you solve a division problem? Be the mediator between an argument between multiplication and division.

Write a letter, make a video, be creative and show how multiplication and division can overcome their mathematical conflict and how inverse operations really can help each other. Make sure to use equations as evidence to prove your point.

Grades 6-7

English Language Arts

Think about a conflict that you have had recently with a friend or a relative. Consider how each person involved in the conflict views it differently.

Write a letter to that person arguing your perspective on the problem. Be sure to introduce your claim, acknowledge the opposing view, and organize the reasons and evidence logically.

Your goal is to write in a way that presents your argument so that your friend or relative can clearly see your perspective on the conflict.

Social Studies

Mesopotamia was an ancient region that was located between the Tigris and Euphrates River, where Iraq, Kuwait, and parts of Syria and Turkey are today. King Hammurabi united the area before his death in 1750 BCE. He is best known for the Code of Hammurabi, which dictated how the legal system resolved conflicts between people. Watch this Khan Academy video about the stele upon which the code was written: <https://bit.ly/2ZRdDb8>

Read some of the different laws that are a part of The Code of Hammurabi, which is an example of what is called “eye for an eye justice.” Why is it called this? What conflicts that are mentioned in the Code are similar to conflicts we still have today?

What do the laws tell us about their culture? Record your thoughts in your journal.

<https://www.sjsu.edu/people/james.lindahl/courses/Hum1A/s3/The-Code-of-Hammurabi.pdf>

Science

Hurricanes are weather hazards that can impact not only coastal regions but also regions hundreds of miles onshore. Barrier islands protect coastlines from the full impact of these storms, but what happens when humans construct homes and businesses on barrier islands?

Read “Barrier Islands Protect Coastlines- But They are Also Vulnerable” to consider the ethical issues with building on these islands: <https://www.weforum.org/agenda/2018/09/barrier-islands-protect-coastlines-but-they-are-also-vulnerable/>

Consider multiple perspectives on whether or not this should be allowed. Determine your position and write and record a Public Service Announcement either supporting or not supporting building on barrier islands. Make sure to support your claim with evidence from the article and/or other sources.

Mindfulness

Conflicts with friends, classmates, siblings, and parents are hard to avoid. Conflict is best resolved by allowing both parties of the conflict to feel as if they won.

Think about the last time you were in a conflict. Create a Venn Diagram showing solutions in one circle that makes you happy. The other circle should contain solutions that make the other person happy. Use this link to learn how to create a Venn Diagram: https://www.youtube.com/watch?v=CkV_uRErlqk

Share your Venn Diagram with a friend and explain which solution would be the best for all involved in the conflict. How would you use the win-win strategy next time you are in a conflict?

Logic Puzzle

As you travel through the forest, you realize that you are lost. As you look ahead you see a fork in the road. One direction leads to the City of Lies (where everyone always lies) and the other to the City of Truth (where everyone always tells the truth). There's a person at the fork who lives in one of the cities, but you're not sure which one.

What question could you ask the person to find out which road leads to the City of Truth? Explain how your question determines the way out of the forest.

Field Studies

Take a virtual tour of the Great Wall of China: <https://www.thechinaguide.com/destination/great-wall-of-china>. Often considered one of the greatest wonders of the world, the wall has a 2,000-year history and at one time stretched over 13,000 miles. Watch the video “What Makes the Great Wall of China So Extraordinary:” <https://youtu.be/23oHqNEqRyo>. Consider the following questions:

- What would cause thousands of years' worth of leaders to dedicate so many resources to building such a wall?
- What conflict(s) led to the building of the wall?
- What conflicts were created by the building of the wall?
- How was the importance of building the wall seen differently by a peasant forced to build it compared to the ruler who wanted it built?

- Over time, how has the importance of the wall changed?

Research Explorations

The Madre de Dios Rainforest in Brazil is the home of the last uncontacted indigenous tribe on Earth. It is also the target of illegal gold mining which enriches the economy of the area. While this conflict is unique in many ways to this region, similar conflicts can be found in other rainforests.

