

Inflation

Hits the Family Budget

Shoot to the Moon

The Russia-Ukraine War

Tackling the Plastic Problem

2022/2023: ISSUE 1

A monthly current events resource for Canadian classrooms

Routing Slip: (please circulate)	



WHAT IN THE WORLD?

Level 1, 2022/2023: Issue 1

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Please let us know if you or a colleague would like to receive a complimentary sample of any of our publications.

Hay'sxw'qa!

LesPlan is grateful to the Lkwungen Peoples, the Songhees and Esquimalt Nations, on whose unceded land we now live, and do our work.

We welcome your comments and appreciate your suggestions. Please contact us at any time.

MISSION STATEMENT

LesPlan Educational Services Ltd. aims to help teachers develop students' engagement in, understanding of, and ability to critically assess current issues and events by providing quality, up-to-date, affordable, ready-to-use resources appropriate for use across the curriculum.





I have had many parents comment to me about how great they think What in the World? is, and they look forward to each month's issue coming home... This is a great resource for a small country school to explore the global issues that affect us all.

> K. Camelon, Grade 7/8 teacher Admaston, ON

PUBLICATION SCHEDULE

A publication schedule listing the release dates for each issue is posted on the Subscriber page of our website at:

www.lesplan.com/subscribers



SUGGESTED APPROACH

WHAT IN THE WORLD? now offers even more flexibility to teachers and students while meeting key curriculum outcomes and utilizing best practice. In response to the need for students to develop 21st Century skills, the topics, themes, or big ideas of selected articles or the issues arising from them as well as the accompanying activities address many of the following competencies:

- Communication
- Collaboration
- Critical and Reflective Thinking
- Creative Thinking
- Personal and Social Responsibility (Citizenship and Character Education)
- Historical Thinking Concepts

Each article is accompanied by **Before** and **After** reading activities, appropriate to the topic or competencies embedded in the article:

Before Reading Activities	set the context and purpose for reading			
After Reading Activities	help students consolidate, extend, and transform their thinking			

After reading activities offer options from each of the skills below. The components accompanying each article may be used as a whole or individually, depending on the teacher's goals and the needs and interests of the class.

Literacy	Inquiry	Media Literacy
 comprehension questions focused reading or notemaking strategy and accompanying organizer 	online explorationcritical thinking questionsself-directed inquiry project	 analyzing visuals (e.g., news photos, editorial cartoons, infographics, maps) evaluating sources

To allow for further differentiation, **WHAT IN THE WORLD?** is available in two levels to meet students' varied reading abilities.

A Word file for each issue is also provided online, so teachers can quickly and easily modify articles and/or assignments as required.

Note: To facilitate assessment, a comprehension quiz is included for each article. Teachers may also find the **Assessment Rubric** (p. 59) to be useful for providing students with formative, strength-based feedback, and/or assessing students' responses holistically.

DID YOU KNOW?

Our PDFs work seamlessly with assistive reading technology, and the Word version of this document can be uploaded to Google Classroom and many other online platforms.

BEFORE READING

- 1. Divide the class into groups of 3-4 students. Provide each group with one shared piece of blank paper, and a pencil for each student.
- 2. Write the word "Inflation" on the board.
- 3. Tell students they will have one minute to write down any words or ideas related to inflation that come to mind. After one minute has passed, have them compare their ideas with their group.
- 4. Next, have a spokesperson from each group share 3 key ideas with the class. Make note of any similarities.
- 5. As a class, watch the following video from the CBC's Andrew Chang entitled "Why inflation happens and why it's hard to stop" at https://www.yout-ube.com/watch?v=6XjvWISoIKM [8:20]
- 6. After viewing the video, have each student identify one idea they understand better and one question they still have.
- 7. Finally, invite students to set a purpose for reading the article, referring to the resource page **Setting A Purpose Before Reading** (page 60) as needed.





You've been saving up to buy a new \$500 bike. For a full year, you've been working hard doing odd jobs and chores. Now, you're ready to make your purchase.

But the news isn't good. Your buying power isn't what it was just 12 months ago. The bike that used to cost \$500 is selling for as much as \$700 today. That's an increase of 40 percent.

Now you'll need to earn more money. And there's no guarantee that the price of your dream bike won't be out of reach when you're ready to buy it once again.

GALLOPING INFLATION

What accounts for the huge cost increase you've just experienced? Inflation. It has sent the price of goods and services soaring in Canada and around the world.

What is inflation? It's a continuing rise in the average level of prices over time. It occurs when there is an imbalance between supply and demand.

Supply is how much of something, such as a product or a service, is available to buy. Demand is how many buyers there are for those things. When there's more supply than demand, prices usually go down. When there's more demand than supply, prices often go up.

An increase in the price of a few items isn't a big problem. However, governments are concerned when prices rise too much and too quickly for many items. Why? Because when this happens, money loses some of its value. And if the buying power of a loonie decreases so much that people find it hard to purchase what they need, there is widespread hardship.

THE CPI "BASKET"

In Canada, we measure inflation using the Consumer Price Index (CPI). The CPI reflects price changes that consumers pay for a fixed "basket" of goods and services. The CPI "basket" consists of a mix of necessities

and luxuries. These range from food and shelter to clothing, transportation, and recreation.

The CPI keeps track of the monthly percentage that the cost for the total "basket" of items changes. These changes are averaged over a 12-month period to get the annual inflation rate.

A FINE BALANCE

Some inflation is normal in a healthy economy. A steady rise in prices can even be good for a country's growth – as long as this inflation is predictable.

Suppose, for example, you're the owner of a small coffee shop. If you know that the cost of beans is going to rise at a reliable rate, you can prepare for the hike over time. You can gradually adjust your staffing, your menu prices, and other factors. When every business knows what to expect in this way, the value of a dollar usually remains on an even keel.

Moderate inflation can be good for average consumers, too.

Say your family has borrowed money to buy a car. Inflation makes that debt shrink, because the borrowed amount has lost some value. Another example: if your family owns a home, as housing prices go up, that **asset** is now worth more.

POCKETBOOK PAIN

However, too much inflation creates instability and insecurity. So what is the ideal level of inflation? Experts say that in Canada, it is two percent.

In 2020, the annual rate in our country was 0.7 percent – too low by that measurement. But by 2021? It had jumped to 3.4 percent. That made essential items such as food, clothing, and shelter more expensive. And in July, Canada's central bank predicted inflation would hit 7.2 percent in 2022. That's the biggest jump in 40 years.

This high inflation rate is causing pain among Canadians living on **pensions**. It's even impacting families with average incomes.

REASONS FOR THE RISE

Several factors have contributed to current high inflation rates.

One culprit is COVID-19.
During the pandemic, many people received government help or had extra money that they would have spent on commuting or work clothing.
So they shopped. They upgraded computers, bought workout equipment, invested in new appliances, and so on. The supply of these and other items didn't keep up with demand, so prices rose.

The Russia-Ukraine war is another factor. It is causing **supply chain** issues and material shortages. For example, over one-quarter of the world's wheat comes from Ukraine and Russia, but this wheat was trapped due to the conflict. So the cost of bread and related goods shot up. Higher wheat prices also affected farm animal food. That in turn drove up prices for chicken, beef, pork, dairy, and eggs.

Another reason? There are more jobs in North America today than there are people willing to fill them. To attract workers, employers have had to hike wages. They are passing those increases on to consumers.

WHAT CAN BE DONE?

A rise in interest rates – that is, the cost to consumers and businesses of borrowing money – is the principal tool that **central banks** use to try to curb inflation.

In 2019, before the pandemic, when Canada's economy was stronger, the Bank of Canada made borrowing money cheap. Its rate was under two percent to encourage spending so the economy could grow.

But this July, Canada's central bank made the largest one-time increase in interest rates since 1998. The hike brought the rate up to 2.5 percent from the previous 1.5 percent.

How could this help? The logic is that when interest rates go up, people borrow less money. They cut spending on non-essential items as a result. Businesses, too, spend less. This cools the economy, causing the inflation rate to decrease – ideally back to two percent.

But will this tactic work this time around? You'll find out when it's time to buy a bike again. ★

DEFINITIONS

ASSET: something such as money or property that a person or company owns

CENTRAL BANK: a country's national bank that sets its monetary policy and interest rates, and oversees its money supply

PENSION: money paid regularly by the government or a company to a person no longer working due to age or health **SUPPLY CHAIN**: the system of people and things that are involved in getting a product from the place where it is made to the person who buys it

COMPREHENSION QUESTIONS

1. A continuing rise in the average level of prices over time is called:
2. What does supply mean? What does demand mean?
3. Explain why prices sometimes go down and why sometimes they go up.
4. What does CPI stand for?
5. What does the CPI measure and how does it do this?
6. What kinds of items are in the CPI "basket"? List three categories.
7. What is the 'ideal' inflation rate? Explain.
8. What was the annual rate of inflation in Canada in 2020 and in 2021?
9. In July, what was Canada's annual inflation rate predicted to be for 2022?
10. List at least two reasons why inflation rose so quickly in recent months.

CAUSE/EFFECT ORGANIZER

YOUR TASK:

You will be practicing making notes on the article "Inflation Hits the Family Budget" using a cause/effect fishbone chart.

This structure is helpful if the information in the text explains a cause (what makes something happen or the reason something happens) and discusses the effects (what happens as a result of the cause).

BEFORE READING

• Record the topic and purpose for reading on the **Cause/Effect** organizer (p. 9). Then, list what you already know about the topic – inflation – in the left-hand column. In the right-hand column, write what you want to know or wonder about the topic. For example, *What are some of the causes of inflation? How does inflation impact our everyday lives? What is being done to reduce inflation?*

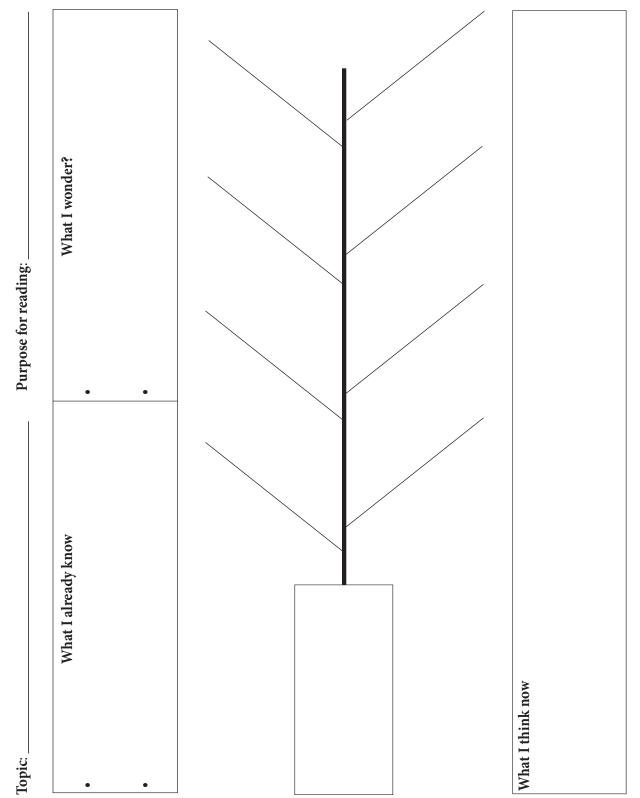
DURING READING

- As you read the article, be mindful of questions that arise. Mark the text with a ? each time a new question pops into your head. Write the question in the margin. For example, in the second paragraph, how could cost of a product increase by 40% in just 12 months?
- Also, make connections. Identify connections with the letters **T-S**, **T-T** or **T-W** and make brief notes in the margin to explain the connections. For example, in the second paragraph you may have been saving up to buy something that is now more expensive to purchase (a text-to-self connection) or seen a TV news reporter talk about how the price of gas is affecting people's ability to travel (a text-to-text connection).
- ullet Read to find out the specific cause(s) of inflation suggested in the article and the resulting effects. Mark these with a C and an E.

