

SECONDARY 5
Week of April 6th 2020

Poetry – Spoken Word

Information for students

- Watch the Ted Talk “[If I Should Have A Daughter](https://www.ted.com/talks/sarah_kay_if_i_should_have_a_daughter?language=en)” by Sarah Kay.
- Use the following prompts to help you think about the talk:
 - I noticed . . . I wonder . . . I was reminded of . . . I think . . . I’m surprised that . . . I’d like to know . . . I realized . . . If I were . . . The central issue(s) is/are . . . If _____, then . . . I’m not sure . . . Although it seems . . . This part makes me think that . . . This makes me feel that . . . The speaker is suggesting that . . . I notice ___ about the language in the talk.
 - Discuss the Ted Talk with a family member or send it to a friend and talk about it together.
 - Create a list: “10 Things I Know to Be True.”
 - Ask a friend online to do the same activity and share your lists. Do they have anything in common?
 - Take it to the next level: Practice your piece as a spoken word performance. Share your piece/performance with your family or friends.

Materials required

- Link: https://www.ted.com/talks/sarah_kay_if_i_should_have_a_daughter?language=en
- Paper, pen, phone, tablet or computer.

Information for parents

Activity details

In this activity, children will practise:

- The best things your child can do are: **Read every day. Write every day. Talk every day.**

Parents could:

- Above all, activity is designed to be simple! We hope it will appeal to your child whatever their grade level.

Bingo with algebraic expressions

Information for students

- In the spaces on the bingo card, write the letters from A to Y in any order.
- Print the algebraic expressions, cut them out and put them in an envelope. Each algebraic expression will be picked out of the envelope at random.
- Perform the operations to simplify the algebraic expression that has been picked out at random. Then find the letter in the tables of solutions that identifies that equivalent algebraic expression and circle that letter on your bingo card. ...

Materials required

The bingo card, the algebraic expressions to be cut out, as well as the tables with the letters that identify the algebraic expressions and the equivalent expressions (solutions) - (see Appendix).

Information for parents

Activity details

In this activity, students will be playing a game of bingo that involves working with algebraic expressions. This activity can be carried out with Secondary III, Secondary IV and Secondary V students.

Students can play this game with friends over the telephone or online (e.g. FaceTime or Messenger). An adult can read out the algebraic expressions one at a time for all the students. The first person to fill up all the spaces in a horizontal, vertical or diagonal line wins the first part of the game. The game can then continue until someone fills up their entire bingo card.

If possible, make several copies of this bingo card or ask the students to draw it on a sheet of paper (table with 5 columns and 5 rows). Each card should have 25 spaces. There should be no “free” spaces. The algebraic expressions will be picked at random and read out one at a time.

Appendix – Bingo Card

B	I	N	G	O

Instructions:

- In the spaces on the bingo card, write the numbers from 1 to 25 in any order.
- Perform the sequence of operations that is read out and find its result on your bingo card. Write an X in that space or colour it in.
- Continue playing until you fill up all the spaces in a horizontal, vertical or diagonal line.
- Challenge: You can continue playing to try and fill up the whole bingo card.

Cut out these algebraic expressions and put them in an envelope. Pick them out of the envelope at random.

$(2r - 7)(5r - 6)$	$8a^2 + -3a^2 + a + -5a^2 + -6a$
$9bc + -11bc^2 + bc + -bc^2$	$4(2c^2 - 5d + e) - (c^2 - 6d + 5e)$
$2x(6x^2 - 8)$	$(-2.2a - b + 5c) + (0.2a + 1.2b - 0.3c)$
$(ab^2 - 4ab + 4b) \div \frac{4}{3}b$	$(20s^2t + 15s^2) \div 5s$
$-7a(2b^2 + 4b - 5)$	$(10x^2 + 2xy - 8) - (3x^2 - xy - 2)$
$3.4a^3(2.1ab^2 - 4.2b)$	$(10nx + -7x - 3) + (-10nx - 2n + 5x)$
$(-4x^2y + 8xy^2 - 6x^2y^2) \div xy$	$5(3a^2 - 4a + 3) - 3(a^2 + 5a - 9)$
$(2ab + 3)^2$	$(-9m^2p^2 + 12mp^2 - 15m^2p) \div 3mp$
$(x^2 + 4y - 8) - (2x^2 + 7)$	$5xy(-y + 9) + 4xy(5y - 7)$
$(a - 0.7) - (0.4a + 1.4)$	$(\frac{3}{4}s^3t + 18)(\frac{8}{9}st^4 - 8)$
$(\frac{4}{6}x^3y^2 - \frac{5}{8}x^2 + \frac{3}{5}y^3) \div \frac{2}{5}xy$	$(\frac{3x}{5} + 4x^2y - y) + (-x - 2,5x^2y - 0,2y) + x^2y$
$(-8y^2 + 32xy) \div 4y$	$(2a^2 - \frac{1}{2}b) - (-a^2 - \frac{2}{3}b) + (6a^2 + 3b)$
$(-s - 3t^2)(s^2 - 4st)$	