Research other conflicts between groups wanting to use the unique resources of rainforests.

Research links:

- <https://bit.ly/30CiOuu>
- <https://bit.ly/3hpQD8V>
- <https://bit.ly/39i56RI>

Are there patterns to the conflicts over the use of rainforests from around the world? Determine a solution that will allow both parties of the conflict to have a win. Write a tweet (140 characters or less) to help raise awareness to the conflict.

Math

Restaurants have a lot of costs beyond the cost of food, such as electricity and employee's wages.

The data table displays the number of customers that visit each type of restaurant each day: <https://docs.google.com/document/d/1h-xkVeDCNMHKJSpljkfyyFrkhFXrxNMPP0eKVu7JPGI/edit>

The average price of a fast-food restaurant meal is \$8 and it costs \$2.20 to create each meal. The average price of a full-service restaurant meal is \$17 and it costs \$4.60 to create each meal. An investor suggests you would make more money opening a fast food restaurant, but you prefer a full-service restaurant. Develop a logical plan to determine which restaurant you should open.

For more information about the costs of running a restaurant: <https://upserve.com/restaurant-insider/4-things-know-food-cost-percentage/>

Grades 8-9

English Language Arts

Select a short story or novel to read. As you read it, identify the conflict(s) in the story. Analyze the conflict(s) from multiple characters' points of view.

Now write the script of an interview for a podcast between a neutral party who interviews first one character and then the other. Make sure that each person in the conflict argues their viewpoint by establishing their claim, distinguishing their claim from that of others, and including counterclaims, reasons, and evidence. Make sure that each character includes a strong concluding statement.

For added fun, record the podcast either playing all characters yourself or recruiting others to help you.

Social Studies

Migration is the largest factor in North Carolina's population growth. About 3 out of 4 new residents have migrated to NC. Between 2012 and 2016, the largest source of net migrants was from New York, followed by New Jersey, Virginia, California, Pennsylvania, and Connecticut.

How has migration and immigration contributed to the development of NC and the United States?

What conflicts can arise between long-time residents and newcomers? How has this played out throughout NC history?

Using the NC Secretary of State's NC History Timeline or another resource, create your own timeline of important events that involve migration or immigration and resulting conflicts in our state's history:

https://www.sosnc.gov/divisions/publications/kids_page_history

Science

Wind energy is one of the safest forms of energy with minimal air pollution or greenhouse gas emissions, so why does it only make up 1% of the world's energy? Follow the link to a NC map and its potential for wind energy production: [https:// windexchange.energy.gov/maps-data/74](https://windexchange.energy.gov/maps-data/74)

What is the threshold for wind development? What two geographic areas have this much wind?

Both of these areas rely heavily on tourism, and many people have concerns that wind turbines would detract from the natural beauty of the area. Create a presentation for the NC Department of Energy, Mineral, and Land Resources comparing wind energy production to at least three other viable energy resources in your state. Explain the environmental consequences of each method.

End with an argument for the energy resource the state should prioritize in the future.

Mindfulness

"[W]e believe that conflicts can afford opportunities for learning and growth." -Western Justice Center. The Western Justice Center, or WJC, has some great suggestions on ways to resolve any type of conflict here: <https://bit.ly/2E2iCNr>

Create a skit that includes a conflict between two people. Your skit should use one of the approaches from WJC to resolve the conflict. Enlist people in your home to help you act out the skit. Which approach did you use? Was it successful? What could you do to make it more successful?

Rewrite the skit using a different approach. How was the second approach different? Which do you believe would be the most successful in real life? How will you use this experience in the future?

Logic Puzzle

A man has to get a fox, a chicken, and a sack of corn across a river. He has a rowboat, which can only carry him and one other thing.