AFTER READING

- Make notes using the Cause/Effect organizer. Remember that effective notes are written in point form and in your own words.
- Begin by identifying and recording the main causes of inflation in the box or head of the fishbone organizer. Then, add each of the key effects on the branches or bones.
- When you have finished recording the cause and effects, complete the *What I think now* section of the organizer. Use the following questions to guide your response:

What surprised you about what you read? What new learnings or connections did you make? What questions do you still have? What are your reactions to the information in the article?



QUESTIONS FOR FURTHER THOUGHT

1. The article suggests three main reasons for higher inflation rates in North America: COVID-19, the Russia-Ukraine war, and more jobs than there are applicants to fill them.
Choose one of these reasons, and share your ideas on how it has contributed to higher inflation rates. Give examples to support your thinking.
2. The article states that higher inflation rates are "causing pain among Canadians living on pensions." What reasons can you suggest for this? Explain.
3. How have you or people you know been personally impacted by higher inflation rates? What has been the biggest adjustment? Explain.

QUESTIONS FOR ONLINE EXPLORATION

<i>Note</i> : The links below are listed at www.lesplan.com/links for easy access.
1. Visit the sites below to learn more about how high inflation rates are impacting family budgets: https://www.yout-ube.com/watch?v=mW7Ebo3oq4Y [6:57] https://www.mydoh.ca/learn/blog/banking/the-parents-guide-to-teaching-kids-about-inflation/
What connections can you make to the ideas presented? Explain.
2. Learn more about how the Canadian government calculates inflation rates using the CPI basket: https://www.statcan.gc.ca/en/subjects-start/prices_and_price_indexes/consumer_price_indexes https://www150.statcan.gc.ca/n1/pub/71-607-x/2018016/cpi-ipc-eng.htm
Identify two ideas that you learned from these sources.
3. Check out the Bank of Canada's Inflation Calculator at https://www.bankofcanada.ca/rates/related/inflation-calculator/
Using this calculator, how much would a "basket" of goods and services that cost \$100 in 1914 cost today? How much would a basket that cost \$100 in 2021 cost today?
4. Compare inflation rates around the world at either of these sites:
https://www.worlddata.info/america/canada/inflation-rates.php https://www.inflation.eu/en/
What did you learn about inflation levels in other countries? How do they compare to rates in Canada? Explain.



YOUR TASK:

Examine the editorial cartoon, then answer the following questions on a separate piece of paper:

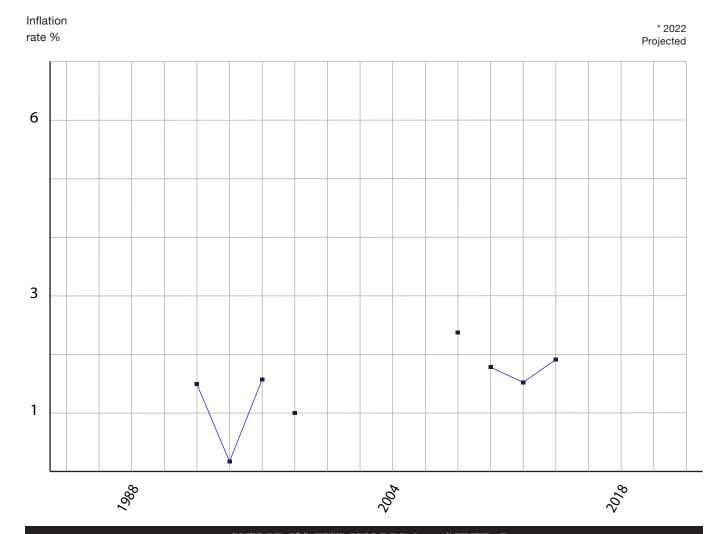
- 1. What do you already know about inflation and rising inflation rates?
- 2. Describe what you *see* and *read* in the cartoon.
- 3. As you see it, what might the cartoonist be saying about inflation rates? Explain.
- 4. For what reasons do you agree with the cartoonist? For what reasons do you disagree? Explain. ★

GRAPHING

1. Complete the table below to show Canada's inflation rate since 1984. The following link may be useful: https://www.inflation.eu/en/inflation-rates/canada/historic-inflation/cpi-inflation-canada.aspx

Year	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
Rate %		2.01		1.78		1.91	1.43		0.72	7.2*
Year	1984	1986	1988	1990	1992	1994	1996	1998	2000	2002
Rate %	3.72		4.03		1.49		1.57	1.00	2.72	

- 2. Then, plot a line graph to show Canada's overall inflation rate between 1984 and 2022.
- 3. Label your graph with a proper title.
- 4. Highlight, then label, the line that economists say is the 'ideal' inflation rate.
- 5. Examine your graph. What observations can you make and what conclusions can you draw? Explain.



PUTTING IT ALL TOGETHER

er on the line beside each question:
termined by supply and: b) interest rates d) demand
level of inflation for a healthy economy? b) 2 percent d) 12 percent
b) use their credit cards more d) spend more on vacations and renovations
rement is <u>True</u> , write one important fact to rite the words that make it true on the line below.
on of items given to families with lower incomes.
ise interest rates to try to slow inflation.
ge in Canada and the United States.
ex.
supply is greater than demand.
e to % this year.
form. (Use a separate sheet of paper if necessary.)
lation? Give reasons to support your response.



BEFORE READING

- 1. Write the title of the article on the board: "Shoot to the Moon".
- 2. Divide the class into pairs or small groups, and provide each of them with sticky notes. Have students brainstorm reasons why we should go to the Moon, recording each new idea on a different note.
- 3. Next, have students classify their reasons into categories of their choosing (e.g., rocket science advancement, Moon exploration, etc.).
- 4. Have each pair/group join with another to consolidate the ideas they came up with. Then, share as a class to co-create a master list of reasons.
- 5. Have students view the NASA video "We Are Going": https://www.yout-ube.com/watch?v=vl6jn-DdafM [3:47].
- 6. Finally, invite students to set a purpose for reading the article, referring to the resource page **Setting A Purpose Before Reading** (p. 60) as needed.



It's the brightest and largest object in the night sky. It bathes us in moonlight. Over 27 days, we watch it change in size and brightness. We feel its gravitational pull in the rise and fall of the Earth's tides.

The Moon is the Earth's only natural **satellite**. About 384,000 kilometres away, it orbits our planet. One trip takes 27.32 Earth days.

The Moon's temperature ranges from minus 248 degrees Celsius to plus 123 degrees Celsius. It has about one percent of the mass and 0.166 of the gravity of the Earth. So if you weigh 45 kilograms on Earth you'd weigh 7.5 kilograms on the Moon.

Ours is not the only moon in space. But our Moon is closest to us. And it's the only place in space where humans have set foot.

EXPLORING THE MOON

The **Soviet Union** landed the first uncrewed spaceship on the Moon in 1959. That event spurred the United States into action. U.S. President John F. Kennedy wanted to beat the Soviets by landing the first human on the Moon.

He succeeded. On July 20, 1969, Apollo 11 astronauts Neil Armstrong and Edwin "Buzz" Aldrin took "a giant leap for mankind" onto the dusty lunar surface.

Over the next three years, five other Apollo missions delivered U.S. astronauts to the Moon. They brought back 382 kilograms of rock and soil to study.

The last human landing was in 1972. However, uncrewed lunar expeditions resumed in the 1990s. The U.S. National Aeronautics and Space Administration (NASA) sent

robots to probe the Moon. So did the European Space Agency (ESA), Japan, China, and India.

Then in 2019, NASA announced the Artemis Lunar Exploration Program. It's an ambitious new program to send humans back to the Moon.

ARTEMIS I

The first mission was scheduled to launch from the Kennedy Space Center in Cape Canaveral, Florida on August 29. That's when a very powerful rocket, the Space Launch System (SLS), was set to lift the Orion spacecraft into lunar orbit.

This test flight was uncrewed. The only passengers were three mannequins. The mission was scheduled to take four to six weeks. Then the spacecraft was expected splash down off the coast of Baja, California.

DEFINITIONS

MANNEQUIN: a life-size model of a human body **SATELLITE**: an object that travels in a path around another in space

SOVIET UNION: officially the Union of Soviet Socialist Republics (USSR). It was made up of 15 Soviet Socialist Republics, including Russia, before it broke apart in 1991.

SHOOT TO THE MOON

During Artemis 1, Orion was supposed to fly farther, and remain in space longer without docking, than any other spacecraft built for humans. It was also expected to return home faster and hotter than ever before, reentering Earth's atmosphere at 11 kilometres per second and producing temperatures of approximately 2760 degrees Celsius.

"This is a mission that truly will do what hasn't been done and learn what isn't known," said Mike Sarafin, the Artemis 1 mission manager at NASA Headquarters.

FUTURE MISSIONS

Artemis 2 will be the first crewed mission. It is scheduled for 2024. Artemis 3 will take place in 2025 at the earliest. That's when astronauts will land on the Moon for the first time in over 50 years.

NASA plans to build a spaceport that will orbit the Moon for Orion to dock at. It's called the Gateway.

At the Gateway, astronauts will stay in HALO, short for Habitation and Logistics Outpost. HALO will provide their life support needs.
Astronauts will travel to the

Moon's surface via the Starship Human Landing System (HLS).

Eventually, NASA plans to build Artemis Base Camp. Four astronauts could then live and conduct science experiments on the Moon for up to two months. The base camp will likely be at the Moon's South Pole. It will have a lunar cabin, a rover, and a mobile home.

JOINT EFFORT

NASA is leading the Artemis program. However, others are playing a role. They include ESA, the Canadian Space Agency (CSA), and the Japan Aerospace Exploration Agency. Several companies are participating as well.

Canada is contributing
Canadarm3. It's an improved
version of the robotic arms we
once built for the Space Shuttle
fleet and the International Space
Station. We're also providing a
lunar rover. In exchange, CSA
astronauts will take part in two
missions to the Moon.

NOT SCIENCE FICTION

A Moon base sounds like the stuff of science fiction, but NASA has an even bigger goal: to send astronauts to Mars by the 2030s or soon after.

WHO OWNS

Who governs the Moon? Who decides who can land on it, live on it, and mine its resources? For years, nations have debated these questions.

The Moon Agreement was drawn up in 1979. It was designed to prevent countries from making a profit on space resources. However, only a few countries **ratified** this agreement. They didn't include the U.S., China, and Russia.

Now the U.S. has unilaterally drawn up the Artemis Accords. This is a set of guidelines for countries participating in its Artemis Project. Canada is one of eight countries that has signed these accords. Others have refused to do so. Why? They believe the U.S. is imposing rules to keep its leadership position on the Moon.

Setting up a base on the Moon is a key step towards accomplishing this goal – but it's also an inspiring achievement on its own.

"To all of us who [sic] gaze up at the Moon, dreaming of the day humankind returns to the lunar surface – folks, we're here! We are going back," said NASA administrator Bill Nelson.

DEFINITIONS

RATIFY: to make an agreement official by signing it or formally accepting it **UNILATERALLY**: (something) done by one country without considering what other countries think or want



COMPREHENSION QUESTIONS

1. How far away is the Moon?
2. How long does it take for the Moon to circle the Earth?
3. List at least three important facts about the Moon.
4. What event prompted the United States to send astronauts to the Moon in 1959?
5. What is the purpose of the Artemis Lunar Exploration Program ?
6. Who is leading this program?
7. What is the purpose of the Artemis I mission?
8. How far was the Orion spacecraft scheduled to fly? How long was it expected to travel for?
9. When are the next two missions for the Artemis Lunar Exploration Program scheduled to occur?
10. What will Canada contribute to the Artemis Program?



QUESTIONS FOR FURTHER THOUGHT

1. The article states that when Commander Neil Armstrong stepped onto the surface of the Moon during the Apollo 11 mission in 1969, he said, "That's one small step for man, one giant leap for mankind."
As you see it, what is the significance of that statement today, more than 50 years after it was first said?
2. The article discusses the question of who owns the Moon. Why are some countries concerned about who has the right to explore the Moon? Why are some countries refusing to ratify common agreements? As you see it, how should Moon exploration be monitored? Give reasons to support your ideas.
3. Elon Musk, founder and CEO of SpaceX, and Jeff Bezos, owner of Blue Origin, have signed contracts with NASA for their companies' spacrafts to fly astronauts to the Moon. Mr. Bezos has stated, "We're not going back to the Moon to visit. We're going back to the Moon to stay." Mr. Musk has stated, "I think we've got potential for an incredibly exciting future in space, with a base on the Moon and ultimately sending people and having a self-sustaining city on Mars."
What are your thoughts about having self-sustaining settlements on the Moon and Mars? Are they realistic? Are they desirable? What might some considerations and challenges be?
4. In Greek mythology, Artemis was the twin sister of the god Apollo. As you see it, what is the significance of the choice of name for NASA's new project to put astronauts on the Moon?



