PCAP 2019

Student Questionnaire

DIRECTIONS

The purpose of the Pan-Canadian Assessment Program (PCAP) is to examine student performance and provide information on other aspects of education systems. PCAP is being conducted by the Council of Ministers of Education, Canada (CMEC), at the request of the ministry/department of education in your province/territory. In this part of the assessment, you will find questions about yourself, your experiences at school, and your mathematics skills and habits, both in school and outside of school. Some questions ask for facts, while others ask for opinions. There are also some questions about assessment in general. Your answers, along with your assessment results and those of other students, will provide a picture of how students in Canada are doing in school in general, and in their mathematics courses in particular.

Please read each question carefully and answer as accurately as possible. There are no right or wrong answers to these questions. The questionnaire is not graded. Please respond according to your own situation. We ask that you respond to all of the questions you feel comfortable answering.

The CMEC may collect personal information during the PCAP, but does not use, disclose, nor retain such personal information. Further, the CMEC will not report any result that would allow the identification of students, teachers, schools, or school boards/districts. The CMEC shall keep all information involved in PCAP secure and confidential. For more information, please consult the CMEC Web site at:

https://www.cmec.ca/131/Learning Assessment Programs.html.

You can change your responses at any time until you have clicked "Submit" at the end of the questionnaire. The questionnaire will take approximately 30 minutes to complete.

Thank you for your time and effort in completing this questionnaire.

1. How do you identify yourself?

- 🗛 1 Female
- 🗛 2 Male
- a_3 I identify myself in another way.
- \mathbf{A}_4 I prefer not to say.
- 2. When were you born?



3. Were you born in Canada?

- 🕰 1 Yes
- 🕰 2 NO

If NO, how old were you upon arrival in Canada?

- ▲ 3 Younger than 3 years old
- A 3 to 5 years old
- ▲ 5 6 to 8 years old
- ▲ 6 9 to 11 years old
- [•] 7 11 years old or older

4. Were your parents born in Canada?

(You may answer this question by thinking either about your own parent(s) or about a person or persons who is/are most like a parent or parents to you).

Parent A

- 🗛 1 Yes
- ▲ 2 NO

Parent B

- 🕰 3 Yes
- 🕰 4 No
- ▲ 5 Not applicable

5. What is the highest level of education completed by one of your parents?

(Please answer the question for **one** parent only—the parent with the **highest** level of education. You may answer this question by thinking either about your own parent or the person who is most like a parent to you).

- ▲ 1 Did not complete high school
- 2 Completed high school
- Δ₃ Started college or cégep or university but did not complete
- Δ 4 Completed education at college or cégep
- ▲ 5 Completed education at university
- ▲ 6 I don't know
- 6. What language do you consider to be your first language (the language you first learned and still understand)?
 - 🗛 1 English
 - ▲ 2 French
 - ▲ 3 An Indigenous language
 - 🕰 4 Other
- 7. Which language or languages do you use outside of school (e.g., with family, friends, or in the community)?
 - ▲ 1 English only or mostly English
 - ▲ 2 French only or mostly French
 - ▲ 3 English and French equally
 - **A** 4 English and a language other than French
 - ▲ 5 French and a language other than English
 - ▲ 6 Mostly an Indigenous language
 - ▲ 7 Mostly other
- 8. Do you identify yourself as Indigenous? (Check all that apply.)
 - 🕰 1 No
 - A 2 Yes, First Nations
 - ▲ 3 Yes, Inuk (Inuit)
 - 🕰 4 Yes, Métis

9. About how many books are there in your home?

(Do not count magazines, newspapers, e-books, or your school books.)

- ▲ 1 0 to 10
- Δ 2 11 to 25
- ▲ 3 26 to 100
- <u>4</u> 101 to 200
- ▲ 5 More than 200
- 10. How many devices in your home are able to connect to the Internet (computers, tablets, smartphones, gaming systems, smart TVs, e-readers)?