If the fox and the chicken are left together, the fox will eat the chicken. If the chicken and the corn are left together, the chicken will eat the corn.

How does the man do it?

Field Studies

According to the UN Refugee Agency (UNHCR) there are 70.8 million forcibly displaced persons in the world. 41.3 million are internally displaced people, 25.9 million are refugees, and 3.5 million

are asylum seekers. There are more refugees today than at any other time since the Second World War. Where displaced persons will live and who will help them is a source of international debate.

Follow the link below to take a virtual journey to gain a deeper understanding of refugees - past and present. Make sure to start using the Field Guide with the video called "The UN Refugee Agency: Our Story," and then check out the other links to gain a deeper understanding.

Write a reflection on your thoughts about refugees and the work of the UN. Link:

<https://courses.lumenlearning.com/atd-pima-ant112/chapter/virtual-field-trip-toward-a-deeper-understanding-of-refugees-past-and-present/>

Research Explorations

You have just been hired to work at the United States Department of State where your job is to give updates on conflicts around the world.

You are competing with other new employees at the State Department to work directly with the Secretary of State. The best report wins!

1. Determine which conflict you are going to research.
2. Write a letter to the Secretary of State so he/she can decide the best course of action to take. In your letter be sure to include: a history of the conflict, why there is a conflict, the action you recommend, and why this action would be most helpful.

Links to examples of world conflicts: <https://www.crisisgroup.org/global/10-conflicts-watch-2020>

Math

In an effort to save money on powering the building, your school is planning to install either solar panels or a wind turbine.

	Solar Panels	Wind Turbines
Total cost to install	\$25,000	\$35,000
Yearly Maintenance Cost	\$200	\$110
Life Expectancy	35-40 years	20-25 years

Currently your school pays \$4800 per year for electricity. Solar panels provide 90% of the needed electricity and wind turbines provide 100%. Should your school install solar panels or a wind turbine? Justify your decision by providing the savings over a 20-year time span. What would the savings be over 30 years? How does the savings change over time? Is there a time when both options have an equal savings value?

Grades 10-12

English Language Arts

The five most common conflicts in literature are:

1. Man Versus Self
2. Man Versus Society
3. Man Versus Man
4. Man Versus Nature
5. Man Versus Supernatural

Write a short fable involving one of the conflicts. The more detailed and creative, the more interesting the story. Infer the moral of the fable. Then draw a picture to represent your fable (i.e. a unicorn standing amongst a herd of horses).

How does your fable relate to the morals in today's society?

Read your fable to family and friends.

Social Studies

As America starts to reopen after months of COVID19 shut downs, many people are conflicted about venturing out in public places. Every day, the media and news outlets are televising public disagreements over masks and protestors challenging the stay-at-home orders in their states.

According to Govtech, *"PSAs can create awareness, show the importance of a problem or issue, convey information, or promote a behavioral change."*

Create your own public service announcement using the link below. What would you say to address the issue over reopening the country? <https://www.govtech.com/education/news/How-to-Create-the-Perfect-Public-Service-Announcement.html>

Science

Myth vs. Fact: You must drink 8 glasses of water each day.

Scientists and health experts are conflicted over whether or not this amount is actually beneficial to the human body. Most teenagers don't drink 8 glasses a day, preferring drinks that are high in sugar or carbonated.

Design an app that helps teenagers keep track of their daily water intake to determine the amount they need. Your app should track the student's schedule, after school activities like sports or a job, and the amount of water they drink daily. Provide tips on how to improve their intake and the effects of staying hydrated.

Share your app idea with other students.

For more information about making an app, read here:

<https://learnappmaking.com/how-to-make-an-app/>

Mindfulness

Read the poem "No Holds Barred" by La Sirena about internal struggles:

<https://allpoetry.com/poem/14531017-No-holds-barred-by-La-Sirena>

How did the author make you feel? Did you empathize or sympathize with the author?