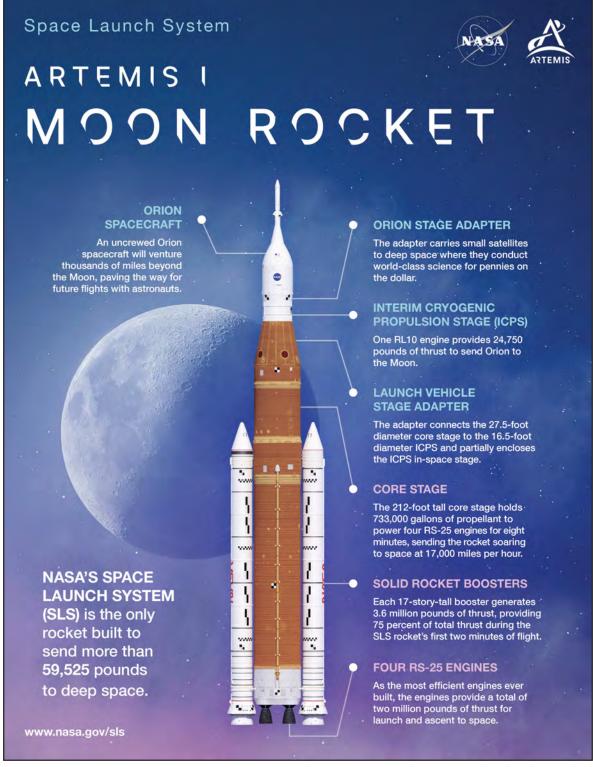
QUESTIONS FOR ONLINE EXPLORATION

Note: The links below are listed at **www.lesplan.com/links** for easy access.

Tion. The mind below are noted at www.icspian.com/minks for easy access.
1. Visit any of the following sites to learn more details about how the Artemis Project will happen: https://www.yout-ube.com/watch?v=qMMguZLZxhk [5:31] https://www.yout-ube.com/watch?v=XcPtQYalkcs[8:48]
What additional information about the Artemis Project did you learn from these links? What questions do you still have?
2. Learn more about Canada's role in and contributions to the Artemis Project: https://www.cbc.ca/news/science/canada-artemis-moon-1.6552605 https://www.cbc.ca/player/play/2062875715871/ [6:14] https://www.asc-csa.gc.ca/eng/astronomy/moon-exploration/canada-role.asp https://www.yout-ube.com/watch?v=fVC7ZqC4Ffo&feature=youtu.be [1:47]
As you see it, what does Canada's participation in this project mean for the future?
3. Find out more about Artemis I: Artemis I map: https://www.nasa.gov/image-feature/artemis-i-map NASA Mission description: https://www.nasa.gov/feature/around-the-moon-with-nasa-s-first-launch-of-sls-with-orion
What three new facts did you learn?
4. Check out the scientific experiments that will be performed during Artemis I: https://www.yout-ube.com/watch?v=Qxxb4YeBTug [3:44]
As you see it, what is the goal of these experiments?



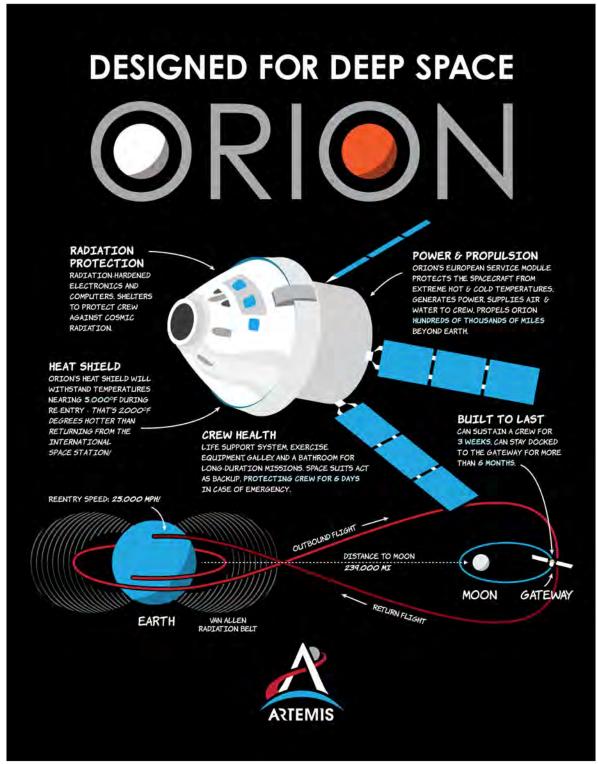
INFOGRAPHIC



https://www.nasa.gov/exploration/systems/sls/multimedia/images.html



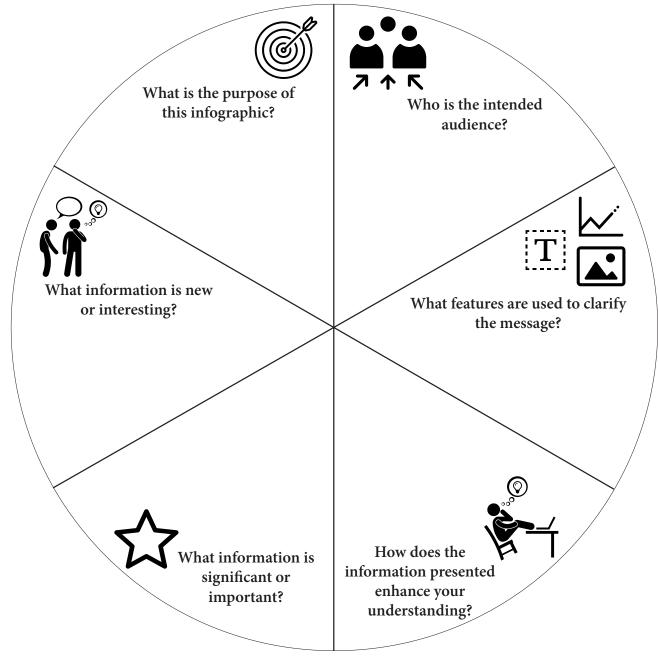
INFOGRAPHIC



https://www.nasa.gov/image-feature/orion-capabilities-for-deep-space-enable-crewed-artemis-moon-missions



ANALYZING AN INFOGRAPHIC



What questions do you still have about the topic presented?



PUTTING IT ALL TOGETHER

A. Write the letter that correspo	nds to the <u>best</u> answ	ver on the line beside each question:	
- ·	arth's climate	t the Moon is TRUE? b) it takes 262 days to orbit the Earth d) it has about one percent of the Earth's mass	
2. Which powerful rock a) Space Launch Syste c) Saturn V		n spacecraft into space? b) Falcon 9 d) Sputnik	
3. Which program aims a) the NASA Moon Pr c) the Gateway Moon	roject	to the Moon for the first time since 1972? b) HALO d) the Artemis Lunar Exploration Program	
		tement is <u>True,</u> write one important fact to write the words that make it true on the line belo	w.
4. True or False? The United States was the first country to land a spaceship on the Moon.			
5. True or False? A perso	on weighs exactly ha	lf as much on the Moon as on Earth.	
6. True or False? The fir	st Artemis mission w	vill not carry astronauts.	
C. Fill in the blanks to complete	each sentence.		
7. The Moon's	ranges fro	om -248 degrees Celsius to 123 degrees Celsius.	
8. The	11 mission in 1969	9 was the first crewed spacecraft to reach the Mo	on.
9. NASA = U.S. National Aerona	utics and	Administration.	
D. Respond to the following que	stion in paragraph f	form. (Use a separate sheet of paper if necessary	.)
10. As you see it, what is the sign response.	ificance of the Arten	nis program? Give reasons to support your	
			—
			—



BEFORE READING

Please note: <u>This article contains sensitive content</u>. Please refer to the teacher resource page **Facilitating Discussions on Sensitive Topics** (pp. 57-58) before approaching this topic with your class.



BEFORE READING

- 1. Share the title of the article with the class: "Russia Versus Ukraine".
- 2. Ask students if they can recall when the war began. (February 24, 2022)
- 3. August 1 marked Day 159 of the Russian invasion and CBC posted 3 photos, all taken on Day 159, that can be found at: https://www.cbc.ca/news/world/day-159-of-russia-s-invasion-of-ukraine-1.6538158
- 4. Project each picture for 30 seconds. Ask students to record their thoughts, emotions, and ideas for each picture as they view it.
- 5. Have students share their ideas with the class. Note and record similarities.
- 6. Finally, invite students to set a purpose for reading the article, referring to the resource page **Setting A Purpose Before Reading** (page 60) as needed.

RUSSIA VERSUS UKRAINE



On February 24, Russian President Vladimir Putin ordered his nation's soldiers to invade neighbouring Ukraine.

Russian troops entered the sovereign country from the air, land, and sea. They attacked military targets as well as countless homes, schools, hospitals, and other civilian locations. The aim of this unprovoked invasion? To capture the capital, Kyiv; to overthrow the government; and to take control of the country.

STRONG RESISTANCE

President Putin had expected the war to end quickly. After all, Russia had a much stronger military. At the start of the conflict, Russia had over one million military **personnel** compared to Ukraine's 200,000. Russia also had more and better military equipment.

However, Ukraine fought hard. Russia also faced unexpected **logistical** and operational challenges. As a result, Russia made slow progress, and by mid-April, President Putin had abandoned the plan to capture Kyiv. Instead, he shifted his focus to the Donbas region in eastern Ukraine. In particular, he zeroed in on the provinces of Luhansk and Donetsk.

Why did Mr. Putin choose to target this area? The Russians have **occupied** Ukraine's Crimean Peninsula since 2014. This peninsula is adjacent to the Donabas. As well, much of the

Donbas was controlled by people sympathetic to Russia even before the invasion.

MR. PUTIN'S JUSTIFICATIONS

Mr. Putin said he invaded Ukraine because he needed to secure Russia's borders. He argued that after the USSR dissolved in 1991, the West promised not to expand NATO. Yet the organization has allowed six former Warsaw Pact members and three former Soviet republics to join since that pledge was made.

Making matters worse, Ukraine wants to become a NATO member, too. Mr. Putin says this desire represents a direct threat to Russia. He demanded that

DEFINITIONS

CIVILIAN: non-military citizen

LOGISTICAL: of or relating to the handling of the details of an operation

NATO: North Atlantic Treaty Organization – a political and military alliance designed to defend democracy

OCCUPIED: seized and controlled as by a military takeover **PERSONNEL**: the people who are members of a military force **SOVEREIGN**: independent

SOVIET REPUBLIC: a republic that was part of the old Soviet Union

USSR: United Soviet Socialist Republic – a communist country in eastern Europe and northern Asia that included Russia and 14 other republics (also known as the Soviet Union)

WARSAW PACT: a treaty of mutual defense and military aid

WARSAW PACT: a treaty of mutual defense and military aid created in 1955 by communist states of Europe under Soviet influence. The alliance ended in 1991.

Ukraine be barred from joining the alliance.

Mr. Putin also said that he needed to stand up for Ukrainians of Russian ethnic origin. He claims they want their country to be controlled by Russia. He also says they are being persecuted and even killed by the Ukrainian government, which is being run by Nazis.

"I have decided to conduct a special military operation... to protect people who have been subjected to bullying and **genocide**... for the last eight years," Mr. Putin declared when the invasion began.

COUNTERING THE CLAIMS

However, most other countries agreed that these accusations were baseless. For one thing, the West never made a firm promise not to expand NATO. For another, no NATO country had shown any sign of wanting to attack Russia. Furthermore, NATO had indicated it had no plans to admit Ukraine anytime soon.