 - ▲ 2 1 to 3
 - ▲ 3 4 to 6
 - 🕰 4 7 to 10
 - ▲ 5 More than 10

11. Do you have any of the following at home?

	Yes	No
(a) Your own computer or tablet	<u>▲</u> 1	2
(b) A shared computer or tablet	<u>▲</u> 1	<u>2</u>
(c) An Internet/Wi-Fi connection	<u>▲</u> 1	<u>2</u>
(d) Your own cell phone	<u>▲</u> 1	<u>2</u>

12. Are you currently or have you ever been enrolled in an immersion program to learn a second language?

(An immersion program is where the majority of your courses are taught in a second language.)

	Yes	No
(a) French-immersion program	<u>▲</u> 1	2
(b) English-immersion program	<u>▲</u> 1	<u>2</u>
(c) An Indigenous-language immersion program	<u>▲</u> 1	A 2
(d) Immersion program in another language	▲ 1	₽ 2

13. Are you currently or have you ever been enrolled in a <u>second-language program</u>? (A second-language program usually focuses on speaking, listening, reading, and writing.)

	Yes, I am now	Yes, I have been in the past	No, never
(a) English (e.g., ELL, EAL, ESL)	<u>▲</u> 1	<u>2</u>	△ 3
(b) French (e.g., extended/intensive French)	<u>▲</u> 1	<u>2</u>	▲ 3
(c) An Indigenous language	<u>▲</u> 1	<u>2</u>	A 3
(d) Other	▲ 1	<u>₽</u> 2	₽ 3

14. To what extent do you agree with the following statements about school?

	Strongly disagree	Disagree	Agree	Strongly agree
(a) I like school.	A 1	A 2	A 3	🕰 4
(b) At school, I am treated fairly.	A 1	<u>2</u>	₽ 3	🕰 4
(c) School staff care about me.	A 1	<u>2</u>	<u></u> 3	₽ 4
(d) At school, I feel that I belong.	<u>▲</u> 1	<u>2</u>	₽ 3	₽ 4
(e) At school, I make friends easily.	▲ 1	<u>₽</u> 2	<u></u> 3	₽ 4
(f) At school, I have a friend or friends whom I can trust.	₽ 1	<u>₽</u> 2	₽ 3	₽ 4

15. To what extent do you agree or disagree with the following statements about mathematics?

		Strongly disagree	Disagree	Agree	Strongly agree
(a)	I like doing paper-pencil calculations.	<u>▲</u> 1	<u>₽</u> 2	<u>∞</u> 3	₽ 4
(b)	I like problem solving.	▲ 1	A 2	₽ 3	🕰 4
(c)	I like doing mental mathematics.	<u> </u>	A 2	₽ 3	🕰 4
(d)	I like estimating.	<u>▲</u> 1	A 2	₽ 3	🕰 4
(e)	I like hands-on mathematics activities.	<u>▲</u> 1	A 2	<u></u> 3	₽ 4
(f)	I like to write or explain the methods or procedures I use in mathematics.	<u>•</u> 1	<u>2</u>	<u>•</u> 3	<u>₽</u> 4
(g)	I understand most of the mathematics I am taught.	A 1	<u>2</u>	₽ 3	₽ 4
(h)	The mathematics I learn now will be useful in my everyday life.	A 1	<u>2</u>	<u></u> 3	₽ 4
(i)	I need to keep taking mathematics for the kind of job I want after I leave school.	<u>•</u> 1	<u>2</u>	<u> </u>	△ 4
(j)	I like mathematics questions that involve a lot of reading.	<u>A</u> 1	<u>₽</u> 2	<u>₽</u> 3	A 4

	Not at all confident	Somewhat confident	Very confident
(a) Paper-pencil calculations	<u>A</u> 1	<u>2</u>	<u>▲</u> 3
(b) Mental math	<u>▲</u> 1	<u>₽</u> 2	<u>▲</u> 3
(c) Estimation	<u>₽</u> 1	<u>₽</u> 2	<u>₽</u> 3
(d) Problem solving	<u>₽</u> 1	<u>₽</u> 2	<u>₽</u> 3
(e) Using calculators	A 1	<u>₽</u> 2	<u>₽</u> 3
(f) Using computers	A 1	<u>₽</u> 2	<u>₽</u> 3
(g) Reading to understand the problem to be solved	<u>A</u> 1	<u>₽</u> 2	<u>₽</u> 3
(h) Explaining how I solved a problem	<u>A</u> 1	<u>₽</u> 2	<u>₽</u> 3
(i) Coding/programming	<u>A</u> 1	<u>₽</u> 2	<u>₽</u> 3
(j) Working with others	<u>A</u> 1	<u>2</u>	<u>▲</u> 3