Tables with the letters that identify the simplified algebraic expressions

Letters	Equivalent algebraic expressions (the solutions)
A	$-5a$
B	$12x^3 - 16x$
C	$-2a + 0.2b + 4.7c$
D	$4st + 3s$
E	$7x^2 + 3xy - 6$
F	$7.14a^4b^2 - 14.28a^3b$
G	$-4x + 8y - 6xy$
H	$9a^2 + \frac{19b}{6}$
I	$15xy^2 + 17xy$
J	$\frac{2}{3}s^4t^5 - 6s^3t + 16st^4 - 144$
K	$-0.4x + 2.5x^2y - 1.2y$
L	$12a^2 - 35a + 42$

Letters	Equivalent algebraic expressions (the solutions)
M	$10r^2 - 47r + 42$
N	$10bc - 12bc^2$
O	$7c^2 - 14d - e$
P	$\frac{3ab}{4} - 3a + 3$
Q	$-14ab^2 - 28ab + 35a$
R	$-2x - 2n - 3$
S	$-2y + 8x$
T	$-s^3 + 4s^2t - 3s^2t^2 + 12st^3$
U	$-x^2 + 4y - 15$
V	$-0.6a - 2.1$
W	$\frac{5}{3}x^2y - \frac{25x}{16y} + \frac{3y^2}{2x}$
X	$4a^2b^2 + 12ab + 9$
Y	$-3mp + 4p - 5m$

Algebraic expressions and solutions

Letters	Algebraic expressions to be picked at random	Equivalent expressions (the solutions)
A	$8a^2 + -3a^2 + a + -5a^2 + -6a$	$-5a$
B	$2x(6x^2 - 8)$	$12x^3 - 16x$
C	$(-2.2a - b + 5c) + (0.2a + 1.2b - 0.3c)$	$-2a + 0.2b + 4.7c$
D	$(20s^2t + 15s^2) \div 5s$	$4st + 3s$
E	$(10x^2 + 2xy - 8) - (3x^2 - xy - 2)$	$7x^2 + 3xy - 6$
F	$3.4a^3(2.1ab^2 - 4.2b)$	$7.14a^4b^2 - 14.28a^3b$
G	$(-4x^2y + 8xy^2 - 6x^2y^2) \div xy$	$-4x + 8y - 6xy$
H	$(2a^2 - \frac{1}{2}b) - (-a^2 - \frac{2}{3}b) + (6a^2 + 3b)$	$9a^2 + \frac{19b}{6}$
I	$5xy(-y + 9) + 4xy(5y - 7)$	$15xy^2 + 17xy$
J	$(\frac{3}{4}s^3t + 18)(\frac{8}{9}st^4 - 8)$	$\frac{2}{3}s^4t^5 - 6s^3t + 16st^4 - 144$
K	$(\frac{3x}{5} + 4x^2y - y) + (-x - 2.5x^2y - 0.2y) + x^2y$	$-0.4x + 2.5x^2y - 1.2y$
L	$5(3a^2 - 4a + 3) - 3(a^2 + 5a - 9)$	$12a^2 - 35a + 42$
M	$(2r - 7)(5r - 6)$	$10r^2 - 47r + 42$
N	$9bc + -11bc^2 + bc + -bc^2$	$10bc - 12bc^2$
O	$4(2c^2 - 5d + e) - (c^2 - 6d + 5e)$	$7c^2 - 14d - e$
P	$(ab^2 - 4ab + 4b) \div \frac{4}{3}b$	$\frac{3ab}{4} - 3a + 3$
Q	$-7a(2b^2 + 4b - 5)$	$-14ab^2 - 28ab + 35a$
R	$(10nx + -7x - 3) + (-10nx - 2n + 5x)$	$-2x - 2n - 3$
S	$(-8y^2 + 32xy) \div 4y$	$-2y + 8x$
T	$(-s - 3t^2)(s^2 - 4st)$	$-s^3 + 4s^2t - 3s^2t^2 + 12st^3$
U	$(x^2 + 4y - 8) - (2x^2 + 7)$	$-x^2 + 4y - 15$
V	$(a - 0.7) - (0.4a + 1.4)$	$-0.6a - 2.1$
W	$(\frac{4}{6}x^3y^2 - \frac{5}{8}x^2 + \frac{3}{5}y^3) \div \frac{2}{5}xy$	$\frac{5}{3}x^2y - \frac{25x}{16y} + \frac{3y^2}{2x}$
X	$(2ab + 3)^2$	$4a^2b^2 + 12ab + 9$
Y	$(-9m^2p^2 + 12mp^2 - 15m^2p) \div 3mp$	$-3mp + 4p - 5m$

Fact and Fiction About COVID-19

Information for students

COVID-19 is spreading rapidly and forcing us all to take extraordinary measures. There is lots of information available on social media, but some of it is false. In this activity, you can assess your current knowledge about COVID-19. By consulting reliable sources of information, you can verify and improve your answers to a series of questions. You can also share what you've learned with your friends and family to provide them with quality information.

First, try to answer these questions yourself, without asking anyone for help or checking any sources of information.