It is true that tens of thousands of Ukrainians, many from the eastern and southern parts of Ukraine, support closer ties to Russia. However, there is absolutely no evidence that they were being harshly treated by the Ukrainian government. And the accusations of Nazis running the Ukrainian government? They were completely false.

INTERNATIONAL CONDEMNATION

Much of the international community has heavily condemned Russia for its actions in Ukraine. They accuse it of breaking international law. They also say the invasion violates Ukrainian sovereignty. So, many nations have been supplying Ukraine with badly-needed weapons and other military equipment so it can defend itself.

The U.S. alone had committed \$9.8 billion (US) in security aid by mid-August. NATO, the **European Union (EU),** and others have also contributed drones, weapons, intelligence, and funds.

ABOUT NATO

At the end of World War II, the U.S. and its allies built a series of international organizations and agreements that established a new world order. The goal of forming institutions such as the United Nations (UN), the World Bank, and global trade associations, was to promote worldwide peace and prosperity. At the same time, the West also created the North Atlantic Treaty Organization (NATO), a political and military alliance designed to defend democracy.

NATO currently has 30 members, including Canada. Each NATO country contributes to a defense fund and pledges to come to the other's aid if attacked.

However, NATO has refused to supply soldiers on the ground. It has also resisted Ukraine's demands to create a **no-fly zone** in the air. Direct actions such as these by NATO against Russia could escalate the war.

DEFINITIONS

ETHNIC: relating to a group of people with the same culture and traditions

EUROPEAN UNION: an international organization of European countries formed after World War II to reduce trade barriers and increase cooperation among its members. It currently has 27 members.

GENOCIDE: systematic killing of an ethnic group
NAZI: consistent with the ideology and practice of Nazism,
a body of political and economic beliefs put into effect in
Germany from 1933 to 1945 by Adolf Hitler

NO-FLY ZONE: an area above a country where planes from other countries are not allowed to fly, especially during a war **PERSECUTE**: to cause to suffer

UNITED NATIONS: an organization of 193 independent states formed in 1945 to promote international peace and security WORLD BANK: a United Nations agency created to assist developing nations by loans guaranteed by member governments

WORLD ORDER: a system controlling events in the world; a set of arrangements for preserving global political stability

RUSSIA VERSUS UKRAINE

ECONOMIC PENALTIES

To put financial pressure on Russia, the EU has also cut its reliance on Russian oil and energy. At the same time, oil giants like BP, Shell, and Exxon cancelled their investments in Russia. Other multinational companies have also pulled out of the country.

Meanwhile, many nations, including Canada, have brought in severe **sanctions** against Russia, its leaders, and its **oligarchs**.

THE IMPACT OF THE WAR

The war has had a wide-reaching impact.

By late August, some 6.3 million people had fled Ukraine. Another 6.6 million had left their homes but remained within the country. These **refugees** and internally displaced people represent nearly one-third of Ukraine's entire population of about 44 million.

The conflict has also impacted the global economy. **Inflation** was a growing problem in Europe and North America before the war broke out. In recent months, prices have climbed even higher. That's partly because many nations that used to rely on Russian oil, natural gas, wheat, corn, fertilizer, and minerals are no longer trading with Russia.

GRAIN SHIPMENTS RESUME

However, in mid-August, there was some good news: shipments of grain were once again leaving the Ukrainian ports of Odessa, Chernomorsk, and Yuzhny.

The ports had been blocked by Russia since the start of the conflict. That had trapped about 20 million tonnes of grain meant for export. But on July 22, the UN, Russia, Ukraine, and Turkey signed a deal to reopen them. This meant that deliveries could resume to countries in urgent need of food, such as those in the **Horn of Africa**.

NUCLEAR CONCERNS

Unfortunately, this positive development was overshadowed by a very concerning one: the shelling of the Zaporizhzhia Nuclear Power Plant on the banks of the Dnieper river in southeastern Ukraine.

On August 11, the UN called on both sides to cease military activities near the power station before a nuclear disaster occurred.

WHAT'S NEXT?

By late August, it still wasn't clear how or when the conflict would end.

With stronger, more accurate weapons supplied by the West, Ukraine had been able to destroy a significant amount of Russia's military equipment. A disproportionate number of Russian soldiers had also been killed or injured. As a result, Ukraine was beginning to win back some occupied territory.

Yet President Putin was showing no signs of backing down – and Ukrainian President Volodymyr Zelensky has said all along that Ukraine will never **concede**.

"We will fight for every metre of our land," he declared. ★

DEFINITIONS

CONCEDE: to acknowledge defeat

DISPROPORTIONATE: (something that is) bigger or smaller
than it should be compared to something else

HORN OF AFRICA: a peninsula of northeastern Africa
comprising Somalia, Djibouti, Eritrea, and parts of Ethiopia
INFLATION: an economic process in which prices increase so
that money becomes less valuable

OLIGARCH: a wealthy, powerful person; usually a Russian who became rich in business after the end of the former Soviet Union

REFUGEE: a person forced to flee their country to escape violence or persecution

SANCTIONS: an official order that limits trade, contact, etc. with a particular country, in order to make it do something, such as obeying international law



COMPREHENSION QUESTIONS

1. When did Russia invade Ukraine?
2. List one of the two main reasons that Russian President Putin gave for this attack.
3. Describe how this invasion progressed during the first few weeks.
4. Where did Russia shift its attention to in April?
5. How did the international community respond to Russia's invasion?
6. How has the international community helped Ukraine's military forces?
7. What was Ukraine's population when the war began? How many Ukrainians have left their homes due to the fighting?
8. What impact has the war had on the world economy?
9. Describe the most recent developments in this armed conflict.



QUESTIONS FOR FURTHER THOUGHT

1. The article states, "NATO has refused to supply soldiers on the ground. It has also resisted Ukraine's demands to create a no-fly zone in the air. Direct actions such as these by NATO against Russia could escalate the war."
Do you agree or disagree with NATO's decision? Give reasons to support your response.
2. The Russians have occupied Ukraine's Crimean Peninsula since 2014. In mid-August, a Russian ammunitions depot and airfield in the region reported a series of explosions. Russia claimed that sabotage was to blame, but Western media has suggested that Ukrainian forces were behind the blasts.
As you see it, why might there be conflicting reports about these explosions? Give reasons to support your ideas.
3. During a visit to Kyiv, Canadian Foreign Affairs Minister Mélanie Joly said, " <i>Ukraine is fighting an existential war for all democracies, including the ones in Europe, but also across the Atlantic for us and the U.S.</i> " What is your understanding of the word 'existential'? What do you suppose Ms. Joly meant by this statement? For what reasons could you agree with this statement? For what reasons could you disagree? Explain.



QUESTIONS FOR ONLINE EXPLORATION

Note: The links below are listed atwww.lesplan.com/links for easy access.

1. Learn more about the situation at the Zaporizhzhia Nuclear Power Plant in southeastern Ukraine: https://www.cbc.ca/news/world/ukraine-invasion-day-176-1.6554680 https://www.cbc.ca/player/play/2063497283531 [2:04] https://www.yout-ube.com/watch?v=oLUcOntomLE [3:27]			
What concerns are being expressed by the international community? What do you wonder?			
2. Visit the official sites of the United Nations, NATO, and the World Bank to learn more about how they started, their member countries, and their shared objectives as international organizations: United Nations (UN): https://www.un.org/en/our-work North Atlantic Treaty Organization (NATO): https://www.worldbank.org/en/who-we-are World Bank: https://www.worldbank.org/en/who-we-are			
What similarities and differences are there between these organizations? Give examples.			
3. Review a timeline of Russia-Ukraine relations since the fall of the Soviet Union: https://www.reuters.com/world/europe/events-leading-up-russias-invasion-ukraine-2022-02-28/			
How has this timeline supported your understanding of this conflict? Give examples.			



IMAGES IN THE NEWS

Directions:

- 1. Study the photograph below.
- 2. Then, complete each quadrant on the **Getting Inside the Picture** chart. Use as many details as you can.
- 3. Now, select one of your powerful words. Use this as a springboard for a 5-minute **Quick Write**. Let your pen flow. A good descriptive paragraph has vivid details and helps the reader "get inside the picture" (experience the event as if he/she were right there).
- 4. Generate three possible titles for this picture. Then select the one that best captures the essence of the image. Explain why this is the most suitable title.



A resident looks at damaged homes from a rocket attack on Tuesday, Aug. 16, 2022, in Kramatorsk, eastern Ukraine, as Russian shelling continued to hit towns and villages in Donetsk province, regional officials said. (AP Photo/David Goldman)

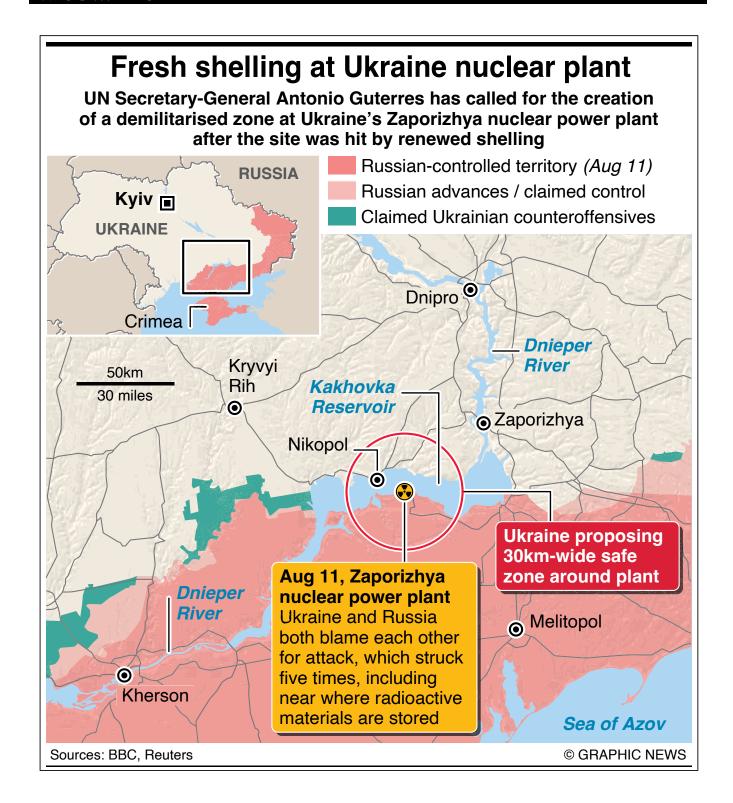


Title:				
Senses What might you hear, smell, taste or touch?	Images What details in the photograph create vivid			
What colours, textures, sounds, movements do you experience? Words	pictures in your mind? Feelings			
What powerful words describe the scene? What might you think, wonder, say if you were there?	What do you feel when you look at this image? What might the people in the photograph be feeling?			
Quick write				
Possible titles:				
1 2	3			
The best title is # because				

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INFOGRAPHIC



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Since August 2021, the U.S. government has approved 18 packages of military equipment to Ukraine, worth some \$9.8 billion in total



HIMARS long-range precisionguided rocket launchers and ammunition (above)



0+ Switchblade tactical

unmanned aerial vehicles (UAVs)

00 Phoenix Ghost tactical UAVs

126 155mm towed howitzers and up to 561,000 rounds of 155mm ammunition

Javelin anti-armour **7,500**+° systems (above)

Stinger anti-aircraft 1.400 +systems

20 Mi-17 "Hip" Russian-designed helicopters, originally purchased by U.S. for Afghan air force



- 20,000+ other anti-armour systems
- **72,000** 105mm artillery rounds
- 126 vehicles to tow howitzers
- **200** *M113* armoured personnel carriers (above)
- **100s** of other armoured vehicles

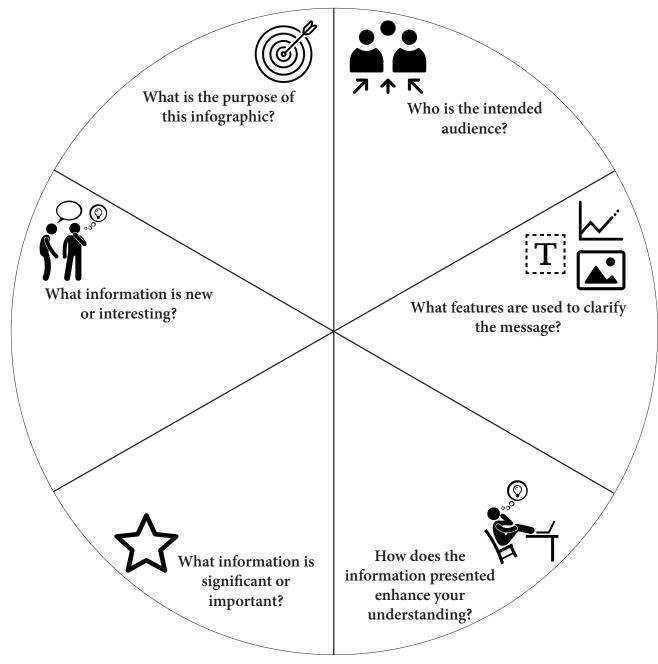
Sources: AP, CRS, U.S. Department of Defence

- **2 NASAMS** surface-to-air missile systems with munitions
- **20** 120mm mortar systems
- 10,000+ small arms
- **75,000** sets of body armour and helmets
- Puma reconnaissance UAVs
- Unmanned coastal defence boats
- **26** counter-artillery radars
- 4 air surveillance radars
- **2** Harpoon missile launchers
- **Claymore** anti-personnel mines
- C-4 explosives and demolition equipment for obstacle clearing

Pictures: DoD. Flickr

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ANALYZING AN INFOGRAPHIC



What questions do you still have about the topic presented?