16. How confident are you when doing the following mathematics activities?

17. My performance in mathematics is mostly influenced by...

	Strongly disagree	Disagree	Agree	Strongly agree
(a) natural ability.	<u>▲</u> 1	A 2	A 3	A 4
(b) luck.	A 1	A 2	A 3	A 4
(c) effort.	<u>▲</u> 1	<u>₽</u> 2	₽ 3	A 4
(d) the quality of teaching.	A 1	<u>2</u>	A 3	🕰 4
(e) my parents/guardians.	<u>▲</u> 1	<u>₽</u> 2	₽ 3	A 4
(f) my friends.	A 1	<u>₽</u> 2	A 3	A 4
(g) the availability of help.	<u>▲</u> 1	<u>₽</u> 2	₽ 3	A 4
(h) learning from my mistakes.	<u>▲</u> 1	2	₽ 3	A 4

	Yes	No
(a) Art	A 1	<u>2</u>
(b) Health and physical education	<u>▲</u> 1	<u>2</u>
(c) Language arts	<u>A</u> 1	<u>2</u>
(d) Music/band	<u>A</u> 1	<u>2</u>
(e) Science	A 1	<u>2</u>
(f) Social studies	<u>A</u> 1	<u>2</u>
(g) Technology	<u>▲</u> 1	<u>2</u>

18. Do you use what you learn in mathematics in the following subjects?

19. How many hours in an average week (including the weekend) do you usually spend doing each of these activities <u>outside of school hours</u>?

	No time	Less than 1 hour	1 to 2 hours	3 to 4 hours	5 to 6 hours	More than 6 hours
(a) Playing mathematics-related games or puzzles	A 1	<u>2</u>	A 3	A 4	A 5	₽ 6
(b) Doing extracurricular activities (e.g., clubs, music)	A 1	<u>A</u> 2	A 3	A 4	A 5	₽ 6
(c) Doing community service	A 1	<u>2</u>	A 3	A 4	A 5	₽ 6
(d) Doing physical activity (e.g., walking, sports)	A 1	<u>₽</u> 2	A 3	A 4	A 5	₽ 6
 (e) Using a computer or device for personal reasons (e.g., Internet, e-mail, gaming, social media, texting) 	A 1	₽ 2	₽ 3	A 4	₽ 5	₽ 6
(f) Spending time with friends	A 1	<u>2</u>	A 3	A 4	A 5	▲ 6

20. On average, how much time do you spend in total every week on homework?

	No homework is assigned	Less than 30 minutes	Between 30 minutes and 1 hour	Between 1 and 2 hours	Between 2 and 3 hours	More than 3 hours
(a) In mathematics	<u>▲</u> 1	<u>2</u>	A 3	A 4	A 5	<u>♣</u> 6
(b) In each of your other school subjects	<u>▲</u> 1	<u>2</u>	A 3	4	A 5	₽ 6

21. How often are you assigned the following types of mathematics homework?

		Never or almost never	2 or 3 times per month	1 to 3 times per week	Daily or almost daily
(a)	Paper-pencil calculations	<u>A</u> 1	<u>₽</u> 2	△ 3	A 4
(b)	Word problems	▲ 1	<u>2</u>	<u></u> 3	<u>₽</u> 4
(c)	Projects	<u> </u>	<u>2</u>	<u></u> 3	₽ 4
(d)	Creating problems	<u> </u>	<u>2</u>	<u>▲</u> 3	₽ 4
(e)	Studying for assessments	<u> </u>	<u>₽</u> 2	<u>▲</u> 3	₽ 4
(f)	Activities using concrete or virtual manipulatives (e.g., base-ten blocks, colour tiles, geometric solids)	A 1	<u>₽</u> 2	₽ 3	₽ 4
(g)	New concepts not taught in class	<u> </u>	<u>2</u>	<u>▲</u> 3	₽ 4
(h)	Collaborative problem-solving activities	<u> </u>	<u>2</u>	<u>▲</u> 3	<u>₽</u> 4
(i)	Participation in on-line discussion forums or blogs	▲ 1	A 2	A 3	<u>∞</u> 4
(j)	Viewing videos on-line (e.g., YouTube, Vimeo) to review concepts	<u>▲</u> 1	<u>₽</u> 2	▲ 3	<u>∞</u> 4