How can you resolve this internal battle? Write a poem in response La Sirena. You can finally speak your mind, so what will you say? How did you feel afterwards? Poems should contain at least three verses using 4 stanzas.

Use your poem to encourage yourself. It is your proof of overcoming a battle that only you can “see.”

Logic Puzzle

Farmer Conflict

A farmer wants to cross a river and take with him a wolf, a goat and a cabbage. He has a boat, but it can only fit himself plus either the wolf, the goat or the cabbage. If the wolf and the goat are alone on one shore, the wolf will eat the goat. If the goat and the cabbage are alone on the shore, the goat will eat the cabbage.

How can the farmer bring the wolf, the goat and the cabbage across the river without anything being eaten?

Field Studies

Take a virtual tour of the battlefields across the United States with American Battlefield Trust:

[https://www.battlefields.org/visit/virtual-](https://www.battlefields.org/visit/virtual-tours?utm_campaign=032120&utm_medium=update&utm_source=email)

[tours?utm_campaign=032120&utm_medium=update&utm_source=email](https://www.battlefields.org/visit/virtual-tours?utm_campaign=032120&utm_medium=update&utm_source=email). The ABT provides vast information on battles that shaped our history, recorded our wins and losses, and the aftermath of each war.

Select and tour three battlefields from the Revolutionary War. After reading their history, compare and contrast each battle. Why did that battle occur? Did fighting solve the conflict? How were human lives impacted by it then and now?

What alternative way would you have solved their conflict?

Research Explorations

Can a painting capture the true essence of war?

The artists featured here used their talent to express their views on the effects of war: <https://theculturetrip.com/middle-east/articles/12-astounding-artworks-from-conflict-zones/>

Which one captures your interest the most?

Select one work of art and research the issues that started the war. Did the artist's picture match the events? How would you alter the picture to depict the conflict?

Math

The government recently passed the CARES Act. People were able to pay bills and shop for necessities at their local grocery stores.

Unfortunately, stores were still socially distancing and only allowing a limited number of families in at one time.

A vertex-edge graph is often used to solve problems with scheduling. Watch the video learn about vertex-graphs and chromatic numbers: https://www.youtube.com/watch?v=-gOh1aG0_zQ

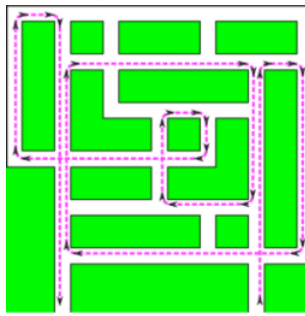
Draw a vertex-edge graph to represent this situation and find the chromatic number. What does the chromatic number mean in this situation?

How can the results of the survey be used to guide the government about future payments?

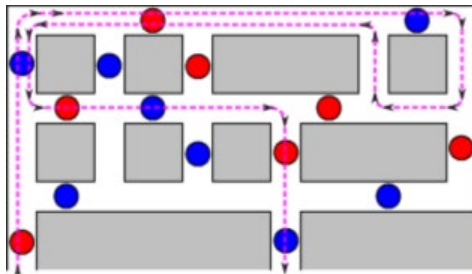
Family	Cannot shop with
Q	R S T W
R	Q S T U
S	Q R T W U
T	Q R S U V
U	R S T
V	S T
W	Q S

Reference Guide

2-3 Logic Puzzle:



4-5 Logic Puzzle:



6-7 Logic Puzzle:

Solution: You ask "In which of those two directions do you live?" A Citizen of the City of Lies will point to the City of Truth

A Citizen of the City of Truth will point to the City of Truth

8-9 Logic Puzzle:

Answer: Take the chicken, then the fox. Bring the chicken back and take the grain. Then go back and get the chicken.

10-12 Logic Puzzle:

Solution: First, the farmer takes the goat across. The farmer returns alone and then takes the wolf across, but returns with the goat. Then the farmer takes the cabbage across, leaving it with the wolf and returning alone to get the goat.