MAP ANALYSIS

Examine the accompanying map. Then, answer the following questions.

A. Reading the map:
1. What is the title of this map?
2. What is the purpose of this map?
3. How are the cities, countries, and water bodies labelled?
4. How are directions represented on the map? Give an example.
5. How is distance communicated on the map? Give an example.
6. Which sea borders Ukraine?
7. What is the capital of Ukraine?
B. Analyzing the map:
1. Describe the location of Ukraine relative to other features on the map. Aim for 5-10 descriptors. (<i>E.g.</i> , <i>Ukraine is located to the south of Belarus</i> .)
2. In what ways does this map help you to better understand the Russia-Ukraine conflict? Explain.





PUTTING IT ALL TOGETHER

A. Write the letter that corresponds to the \underline{b}	best answer on the line beside each question:	
1. Many countries imposed sanctio	ons against Russian politicians and	
a) sports teams	b) oligarchs	
c) religious leaders	d) university professors	
-	ountry to escape violence or persecution is called a(n):
a) refugeec) deserter	b) evacuee	
•	d) migrant	
a) Mariupol	b) Donbas	
c) Donetsk	d) Crimean	
support it on the line below. If a statement i	e). If a statement is <u>True</u> , write one important fact to is <u>False</u> , write the words that make it true on the line b panded since the USSR was dissolved.	elow.
5. True or False? Russia expected a	quick and easy victory when it invaded Ukraine.	
6. True or False? Some 13 million U	Jkrainians have fled their homes because of the fighting	<u>.</u>
C. Fill in the blanks to complete each senter	nce.	
7. NATO = North	Treaty Organization.	
8. The	has provided the most military aid to Ukrain	ne. (2)
9. In August,sl	hipments resumed from Ukrainian ports on the Black	Sea.
D. Respond to the following question in pa	aragraph form. (Use a separate sheet of paper if necessa	ıry.)
	n the Russia-Ukraine conflict? Give reasons to support	



BEFORE READING

- 1. Divide the class into pairs.
- 2. Ask each pair to look around the classroom and to generate a list of items that are made from plastic.
- 3. Share lists as a class. Facilitate a discussion using the following prompts:
 - Was it difficult to locate items made of plastic?
 - Why do you think plastic is such a common material?
 - What are some of the advantages and disadvantages of plastic?
- 4. Next, ask student pairs to consider how plastic is made. Have them share their ideas with their partner.
- 5. Have students view the following animation, entitled "A Brief History of Plastic": https://www.yout-ube.com/watch?v=9GMbRG9CZJw [5:33]
- 6. Encourage students to share and discuss one thing that they learned from the video with their partner.
- 7. Finally, invite students to set a purpose for reading the article, referring to the resource page **Setting A Purpose Before Reading** (page 60) as needed.



It poisons sea creatures, or chokes the life out of them. It harms the air we breathe and the food we eat. It pollutes beautiful beaches. It will never, ever entirely go away.

What's the **culprit**? Plastic.

THE PLASTIC PROBLEM

Yet the world keeps making more of this substance – nearly 400 million **tonnes** a year. And we dispose of it irresponsibly. Scientists say that some eight million pieces of plastic enter the oceans daily. That's two garbage trucks of plastic being dumped into our oceans every minute!

Plastic also contributes to global warming. Made from petroleum, it releases carbon dioxide into the atmosphere when it is

PROBLEMATIC PLASTIC

Some scientists fear that plastic may be poisoning the marine food chain. Why? Because plastic doesn't **biodegrade**. Instead, after years of sunlight and wave action, it breaks up into tiny pieces less than five millimetres across. That's about the width of a pea.

These microplastics act like tiny sponges in the ocean. They soak up the many **toxic** chemicals that have found their way into the salt water. Eventually, small creatures eat these plastic pieces. Sometimes, the animals die as a result. Other times, they are eaten by larger creatures, including fish. In turn, larger animals – including humans – eat the fish and **ingest** the poisons.

On land, toxic chemicals added during manufacturing leach from plastic garbage into groundwater. The water then contaminates the soil.

burned as waste. That increases carbon emissions.

FANTASTIC PLASTIC?

So should we stop using plastic altogether? Most experts say that wouldn't be practical. After all, plastic has many valuable

features. It is cheap to make. It is strong and lightweight. It is malleable. Manufacturers rely on it to make sports equipment, electronics, household goods, building materials, cars, medical equipment, farming tools,

DEFINITIONS

BIODEGRADE: to be broken down by bacteria or other organisms into very small pieces that are not harmful to the environment

CULPRIT: something that is responsible for a bad situation

INGEST: to take food or drink into the body
MALLEABLE: easy to bend or to make into a different shape
TONNE: a unit of weight equivalent to 1000 kilograms
TOXIC: poisonous

personal protective equipment (PPE), and thousands of other items.

DID YOU KNOW?

In the spring of 2022, representatives from nearly 200 countries met in Nairobi, Kenya, for the **United Nations** Environment Assembly. On March 2, they announced a plan to create a global plastic pollution treaty by 2024.

THE LAST STRAW

So what's the solution? The federal government says we need to manage plastic better.

Currently, Canada produces 3.3 million tonnes of plastic waste a year. Only nine percent is recycled. Some 29,000 tonnes end up in our natural environment.

Steven Guilbeault is the federal Minister of the Environment and Climate Change. He says the government's first step in tackling the plastic problem is to ban plastic goods that we use only once and then toss away. This includes checkout bags, straws, stir sticks, six-pack rings, cutlery, and hard-to-recycle food containers.

These single-use items end up in our landfills and waterways more often than other plastic items because they're too hard or too costly to recycle. Yet non-plastic products can easily take their place.

The ban will happen in stages. By the end of 2022, companies must stop making or importing these items for use in Canada. The companies have until the end of 2023 to sell what they already have made. By the end of 2025, companies can no longer make these items at all—not even to sell to other countries.

"Our government is all-in when it comes to reducing plastic pollution," said Mr. Guilbeault.

A SUSTAINABLE FUTURE

Many see the ban as a cause for celebration. However, others feel that we are still moving too slowly. They point out that the six categories of banned plastics make up only about three percent of plastic waste that Canada produces in a year.

Still, the ban is an important step in creating less plastic waste in Canada. It will also encourage companies to give more thought to their use of plastics going forward.

COVID AND THE SINGLE-USE SURGE

There's a new type of plastic litter in town. Stroll along a beach or walk through a grocery store parking lot. Odds are, you'll see at least one **discarded** mask.

Surgical and N-95 masks are often made of a form of plastic called polypropylene. They are a part of life now, and they're ending up in the environment.

Masks aren't the only way that COVID increased our plastic usage. Gloves, respirators, and other medical equipment contain various plastics. So do at-home COVID tests.

According to Ashley Wallis of Environmental Defence Canada, the use of one-time-only plastic may have increased by up to 300 percent since COVID-19 set in.

The federal government pledges that more plastic bans will come later. It has set a target of 2030 to end completely the flow of plastic waste that litters our natural spaces or ends up in landfills.

"Our ultimate goal is zero plastic waste," Mr. Guilbeault says. ★

DEFINITIONS

DISCARDED: thrown away; disposed of as useless

UNITED NATIONS: an organization of independent states formed in 1945 to promote international peace and security

COMPREHENSION QUESTIONS

1. Describe the benefits of plastic products.
2. How much total plastic is produced globally every year?
3. How much plastic winds up in the world's oceans?
4. Explain what biodegrade means.
5. What happens to plastic waste when it is discarded into the ocean? Explain.
6. How does plastic contribute to global warming? Explain.
7. How much plastic waste does Canada produce? How much is discarded? How much is recycled?
8. What types of plastic products does the Canadian government plan to ban?
9. List at least four types of products that will be prohibited.
10. Explain why the federal government is banning these products.



ORGANIZER

A. The single-use plastics ban announced by the Federal Minister of the Environment and Climate Change will impact the way we live and the way that certain businesses are run. Complete the table below, considering who might be affected by each product's ban, and suggesting how they might need to adapt.

Banned plastic product	Who will be affected?	How will they adapt?
product		, ,
Checkout bags		
Straws		
Stir sticks		
Six-pack rings		
Cutlery		
Hard-to-recycle takeout food containers		

B. When you consider this information as a whole, which sector of society do you think will be *most* impacted by this ban? Explain.

QUESTIONS FOR FURTHER THOUGHT

1. Imagine that you are part of your school's environmental club and that you have been asked to create a campaign to raise student awareness of the new single-use plastics ban.
a) What information would you choose to share with students?
b) How would you choose to communicate that information?
2. Which one of the six banned products will you miss the most in your day-to-day life, and what adjustments will you need to make when it is no longer available? Explain.
3. The article quotes Federal Minister of the Environment and Climate Change, Steven Guilbeault: "Our ultimate goal is zero plastic waste." As you see it, is this a realistic goal? Support your response with examples.

QUESTIONS FOR ONLINE EXPLORATION

Note: The links below are listed at **www.lesplan.com/links** for easy access. 1. Learn more about the federal government's plan to ban single-use plastics: https://www.yout-ube.com/watch?v=FfzkYfFjXwQ [1:56] https://www.yout-ube.com/watch?v=MlWrweRj6gU [2:00] https://www.cbc.ca/news/politics/single-use-plastics-explained-1.6498061 https://www.cbc.ca/news/politics/plastics-ban-countdown-1.6494379 Then, use the following prompts to respond to what you have viewed and read: I understood I was surprised to learn that ______ 2. Prior to the government's announcement, a Canadian watchdog organization named Oceana produced a video calling for Canadians to lobby the government to issue a single-use plastics ban. Oceana has now produced a second video celebrating the 2022 announcement. Visit Oceana's website to view both of these videos: https://oceana.ca/en/our-campaigns/plastics/ Then, share what you learned with a partner. 3. Learn more about this important issue and how you can get involved in supporting the plastics ban: United Nations https://www.unep.org/interactives/beat-plastic-pollution/ Ted-Ed: https://ed.ted.com/endwaste#understand-the-problem NRDC (Natural Resources Defence Council): https://www.nrdc.org/stories/10-ways-reduce-plastic-pollution Environmental Defence Canada: https://environmentaldefence.ca/campaign/ending-plastic-pollution/ Identify one initiative that you could support and how it might impact the planet.