22. How often do you complete your mathematics homework?

- 🗛 1 Never
- A 2 Rarely
- ▲ 3 Sometimes
- 🗛 4 Often

23. To what extent	o you agree wit	h the following statements?
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	Strongly disagree	Disagree	Agree	Strongly agree
(a) I am prepared for my assessments.	₽ 1	A 2	₽ 3	🕰 4
(b) I keep studying until I understand the material.	₽ 1	A 2	₽ 3	🕰 4
(c) I pay attention in class.	<u>▲</u> 1	A 2	₽ 3	₽ 4
(d) I avoid distractions when I am studying.	<u>▲</u> 1	<u>2</u>	<u></u> 3	<u>₽</u> 4
(e) I keep my work well-organized.	<u>▲</u> 1	<u>₽</u> 2	₽ 3	₽ 4
(f) I practise concepts that have not been taught in class.	<u>A</u> 1	<u>2</u>	▲ 3	A 4

24. In this school year, how many days have you been absent from school?

	0 to 2 days	3 to 5 days	6 to 9 days	10 to 14 days	15 to 20 days	More than 20 days
 (a) For reasons that are not school-related (e.g., illness, appointments, travel, sports activities, community events) 	A 1	A 2	A 3	A 4	4 5	₽ 6
 (b) For school-related activities (e.g., field trips, sports activities, music or cultural events) 	A 1	<u>2</u>	A 3	A 4	A 5	<u>♣</u> 6

25. In the last two full weeks, how often did the following things occur?

	Never	1 or 2 times	3 or 4 times	5 or more times
(a) I skipped a whole school day.	<u>▲</u> 1	2	△ 3	4
(b) I skipped some classes.	<u>▲</u> 1	2	▲ 3	4
(c) I arrived late for school.	<u>▲</u> 1	<u>2</u>	<u>▲</u> 3	A 4

26. How often is instructional time lost because of the following in your mathematics class?

	Never	Rarely	Sometimes	Often
(a) Student misbehaviour	A 1	A 2	<u> </u>	4
(b) Other disruptions (e.g., announcements, assemblies, visits)	<u>•</u> 1	<u>2</u>	<u>▲</u> 3	A 4
(c) Discussions unrelated to the mathematics lesson	A 1	A 2	A 3	4
(d) Teachers helping other students	▲ 1	A 2	A 3	A 4

	Never heard of it	Heard of it a few times	Heard of it often	Know this concept well
(a) Percentage	₽ 1	<u>2</u>	<u>▲</u> 3	₽ 4
(b) Percentage increase	<u>A</u> 1	<u>2</u>	₽ 3	A 4
(c) Histogram	₽ 1	₽ 2	A 3	A 4
(d) Factors	<u>▲</u> 1	<u>₽</u> 2	▲ 3	A 4
(e) Square root	▲ 1	<u>2</u>	<u>▲</u> 3	A 4
(f) Polygon	₽ 1	<u>2</u>	<u></u> 3	₽ 4
(g) Integer	<u>▲</u> 1	<u>2</u>	<u></u> 3	₽ 4
(h) Cartesian plane	<u>▲</u> 1	<u>2</u>	A 3	A 4
(i) Quadrant	▲ 1	<u>2</u>	A 3	🕰 4
(j) Perimeter	<u>▲</u> 1	<u>2</u>	<u>▲</u> 3	₽ 4
(k) Quadrilateral	<u>▲</u> 1	<u>2</u>	<u>▲</u> 3	₽ 4
(I) Equation	▲ 1	<u>2</u>	<u> </u>	₽ 4
(m) Ratio	<u>▲</u> 1	<u>2</u>	<u>▲</u> 3	₽ 4
(n) Median	₽ 1	<u>2</u>	<u></u> 3	🕰 4
(o) Mode	₽ 1	<u>2</u>	<u> </u>	₽ 4
(p) Sampling	₽ 1	<u>2</u>	<u></u> 3	A 4