- What does COVID-19 mean?
- Why are travellers being asked to self-isolate for at least 14 days after returning home?
- What is an incubation period?
- What are the main symptoms of this illness?
- How can the virus be transmitted?
- Does wearing a mask protect you from the virus?
- Is it possible to create an antibiotic that is effective against COVID-19?
- We hear about probable cases and confirmed cases. What's the difference?
- We are being asked to flatten the curve. What does this mean? Why use this strategy?
- How long can the virus survive on surfaces like plastic or cardboard?

Next, check your answers by visiting the sites listed below.

If you're interested, see the *Myth busters* section of the [World Health Organization](#) website, which shows some of the main examples of widely shared misinformation

Materials required

Here are some sites you may find useful:

- [World Health Organization](#)
- [Government of Québec: COVID-19](#)
- [Government of Canada: COVID-19](#)
- [What are microbes?](#)
- [BBC article about COVID-19 on surfaces](#)

Information for parents

Activity details

Students can complete this activity on their own. Different versions of this activity adapted for each high school grade level are also available.

In this activity, children will practise:

- try to determine what they know about the virus
- use reliable information sources
- share their main discoveries with their parents

Rube Goldberg Machines

Information for students

Rube Goldberg machines are circuits made up of practically anything in which a marble can be set in motion. The marble is placed at a starting point and keeps moving until the goal is achieved. This series of actions is explained by the concept of cause and effect.

In this activity, the challenge is to build your own Rube Goldberg machine, while following specific guidelines.

- Take a look at the first machine shown in this [video](#).
- Design and build your own machine by following the guidelines below:
 - It should include at least eight steps.
 - It should be made up of at least two of the following simple machines: wheel, inclined plane, lever, pulley.
 - It should include at least one motion transmission or motion transformation system.
 - It should involve at least one example of projectile motion.

You can make a video of your Rube Goldberg machine in action and share it with your friends.

Materials required

Various household objects that are safe to use, as well as recyclable materials.

- For more information (in French) on simple machines and projectiles, see: [Alloprof: Les types de machines simples](#) and [Alloprof: Le mouvement de projectile](#)
- You will find more information on motion transmission and motion transformation systems in the *Expérimentations* section of this page (in French): [CDP: Les mécanismes](#)

Information for parents

Activity details

Students can try doing this activity on their own. Different versions of this activity, of varying levels of complexity, can be carried out at all grade levels. If anyone else in the house is studying science, why not have them all work as a team?

In this activity, children will practise:

- make simple machines using simple materials, accurately predict the consequences of an action, analyze the causes of errors and make the necessary corrections

Parents could:

- help their children find an appropriate workspace and materials that can be used for the activity

This activity was adapted from the *EnScience pour la réussite* project from the Instance régionale de concertation de la Capitale-Nationale.

Screen time

Information for students

- Look the video that explains the concept of screen time.
- During supper time, tell your family what you learned about screen time screen and how to better balance it.

Materials required

- The vidéo [Are You Sitting Too Much?](#)

Information for parents

Activity details

In this activity, children will practise:

- To learn good habits regarding screen time and how to better manage the time spent on online activities.

Make a plan, get moving, take a moment to reflect

Information for students

- Plan the physical activities you will carry out this week.
- Carry out the physical activities you planned.
- In your opinion, did you follow the necessary safety rules when carrying out the activities?

Materials required

- Depending on the activity.¹

Information for parents

Activity details

In the context of the current pandemic, the physical and social environment in which physical activities or active play are carried out must comply with the most recent guidelines issued by the Direction de la santé publique or by any other relevant authority.

This activity allows children to carefully plan their physical activities and think about the planning process at the end.

In this activity, children will practise:

- plan the physical activities they will carry out during the week
- carry out the physical activities they planned
- be curious about the safety rules they need to follow during the physical activities

Parents could:

- carry out the activities with their children, or alternate between supervision and independent play, depending on the activity

¹ Based on the materials available at home.

Unavailable

Unavailable

Your budget for the next year

Information for students

Spark your interest in learning:

- Analyze all of your personal activities and identify those that earn you money and those that cost you money.
- Make a list of all the new activities that may come up in the next year. Use your available resources or ask an adult to help you explore other potential budget components.
- Plan a budget of your income and expenses for the next year.

Materials required

Useful resources, depending on personal preferences and availability:

- writing materials (paper, poster board, pencils, etc.)
- printer
- device with Internet access

Information for parents

Activity details

In class, students learn to identify everything that should be taken into account in a situation involving personal finances. Learning to carry out the calculations in a budget is not the targeted goal; many online calculators are available for this purpose.

A portrait of your point of view

Information for students

Spark your interest in learning:

- Choose a current issue that you heard being discussed on the news or that you read about.
- Identify the main elements of the problem that this issue causes.
- Create a cartoon, a diagram, a collage, etc., that allows you to express your point of view on the issue.

Materials required

Useful resources, depending on personal preferences and availability:

- writing materials (paper, poster board, pencils, etc.)
- printer
- device with Internet access

Information for parents

Activity details

In class, students and teachers discuss current events. The focus, however, is on the underlying causes of situations that occur in today's world and on the problems and issues stemming from these situations.