INFOGRAPHIC

Atlantic Ocean swamped by plastic

There is at least 10 times more plastic in the Atlantic Ocean than previously thought, according to a study led by the UK's National Oceanography Centre

Previous
estimates of
amount of plastic
entering Atlantic
since 1950

17 million tonnes

Mass of microplastic particles* in upper 200m of Atlantic found by new study

12-21 million tonnes

Atlantic Ocean

21 million tonnes would fully load almost 1,000 container ships

Mass of three most common types of plastic in entire ocean (assuming concentration found in upper 200m is representative of rest of depth of Atlantic)

200 million tonnes

(or 178 million tonnes more compared to previous estimates)

• Sample sites: Three most common types of plastic litter – polyethylene (PE), polypropylene (PP) and polystyrene (PS) – assessed at 12 locations in 2016

*Ranging from 32-651 microns in size (human hair is about 75 microns across). Study team found up to 7,000 particles per cubic metre of seawater

Sources: BBC, Nature Communications, Phys.org

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INFOGRAPHIC

Turning paper into biodegradable plastic

Researchers in Japan have developed a cheap coating for paper that behaves like plastic, but is far less harmful to the environment

Traditional

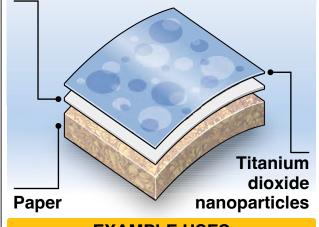
lack rigidity and soon become soggy

paper straws

BIODEGRADABLE COATING

"Choetsu": Easily applied to paper, making it rigid, waterproof and bacteria-repellent – without creating plastic pollution

Silica-resin layer: Solution of methyltrimethoxysilane, isopropyl alcohol, and tetramethoxysilane



EXAMPLE USES



cutlery



Food packaging



Drinkina straws



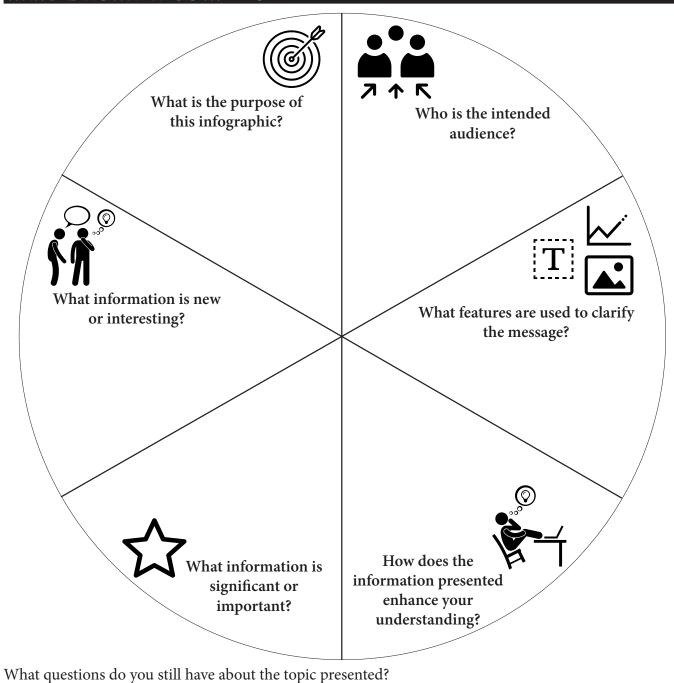


Plastic drinking straws: World's beaches estimated to be polluted with **8.3 billion** plastic straws. Now banned in many countries

When submerged in water, coated origami crane keeps its shape while uncoated one soon becomes saturated and starts to disintegrate

Sources: Vice, National Geographic Pictures: EVG Kowalievska (Pexels), Hiroi et al © GRAPHIC NEWS

ANALYZING AN INFOGRAPHIC





PUTTING IT ALL TOGETHER

A. Write the letter that corresponds to the <u>best</u> ar	nswer on the line beside each question:
1. Each year, the world produces	
a) 6 million	b) 57 million
c) 240 million	d) 400 million
a) it is cheap to make	b) it is strong
c) it doesn't biodegrade	d) it is lightweight
3. Microplastics act like tiny	in the ocean and they absorb many toxins.
a) sponges	b) bacteria
c) scrubbers	d) organisms
B. Mark the statements T (True) or F (False). If a support it on the line below. If a statement is False	statement is <u>True</u> , write one important fact to <u>e</u> , write the words that make it true on the line below.
4. True or False? Plastic is malleable.	
5. True or False? Fish are not affected by J	plastic that is in the ocean.
6. True or False? Most of Canada's plastic	waste is recycled.
C. Fill in the blanks to complete each sentence.	
7. Scientists say that about	million plastic pieces enter the oceans daily.
8. Burning plastic contributes to global	·
9. Steven Guilbeault is the federal Minister of the	
D. Respond to the following question in paragrap	ph form. (Use a separate sheet of paper if necessary.)
10. Do you agree or disagree with the single-use pl	lastics ban? Give reasons to support your response.



THE STEPS OF AN INQUIRY PROJECT

Choose a news article from this issue that you found interesting or surprising – one that caught your attention, sparked an 'ah ha', or left you wondering about something. Tap into your curiosity. What more do you want to know?

Before starting your Inquiry Project, do a little more research on your own to investigate the news story or topic in a deeper way. Notice the questions that come to mind as you read.

When you have a deeper understanding of the topic or issue, complete the **Inquiry Project Planner** on p. 46. Use the following steps to guide you:

1. A good inquiry project starts with a powerful inquiry question. This is an overarching question related to an important issue, problem, or concern in the news story or topic you have chosen. It should be something you are genuinely curious about or that is meaningful to you.

Inquiry questions are not easy to answer. They are open-ended (meaning that they can't be answered with a yes or no response), lead to more questions, and require you to think or really investigate something. Answers to inquiry questions are not found by 'Googling'!

A good inquiry question should have these 4 components:

- A question stem (e.g., What is...? How can...? Why can't...? What could...? What impact...? How would it be possible...? What would happen if...? How would you improve... Why do you believe...?);
- Who is taking action and/or who will be impacted by the findings/answer (e.g., *you*, *your family*, *your school*, *your community*, *the world*);
- What the action is (e.g., solve, reduce, develop, create, refine, educate, make, impact, improve, change);
- What the problem or concern is.

For example, if, after reading an article that explains how COVID-19 spreads, I wanted to learn more about the benefits (or limitations) of wearing a mask, my inquiry question might be:

How can I educate students about the importance of wearing a mask in school? OR

How can I educate students about the limitations of wearing a mask in school?

Here are other examples of inquiry questions:

- How might I create and sell something at profit, so I can contribute to my favourite charity?
- What could parents prepare for lunch if their child is allergic to gluten?
- What impact would reducing plastic take-out containers have on the environment?
- How can we attract more native birds and butterflies to our school garden?
- 2. Then, brainstorm other smaller, supporting research questions that will help you arrive at the answer to your inquiry question. Aim for 4-5 questions to start. For example:
- Do masks help stop the spread of COVID-19? If so, how? If not, why?
- Are all masks (or mask designs) equally effective?
- Who benefits from wearing masks? Who doesn't?
- Where and when should masks be worn?
- Are there other measures that are more effective at stopping the spread of the virus?

As you begin to research, you may find that there are other questions that you want to know the answer to. Record these questions, too.



3. Decide what resources you will explore to find answers to your questions. What will you read (print or digital texts), watch, study and/or who you might talk to?

If you are researching online, make sure the website is credible. (That means it is trustworthy — you can trust the information to be true and up-to-date). Also check that the information is reliable. (That means the information is accurate, presents a balanced view vs. a biased one, and answers your question.)

Check out these short videos to learn how to check the credibility and reliability of websites:

- How to evaluate sources for reliability: https://youtu.be/q1k8rcYUmbQ [3:48]
- How to check if a website is credible: https://youtu.be/jt-IZ5M6XU8 [1:39]
- 4. Figure out how you will document (show) everything you are learning about your inquiry question either digitally or by hand. There are lots of options:
- keep a written journal;
- create a note making template (like the one included on p. 47);
- construct a visual journal (e.g., photographs, videos, Sketchnote);
- write a blog (e.g., Wordpress, edublogs, Weebly for Education);
- link a series of mind maps or concept maps.

Remember to date each entry and explain why what you documented is important or how it is related to your inquiry question.

For example, I might find photographs of different types of masks and use PicCollage to document the different examples. Then, I might type a brief caption under each photograph explaining what the masks are made of and how they prevent the spread of COVID-19.

- 5. Determine how you will share your learning with your peers, in an authentic way. Think about how you best show what you know and how experts in the field might share their knowledge. There are lots of ways to do this, such as:
- record a podcast
- design a blog
- build a model
- develop an infographic
- make a video
- create an animation
- present a TED Talk with an accompanying slide show.
- 6. Finally, create a project timeline. List all the steps you need to take to finish your project and set deadlines for completing them. Online calendars or organizer apps, such as Trello, are helpful tools for managing projects. Use the strategy of working backwards to make sure you give yourself enough time to complete each step and not be rushed.
- 7. You are now ready to begin researching. Have fun!



INQUIRY PROJECT PLANNER

Topic:
Inquiry question:
This question is important to me because
Research questions:
•
•
•
•
•
Resources I'll use:
How I will document my findings:
How I will share what I've learned:
Due:



INQUIRY RESEARCH ORGANIZER

HINTS:

- Use multiple valid sources
- Use the right keywords and search strategies to find relevant information

NOTE:

You may find fascinating facts that aren't connected to your question. If that's the case, just add a question and the answer. The fun part of researching is that you never know what fascinating facts are going to pop out at you.

Check Your Sources

Identify the source

- Is it true?
- Is it trustworthy?
- Is it current (up-to-date)?

Analyze the information

- Is it accurate?
- Is there any bias that should concern me?
- Does this answer my question?

Inquiry Question:		
Q:	Q:	
A:	A:	



HELPFUL TEACHER RESOURCES ON INQUIRY-BASED LEARNING

Check out Trevor MacKenzie's website with links to podcasts, blogs, social media links, and other resources on Inquiry-based learning:

https://www.trevormackenzie.com

His book, *Dive into Inquiry: Amplify Learning and Empower Student Voice*, offers a scaffolded approach to student inquiry: structured, controlled, guided, and free inquiry. It is a practical resource if inquiry-based learning is new to you.

John Spenser is another educator whose videos, blogs, and resources offer practical strategies and structures for engaging students in inquiry. Here are two to get you started:

- "Helping Students Ask Better Questions by Creating a Culture of Inquiry" https://medium.com/synapse/helping-students-ask-better-questions-by-creating-a-culture-of-inquiry-d1c4bo324a6f
- "Using a Wonder Week to Spark Inquiry-based Learning" http://www.spencerauthor.com/wonder-week/

Edutopia has a number of articles on student inquiry, including:

- "What the heck is Inquiry-based Learning?" https://www.edutopia.org/blog/what-heck-inquiry-based-learning-heather-wolpert-gawron
- "Resources and Downloads to Facilitate Inquiry-based Learning" https://www.edutopia.org/article/inquiry-based-learning-resources-downloads

^{*} *Note*: All links in this document are listed at www.lesplan.com/en/links for easy access.

SETTING THE TONE

Setting a positive and empathetic tone in your classroom is essential to the exploration of sensitive issues.

- 1. It is recommended to co-create discussion norms with your students and, depending on their experience, review what each of these looks like and sounds like. Post them for regular classroom reference. These may include:
- Listen respectfully and actively, without interrupting
- Assume best intentions
- Challenge ideas, not individuals
- Commit to learning, not winning
- Speak with evidence
- Agree and disagree politely
- 2. Always give students the option to pass on a sensitive discussion topic and to choose other means of 'participation' instead, such as a personal journal entry, or partner/small group discussion.

BEFORE READING

1. Know the topic:

• review the *Learning Outcomes* and the *At a Glance* points (found in the Before Reading section of the lesson plan accompanying the article) before presenting the article to students.

2. Know yourself:

• consider your perspective on the article content and how you will respond to student questions.

3. Know your students:

- anticipate student connections and/or triggers related to the article content.
- anticipate how you might incorporate or respond to these connections.