27. How familiar are you with the following mathematical terms?

28. In your mathematics class, how often are you assessed using the following methods?

	Never	Rarely	Sometimes	Often
 (a) Common assessments (i.e., any assessment used by two or more teachers) 	<u>▲</u> 1	<u>2</u>	<u></u> ▲ 3	△ 4
(b) Teacher-developed classroom assessments	<u>a</u> 1	<u>₽</u> 2	<u></u> 3 3	4
(c) Student portfolios and/or journals	▲ 1	A 2	A 3	4
(d) Individual student assignments/projects	▲ 1	<u>₽</u> 2	A 3	4
(e) Group assignments/projects	<u>▲</u> 1	🕰 2	<u></u> 3 3	A 4
(f) Self-assessment	<u>₽</u> 1	<u>₽</u> 2	<u>▲</u> 3	4
(g) Peer assessment	<u>₽</u> 1	<u>₽</u> 2	<u>▲</u> 3	A 4
(h) Homework	<u>₽</u> 1	<u>2</u>	<u> </u>	A 4
 (i) Performance assessments (include tasks with a real-world application) 	A 1	<u>A</u> 2	₽ 3	A 4

29. Do you know what a scoring rubric is for marking assessments or assignments?

- 🕰 1 Yes
- <u>∧</u> 2 No

30. Do you sometimes use a rubric when you start an assignment in your mathematics class?

- 🕰 1 Yes
- 🕰 2 NO
- **31.** How often are rubrics used for marking assessments or assignments in your mathematics class?
 - ▲ 1 Never
 - ▲ 2 Rarely
 - ▲ 3 Sometimes
 - 🗛 4 Often

32. How often do you do the following in your mathematics class?

		Never	Rarely	Sometimes	Often
(a)	Pay attention to the teacher doing examples and giving explanations	<u>•</u> 1	<u>2</u>	₽ 3	₽ 4
(b)	Observe teacher-guided problem solving and investigations	<u>▲</u> 1	₽ 2	<u></u> 3	₽ 4
(c)	Solve problems	A 1	A 2	A 3	A 4
(d)	Copy notes	A 1	<u>₽</u> 2	<u>▲</u> 3	₽ 4
(e)	Practise skills	A 1	2	<u>▲</u> 3	₽ 4
(f)	Use concrete or virtual manipulatives (e.g., base-ten blocks, colour tiles, geometric solids)	△ 1	2	<u></u> 3	<u>₽</u> 4
(g)	Work individually	A 1	A 2	A 3	A 4
(h)	Work in groups	A 1	A 2	A 3	A 4
(i)	Share solutions with others	A 1	₽ 2	<u>▲</u> 3	A 4
(j)	Use computer software	₽ 1	<u>₽</u> 2	<u>▲</u> 3	₽ 4
(k)	Use calculators	A 1	<u>2</u>	₽ 3	₽ 4
(I)	Reflect on what was learned	A 1	A 2	₽ 3	A 4
(m)	Justify your reasoning	<u>•</u> 1	<u>₽</u> 2	₽ 3	₽ 4
(n)	Use an alternative strategy to solve problems	A 1	2	<u>₽</u> 3	A 4
(o)	Create your own mathematical problems	A 1	A 2	<u>▲</u> 3	₽ 4