4. Find out what your students know:

- brainstorm as a class, talk with a partner, or write in response to a prompt, depending on students' backgrounds and life experience.
- begin with basic questions (e.g., Who? What? Where? When?).
- progress to more probing questions (e.g., How? Why?).

5. Gather student ideas and questions:

- examine student ideas together.
- determine commonalities.

6. Help students make connections:

- how might this topic affect them, their family, or their friends?
- are there connections that can be made to other topics you've studied(e.g., political, environmental, etc.)?

7. Introduce the article:

- share the *Learning Outcomes* (found in the Before Reading section of the lesson plan accompanying the article) with students.
- encourage them to focus their reading on these outcomes. You may assign specific outcomes to certain groups.
- invite them to note further questions about the topic as they read.

DURING THE DISCUSSION

When dealing with sensitive topics, it is important to actively facilitate the conversation and to monitor its progress:

- Take the temperature of the discussion often. Remind students of the discussion objective as needed. If the intensity of the discussion is escalating, remain calm and try to turn it into a learning experience. Don't avoid the issue, but defer it so that you can make a plan to deal with it at a later date.
- **Remind students of discussion norms as needed**. (e.g., "Remember our norms: challenge ideas, not individuals.")
- Reword student comments/questions as needed. (e.g., "What I think you are saying is... Is that correct?")
- **Correct misinformation**. (e.g., "What makes you say that? What evidence are you basing that idea on?")
- Ask for clarification. (e.g., "Can you explain that idea again?")
- Review/summarize the main points of the article as needed. (e.g., "Let's review our *Learning Outcomes*. Which of these do you feel you are able to do after today's discussion?")

AFTER THE DISCUSSION

It's important to build in reflection time for students to consolidate their experience. Their reflections will also help you prepare for future discussions:

- Ask students to reflect on the discussion and the ideas shared by other students, particularly those that they disagree with. Provide reflection prompts as needed. (e.g., What was the most important idea discussed today? What idea/perspective would you like to learn more about?)
- Ask students to self-assess their progress in achieving their goal norm for the discussion.



This rubric may be helpful in providing students with formative, strength-based feedback and/or assessing students' responses holistically. This easy-to-modify activity is included in the doc file which you can download from: www.lesplan.com/subscribers

	Emerging	Developing	Proficient	Extending	
Supports thinking	Answers or reflections are brief and include obvious facts/ details/ evidence.	Answers or reflections are general and supported with some relevant facts/details/ evidence.	Answers or reflections are clearly supported with specific, relevant facts/ details/evidence.	Answers or reflections are insightful and supported with specific, relevant facts/details/ evidence.	
Shows understanding	Responses show a basic understanding of the text, topic, issue or message.	Responses are thoughtful and show a general understanding of the text, topic, issue or message.	Responses are thoughtful and show a complete understanding of the text, topic, issue or message.	Responses are insightful and show a deep understanding the text, topic, issue or message. May synthesize ideas or explain the 'so what'.	
Thinks critically	Makes straightforward connections or inferences. Focuses on retelling.	Makes logical connections to self (T:S) and/ or background knowledge (T:S). Inferences are logical.	Makes meaningful connections to self. Considers ideas between texts (T:T). Inferences are plausible.	connections that go between texts	

RESOURCE PAGE FOR STUDENTS SETTING A PURPOSE BEFORE READING

There are a number of reasons we read, and setting a purpose for reading – knowing WHY we are reading – helps us to focus on important information and to better understand and remember what we read. It also helps us decide HOW we will read the text.

We don't read all texts for the same purposes or in the same way. For example, we read an instruction manual for a new Blu-ray player for a different reason than we read a book or a website. How we will read it – the strategies we use – will also differ. We are more likely to skim to find the information we need in a manual. Once we find what we need, we might read the instructions carefully to figure out what to do. Then, we stop reading, put the manual down, and carry out the steps. We may have to reread if we get confused or forget what to do.

This is a very different approach than the one we would use to read a book. When we read a book, we usually read cover-to-cover. We read carefully so we don't miss any details because we want to understand the whole story. Sometimes we make connections or create images in our minds as we read to help us better understand what we are reading. Depending on its length, we may put the book down before we finish reading it but we will start reading where we left off.

Good readers are flexible and responsive. This means that they match their reading strategies to their purpose for reading. What types of text do you read? Why do you read them? What strategies do you use to read each of these texts? The chart below is a summary of the main purposes for reading and what each entails.

Purpose for reading	What it looks like
For enjoyment	Usually student-selected.
	Allows students to choose a variety of genres and forms.
	Allows students to pursue what interests them while developing reading skills.
To experience something new	Students make connections between their personal experiences and those of people around the world.
To learn more about themselves and others	Students reflect on what they've read and express opinions and perspectives.
	Students develop a sense of their personal values and make sense of the world around them.
To gain information	Students use the features of informational texts to gather, analyse and apply what they've learned.
To understand issues	Students develop a sense of perspective.
	Students pose questions, acknowledge other points of view, critique the opinions presented and support opinions with evidence.
To appreciate writing	Students respond to text in ways other than written answers to apply what they've learned in new contexts.
To appreciate use of media to communicate	Students respond to a variety of media formats (e.g., infographics, political cartoons, videos, etc.) and react to how the format supports the meaning of the message.

^{*} Chart adapted from: A Guide to Effective Literacy Instruction, Grades 4-6, p. 11.



INFLATION HITS THE FAMILY BUDGET

1. A continuing rise in the average level of prices over time is called:

inflation

2. What does **supply** mean? What does **demand** mean?

Supply describes how much of a product or a service is available. Demand is the number of customers (people, businesses) who want to buy a particular product.

3. Explain why prices sometimes go down and why sometimes they go up.

When supply is greater than demand, prices usually go down. When demand is high and supply is low, prices often go up. (Supply and demand is the main economic pricing model used in a market economy. When prices are fixed by a government regulator – e.g. a milk marketing board – they are not subject to the usual rules of supply and demand and usually do not change.)

4. What does CPI stand for?

Consumer Price Index

5. What does the CPI measure and how does it do this?

The CPI calculates inflation by tracking price changes paid by consumers for a fixed "basket" of goods and services.

6. What kinds of items are in the CPI "basket"? List three categories.

The CPI 'basket' consists of a mix of necessities and luxuries. These include food, shelter, clothing, transportation, and recreation. (Statistics Canada fills a virtual shopping basket with about 700 goods and services that Canadians typically buy.)

7. What is the 'ideal' inflation rate? Explain.

The 'ideal' inflation rate is 2% according to experts. This is considered normal and helps an economy grow. [On the other hand, too much inflation creates instability and insecurity – especially for low-income citizens. If a dollar's buying power diminishes too much, some people may be unable to buy certain necessities.]

8. What was the annual rate of inflation in Canada in 2020 and in 2021?

0.7% in 2020 and 3.4% in 2021

9. In July, what was Canada's annual inflation rate predicted to be for 2022?

7.2% – the biggest jump in 40 years. (This will especially impact pensioners and people with low incomes the most.)

- 10. List at least two reasons why inflation rose so quickly in recent months.
- 1) Many people had extra money because of COVID-19 so they spent it;
- 2) The Russia-Ukraine conflict caused global supply chain issues and wheat shortages that increased prices for many items;
- 3) There is a large-scale worker shortage so employers must offer higher wages and these costs are being passed on to consumers.



INFLATION HITS THE FAMILY BUDGET

Cartoon:

- 1. Inflation has sent the price of goods and services soaring in Canada and around the world. By July, the central bank predicted that inflation would hit 7.2 percent in 2022, the biggest jump in 40 years. That's causing pain among Canadians living on pensions. It's also doing severe damage to budgets in many families with average incomes.
- 2. The cartoon shows a person running on a treadmill. The person is barely able to keep up with the machine, and is holding on to the handlebars with one hand to keep from being thrown of the back. The person is labelled 'wages'; the treadmill is labelled 'inflation'.
- 3. The cartoonist is suggesting that wages are not able to keep up with inflation. No matter how much people are earning, they aren't able to make enough to cover their costs because prices are rising so quickly and so much.
- 4. Answers will vary.

Quiz:

- 1. d; 2. b; 3. c; 4. False; 5. True; 6. False;
- 7. Price; 8. down; 9. 7.2; 10. *Answers will vary*.

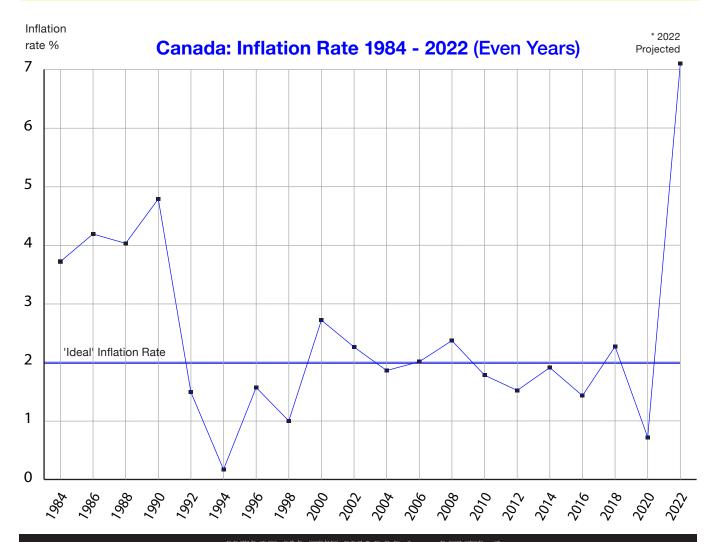


GRAPHING

1. Complete the table below to show Canada's inflation rate since 1984. The following link may be useful: https://www.inflation.eu/en/inflation-rates/canada/historic-inflation/cpi-inflation-canada.aspx

Year	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
Rate %	1.86	2.01	2.37	1.78	1.52	1.91	1.43	2.27	0.72	7.2*
Year	1984	1986	1988	1990	1992	1994	1996	1998	2000	2002
Rate %	3.72	4.19	4.03	4.79	1.49	0.17	1.57	1.00	2.72	2.26

- 2. Then, plot a line graph to show Canada's overall inflation rate between 1984 and 2022.
- 3. Label your graph with a proper title.
- 4. Highlight, then label, the line that economists say is the 'ideal' inflation rate.
- 5. Examine your graph. What observations can you make and what conclusions can you draw? Explain.





SHOOT TO THE MOON

- 1. How far away is the Moon? It is about 384,000 kilometres away from Earth.
- 2. How long does it take for the Moon to circle the Earth?

One trip around Earth takes 27.32 Earth days. (The Moon circles the Earth in an elliptical orbit.)

- 3. List at least three important facts about the Moon.
- 1) It is the brightest and largest object in the night sky. 2) Its gravity makes Earth's tides rise and fall.
- 3) It is the Earth's only natural satellite. 4) Its temperature ranges from minus 248 degrees Celsius to plus 123 degrees Celsius. 5) It has about one percent of the Earth's mass.
- 4. What event prompted the United States to send astronauts to the Moon in 1959?

The Soviet Union landed the first uncrewed spaceship on the Moon in 1959. U.S. President John F. Kennedy wanted to beat the Soviets by placing the first human on the Moon. (U.S astronauts have landed on the Moon six times.)

5. What is the purpose of the **Artemis Lunar Exploration Program?**

It is an ambitious program to send humans back to the Moon (and eventually to Mars).

6. Who is leading this program?

The project is led by NASA – the U.S. space agency. (Others – Canada, Japan, ESA) and commercial partners will also help out.)

7. What is the purpose of the Artemis I mission?

Artemis I was scheduled to launch on August 29. Its purpose was to test the 100-metre-tall Space Launch System (SLS) rocket and Orion spacecraft. No astronauts would be on board – the only passengers were three mannequins.

8. How far was the Orion spacecraft scheduled to fly? How long was it expected to travel for?

Orion will fly farther, and remain in space longer without docking, than any other spacecraft built for humans. It will also return home faster and hotter than ever before, reentering Earth's atmosphere at 11 kilometres per second and producing temperatures of approximately 2760 degrees Celsius.

9. When are the next two missions for the Artemis Lunar Exploration Program scheduled to occur?

Artemis II is scheduled for 2024. This will be the first crewed launch. Artemis III, which will see astronauts landing on the Moon, is scheduled for 2025 at the earliest.

10. What will Canada contribute to the Artemis Program?

Canada will contribute a lunar rover and Canadarm3 – a new, improved version of the robotic arms previously built for the Space Shuttle fleet and the International Space Station.

Quiz: 1. d; 2. a; 3. d; 4. False; 5. False; 6. True; 7. temperature; 8. Apollo; 9. Space; 10. Answers will vary.



RUSSIA VERSUS UKRAINE

1. When did Russia invade Ukraine?

Russia invaded on February 24, 2022.

- 2. List one of the two main reasons that Russian President Putin gave for this attack.
- A) Mr. Putin said he invaded to secure Russia's borders. He claimed that after the USSR dissolved, the West promised not to expand NATO. Yet the alliance has welcomed six former Warsaw Pact members and three former Soviet republics.
- B) Mr. Putin said that he needed to protect pro-Russian Ukrainians and Ukrainians of Russian ethnic origin (many of whom live in eastern Ukraine). He claimed they are being persecuted and even killed by Ukraine's government. (Most countries say these claims are false.)
- 3. Describe how this invasion progressed during the first few weeks.
- Mr. Putin (and many others) expected the invasion to end quickly. Despite having a much smaller army and old equipment, the attack, which targeted the capital, Kyiv, met stiff Ukrainian resistance and failed. (Russia had over one million soldiers compared to Ukraine's 200,000 and many more resources e.g. tanks and planes.)
- 4. Where did Russia shift its attention to in April?
- By mid-April, Russia had abandoned its initial aims and shifted focus to the Donbas region in eastern Ukraine. (Pro-Russian forces already controlled much of this area. It is rich in natural resources and is often referred to as Ukraine's industrial heartland. In 2014, Russia had also occupied the strategic Crimean Peninsula.)
- 5. How did the international community respond to Russia's invasion?

Many countries strongly condemned Russia and accused Mr. Putin of breaking international law and grossly violating Ukraine's sovereignty. Various countries cut trading ties with Russia and imposed strong economic sanctions on its leaders and oligarchs. Many companies pulled out of the country. (The EU is also trying to decrease its dependence on Russian energy exports.)

6. How has the international community helped Ukraine's military forces?

Many countries (including Canada) sent modern weapons and military equipment. The U.S. alone had committed \$9.8 billion (US) in military aid by mid-August.

7. What was Ukraine's population when the war began? How many Ukrainians have left their homes due to the fighting?

Before the invasion the population was 44 million. By late August, 6.3 million people had left the country (many went to neighbouring Poland). Another 6.6 million had left their homes but stayed in Ukraine. This represents nearly one-third of the population.



RUSSIA VERSUS UKRAINE

8. What impact has the war had on the world economy?

Inflation was already a growing problem before February 2022. However, in recent months, prices climbed even higher, partly because many nations that used to rely on Russian oil, natural gas, wheat, corn, fertilizer, and minerals used to produce various products no longer trade with Russia.

9. Describe the most recent developments in this armed conflict.

Not much has changed in recent weeks. Russia showed no signs of backing down while Ukraine began to take back small parcels of territory in some areas. The nuclear power plant in Zaporizhzhia in southeastern Ukraine was under Russian control and fighting was occurring nearby. (Both sides accused the other of endangering the nuclear reactors and increasing the risk of a catastrophe.)

Quiz:

- 1. b; 2. a; 3. b; 4. False; 5. True; 6. True;
- 7. Atlantic; 8. United States; 9. grain; 10. Answers will vary.



PLASTIC QUEST

1. Describe the benefits of plastic products.

Plastic is cheap to make, strong, lightweight, and malleable. Manufacturers rely on it to produce thousands of items. (Most experts say getting rid of plastic is not practical.)

- 2. How much total plastic is produced globally every year? Nearly 400 million tonnes annually.
- 3. How much plastic winds up in the world's oceans?

Some 8 million plastic pieces enter the oceans daily. (Two garbage trucks of plastic every minute.)

4. Explain what biodegrade means.

When something is broken down by bacteria or other organisms into very small pieces that are not harmful to the environment.

5. What happens to plastic waste when it is discarded into the ocean? Explain.

Plastic does not biodegrade. After years of sunlight and wave action, it breaks up into tiny pieces less than five millimetres across – about the width of a pea. These tiny plastic pieces act like miniature sponges and soak up many toxic chemicals that are in the ocean. Small creatures eat these microplastics. Sometimes they die but often, they are eaten by larger creatures, including fish. In turn, larger animals – including humans – eat the fish and ingest the poisons.

6. How does plastic contribute to global warming? Explain.

Plastic is made from petroleum and releases carbon dioxide (CO₂) into the atmosphere when it burns – and that increases carbon emissions.

7. How much plastic waste does Canada produce? How much is discarded? How much is recycled?

Canada creates 3.3 million tonnes of plastic waste each year. Some 29,000 tonnes end up in the environment and only nine percent is recycled.

8. What types of plastic products does the Canadian government plan to ban?

Over the next few years, Canada will ban plastic items that are only used once and tossed away.

9. List at least four types of products that will be prohibited.

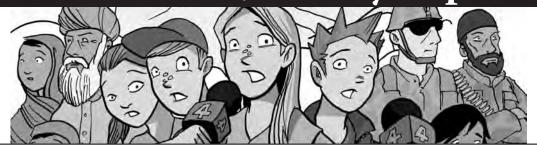
The six categories of single-use plastics include: checkout bags, plastic cutlery, takeout dishes made from plastics that are hard to recycle, plastic rings around packs of canned drinks, stir sticks, and drinking straws. (There are some exemptions.)

10. Explain why the federal government is banning these products.

These items often end up in landfills and waterways because they're too hard or too costly to recycle and non-plastic products can easily take their place. stic categories can easily be replaced with choices that are better for the environment.

Quiz: 1. e; 2. c; 3. d; 4. True; 5. False; 6. False; 7. eight; 8. warming; 9. Environment; 10. Answers will vary.

Current Events, Clearly Explained



Students want to know what's happening in their world – but the news can be difficult and time-consuming to teach.

WE HAVE THE SOLUTION. (Five, actually.)

The Canadian Reader

PDF/Word resource

- ✓ Clearly written, leveled Canadian current events articles
- ✓ Literacy-based lesson plans
- ✓ Engaging, original illustrations
- ✓ Comics
- ✓ Map assignments

Product details: 8 issues. 36 pages. Available in English and in French for grades 3 and up.

Currents4Kids.com News4Youth.com

- ✓ **Online** interactive resource
- ✓ Weekly news stories
- ✓ Auto-graded quizzes
- ✓ Comment page for students to respond to the stories
- ✓ Links to relevant articles, resources, maps, photos and videos
- ✓ Extension activities

Product details: 40 issues. **One subscription** allows all teachers and students access from any Internet-connected device at any time. Available in English and in French. *Currents4Kids/Infos-Jeunes*: Grades 3 and up. *News4Youth/Infos-Ados*: Grades 7 and up.



What in the World?

- ✓ PDF/Word resource
- ✓ National and international news stories
- ✓ Key vocabulary
- ✓ Background information
- ✓ Varied assignments that build content-area knowledge and enhance critical thinking
- ✓ Maps and illustrations

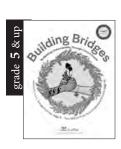
Product details: 8 issues. 60 pages. Available in English and in French, and in two reading levels, for grades 5 and up.

Building Bridges

- ✓ PDF/Word resource
- ✓ Builds understanding of current events that impact Indigenous Peoples and all Canadians
- ✓ Two theme-based articles and lesson plans
- ✓ Background information
- ✓ Consistent with
 First Peoples Principles of Learning
- ✓ Encourages a respectful, reflective, empathetic, and inquiring frame of mind

Product details: 5 issues. Variable page length. Available in English and in French, and in two reading levels, for grades 5 and up.





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Contact us for a sample copy or free demo.

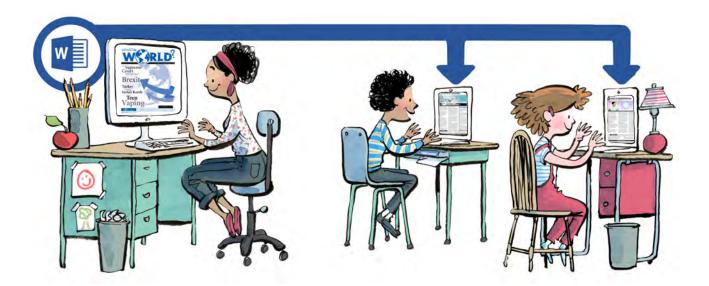
LesPlan Educational Services Ltd.

visit: www.lesplan.com

email: info@lesplan.com

call toll free: 888 240-2212

Students Can Work In Word/Google Docs...



Did you know...

... that each issue of *What In The World?* includes a PDF file (complete document) and a Word file (articles and questions only).

Students can complete assignments directly in the **Word** file. Teachers can email the file to students or post it on the Internet. The **Word** file also allows teachers to:

- easily modify and format content including changing $\boldsymbol{\text{fonts}}$ and \boldsymbol{text} \boldsymbol{sizes}
- create a PDF document and use Adobe Reader's 'Read Out Loud Mode'
- · save paper and copying costs and help protect the environment
- · promote and encourage students' computer skills

Password Security

There are **three** ways to access data from a **Word** file that is password protected:

- Select the data you wish to Copy and then Paste it into any word processing program. Use Select All to copy the entire document.
- 2) Import the entire **Word** file into **LibreOffice** (or another similar program) and then save as a new file
- 3) To remove the password from a protected **Word** file, use **Save As** to make a new copy of the file. You can then change the **Security** settings and remove the password.

Google Docs and LibreOffice

- You can easily upload the **Word** file to **Google Docs** and share it with students or other teachers.
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2022 - 2023 Publication Schedule



What in the World? Level 2

Issue 1: August 25 Issue 2: September 26 Issue 3: October 24 Issue 4: November 28 Issue 5: January 9 Issue 6: February 21 Issue 7: April 3 Issue 8: May 15

Level 1

Issue 1: August 29 Issue 2: September 28 Issue 3: October 26 Issue 4: November 30 Issue 5: January 11 Issue 6: February 23 Issue 7: April 5 Issue 8: May 17

The Canadian Reader

Issue 1: August 30 Issue 2: September 30 Issue 3: October 28 Issue 4: December 2 Issue 5: January 13 Issue 6: February 24 Issue 7: April 11 Issue 8: May 19

Le Monde en Marche Niveau 2

Numéro 1: 29 août Numéro 2: 3 octobre Numéro 3: 31 octobre Numéro 4: 5 décembre Numéro 5: 16 janvier Numéro 6: 27 février Numéro 7: 11 avril Numéro 8: 23 mai

Niveau 1

Numéro 1: 1^{er} septembre Numéro 2: 5 octobre Numéro 3: 2 novembre Numéro 4: 7 décembre Numéro 5: 18 janvier Numéro 6: 1^{er} mars Numéro 7: 12 avril Numéro 8: 224 mai

Nos Nouvelles

Numéro 1: 2 septembre Numéro 2: 7 octobre Numéro 3: 4 novembre Numéro 4: 9 décembre Numéro 5: 20 janvier Numéro 6: 3 mars Numéro 7: 14 avril Numéro 8: 26 mai

Building Bridges Level 2

Issue 1: August 23 Issue 2: November 14 Issue 3: January 16 Issue 4: March 13 Issue 5: May 8

Building Bridges Level 1

Issue 1: August 26 Issue 2: November 16 Issue 3: January 18 Issue 4: March 15 Issue 5: May 10

Bâtir des ponts Niveau 2

Numéro 1: 22 août Numéro 2: 21 novembre Numéro 3: 23 janvier Numéro 4: 20 mars Numéro 5: 15 mai

Bâtir des ponts Niveau 1

Numéro 1: 24 août Numéro 2: 23 novembre Numéro 3: 25 janvier Numéro 4: 22 mars Numéro 5: 17 mai



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