33. In your mathematics class, how often does your teacher give you the following?

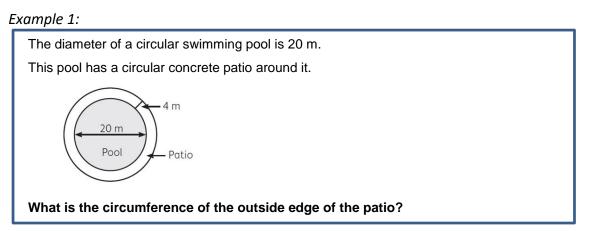
	Never	Rarely	Sometimes	Often
 (a) Details about how your assessments or assignments will be marked 	<u>▲</u> 1	<u>2</u>	A 3	A 4
(b) Regular feedback to help you improve your learning	<u>a</u> 1	<u>₽</u> 2	<u> </u>	A 4
(c) An opportunity to redo or resubmit work	<u>₽</u> 1	<u>₽</u> 2	A 3	A 4
(d) Useful hints or strategies to solve a problem	<u>▲</u> 1	<u>₽</u> 2	A 3	A 4

	Never	Rarely	Sometimes	Often
(a) Re-read the problem	A 1	<u>₽</u> 2	<u>▲</u> 3	A 4
(b) Underline key words	₽ 1	A 2	<u>▲</u> 3	A 4
(c) Create a diagram or picture	A 1	A 2	<u>▲</u> 3	4
(d) Draw a table, chart, or graph	A 1	A 2	<u>₽</u> 3	4
(e) Look for examples in textbook or notes	<u>₽</u> 1	<u>2</u>	<u>₽</u> 3	4
(f) Model with concrete or virtual manipulatives (e.g., base-ten blocks, colour tiles, geometric solids)	<u>A</u> 1	<u>₽</u> 2	₽ 3	<u>▲</u> 4
(g) Use a calculator	A 1	<u> </u>	<u></u> 3	4
(h) Ask for help	A 1	A 2	<u>₽</u> 3	4
(i) Keep trying	A 1	<u>₽</u> 2	<u>₽</u> 3	₽ 4
(j) Find a quiet place to work	A 1	<u>₽</u> 2	<u>₽</u> 3	₽ 4
(k) Use an on-line site or app	A 1	<u>₽</u> 2	<u>₽</u> 3	A 4
(I) Work with a mathematics tutor	<u>₽</u> 1	<u>2</u>	<u>₽</u> 3	<u>₽</u> 4
(m) Work backwards	₽ 1	A 2	₽ 3	4
(n) Guess and check	A 1	<u> </u>	₽ 3	4
(o) Make notes	<u>▲</u> 1	<u>a</u> 2	₽ 3	4
(p) Look for patterns	<u>₽</u> 1	<u>2</u>	<u>₽</u> 3	A 4
(q) Use benchmark numbers ("friendly numbers")	A 1	<u>2</u>	₽ 3	4
(r) Work with another student	₽ 1	<u>₽</u> 2	<u>₽</u> 3	A 4

34. How often do you use the following strategies to help with mathematics?

For questions 35–36, you do not need to solve the mathematics problems.

35. Some mathematics problems describe scenarios and provide all the information required to solve them. Below are two examples.



Example 2:

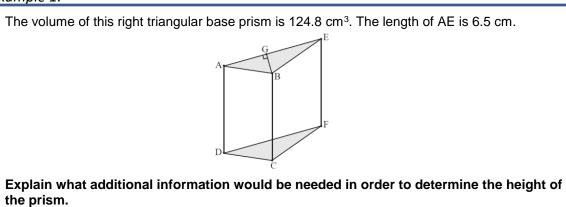
The price of a video game increased from \$30 to \$45.

What is the percentage increase in the price of the video game?

	Never	Rarely	Sometimes	Often
(a) How often do you encounter these types of problems in your mathematics lessons?	<u>♣</u> 1	<u>₽</u> 2	₽ 3	₽ 4
(b) How often do you encounter these types of problems on assessments?	A 1	<u>₽</u> 2	A 3	A 4

36. Some mathematics problems do not describe scenarios but require the use of mathematical knowledge to form conclusions. Below are two examples.

Example 1:



Example 2:

If *n* is any even number: can *3n* be an odd number?

	Never	Rarely	Sometimes	Often
(a) How often do you encounter these types of problems in your mathematics lessons?	▲ 1	₽ 2	A 3	₽ 4
(b) How often do you encounter these types of problems on assessments?	<u>▲</u> 1	<u>₽</u> 2	₽ 3	₽ 4

Thank you for taking the time to complete this questionnaire.