

Council of Ministers of Education, Canada

Pan-Canadian Assessment Program

PCAP – 2013

Student Questionnaire

DIRECTIONS

In this part of the assessment, you will find questions about yourself, your experiences at school, and your science skills and habits, both in school and out 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 test results and those of other students, will provide a picture of how students in Canada are doing in school, in general, and in their science courses in particular.

Please read each question carefully and answer as accurately as possible. There are no right or wrong answers to these questions. Your answers are confidential, and no one will be able to identify you from these answers.

Most of the questions will be followed by a few choices. For these questions, please answer by checking the appropriate box next to your choice, as shown in the example below.

Example

Check the appropriate box.

	Strongly disagree	Disagree	Agree	Strongly agree
I like to listen to music.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3	<input type="radio"/> 4

OR

I like to listen to music.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
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**Thank you for your time, effort, and thought
in completing this questionnaire.**

Section 1

1. Are you male or female?

- ① Male
- ② Female

2. When were you born?

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Month

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Year

3. Were you born in Canada?

- ① Yes
- ② No

4. What language do you consider to be your first language (the language you first learned and still understand)?

- ① English
- ② French
- ③ Aboriginal (e.g., Cree, Inuktitut)
- ④ Other (e.g., German, Mandarin)

5. In what language are most of your school subjects taught?

- ① English
- ② French
- ③ Aboriginal (e.g., Cree, Inuktitut)
- ④ Other (e.g., German, Mandarin)

6. Which language or languages do you use outside the school (e.g., with family, friends, or in the community)?

	Yes	No
English only or mostly English	①	②
French only or mostly French	①	②
English and French equally	①	②
English and a language other than French	①	②
French and a language other than English	①	②
Mostly other (e.g., German, Mandarin)	①	②

7. Are you an Aboriginal person, that is, First Nations (North American Indian), Métis, or Inuk (Inuit)?

- ① No, not an Aboriginal person
- ② Yes, First Nations (North American Indian)
- ③ Yes, Inuk (Inuit)
- ④ Yes, Métis

8. About how many books are there in your home? (Do not count magazines, newspapers, or your school books.)

- ① 0 to 10 books
- ② 11 to 25 books
- ③ 26 to 100 books
- ④ 101 to 200 books
- ⑤ More than 200 books

9. What is the highest level of education completed by your mother (or stepmother or female guardian)?

- ① Did not complete high school
- ② Completed high school
- ③ Had some education after high school
- ④ Completed education at a college or cégep
- ⑤ Had some university education but did not complete a degree
- ⑥ Completed one or more university degrees
- ⑦ I don't know

10. Are you currently in a French immersion program?

- ① Yes
- ② No

11. Have you ever been in an English-as-a-second-language program?

- ① Yes, I am now
- ② Yes, I have been in the past.
- ③ No, I have never been

Section 2

12. Please check the box that best describes how much you agree or disagree with each of the following statements about school.

	Strongly disagree	Disagree	Agree	Strongly agree
(a) I like school.	①	②	③	④
(b) My teachers treat me fairly.	①	②	③	④
(c) My teachers care about me.	①	②	③	④
(d) At school, I feel that I belong.	①	②	③	④
(e) At school, I make friends easily.	①	②	③	④

13. During this year, how often have any of the following things happened to you at school?

	Never	A few times a year	A few times a month	At least once per week
(a) I was made fun of by other students.	①	②	③	④
(b) I was called names by other students.				
(c) I was left out of games or activities on purpose by other students.	①	②	③	④
(d) Lies or negative comments were spread about me or posted on the internet by other students.	①	②	③	④
(e) Things that belonged to me were taken away or destroyed by other students.	①	②	③	④
(f) I was hit or pushed around by other students.	①	②	③	④
(g) I was threatened or made to do things that I didn't want to do by other students.	①	②	③	④

14. Please check the box that best describes how much you agree or disagree with each of the following statements about science.

	Strongly disagree	Disagree	Agree	Strongly agree
(a) Learning science is easy for me.	①	②	③	④
(b) I can usually give good answers to science test questions.	①	②	③	④
(c) Learning science is a waste of time.	①	②	③	④
(d) Making an effort in science class is worth it because I would like this type of job later on.	①	②	③	④
(e) I learn science concepts quickly.	①	②	③	④
(f) I like hands-on science activities.	①	②	③	④
(g) Science is boring.	①	②	③	④
(h) I understand most of the science I am taught.	①	②	③	④
(i) I enjoy learning new information in science.	①	②	③	④
(j) I feel nervous when doing a science activity.	①	②	③	④
(k) I like reading about science.	①	②	③	④

15. Please check the box that best describes how much you agree or disagree with each of the following statements about the use of science.

	Strongly disagree	Disagree	Agree	Strongly agree
(a) Advances in science and technology make our lives healthier, easier, and more comfortable.	①	②	③	④
(b) Science is valuable to society.	①	②	③	④
(c) Science is more beneficial than harmful.	①	②	③	④
(d) Science and technology can help eliminate poverty and famine in the world.	①	②	③	④
(e) I will use science in many ways when I am an adult.	①	②	③	④
(f) Science and technology are relevant to me.	①	②	③	④
(g) I recognize where science is found in my daily life (e.g., newspaper articles, food labels).	①	②	③	④
(h) I find that science helps me to understand how things work.	①	②	③	④
(i) Science helps me understand the things around me in my daily life.	①	②	③	④

16. Please check the box that best describes how much you agree or disagree with each of the following statements about the nature of science.

	Strongly disagree	Disagree	Agree	Strongly agree
(a) Science is a collection of facts.	①	②	③	④
(b) Science is creative.	①	②	③	④
(c) Science is impartial and fair.	①	②	③	④
(d) Science can answer all questions.	①	②	③	④
(e) Scientific results can be trusted.	①	②	③	④
(f) Scientists should be able to repeat other scientist's experiments.	①	②	③	④
(g) Investigations that do not reach a definite conclusion can still be useful.	①	②	③	④
(h) Explanations in science should be based on evidence.	①	②	③	④
(i) In science, observations and experiments are used to gather data about the world.	①	②	③	④
(j) Sometimes there is not enough evidence to draw a conclusion.	①	②	③	④
(k) New knowledge must be explained by starting with what we already know.	①	②	③	④

	Strongly disagree	Disagree	Agree	Strongly agree
(l) Scientific knowledge can change when new information is obtained.	①	②	③	④
(m) Scientists who follow the scientific method will get the correct answer.	①	②	③	④
(n) There is a difference between scientific knowledge and personal opinion.	①	②	③	④

17. How easy would it be for you to perform the following tasks on your own?

	I could not do this	I would struggle to do this on my own	I could do this with a bit of effort	I could do this easily
(a) Suggest a meaningful question that could be answered with an experiment.	①	②	③	④
(b) Design a procedure that could be used to answer a science question.	①	②	③	④
(c) Make good observations during an experiment.	①	②	③	④
(d) Be sure that data collected during an experiment is accurate.	①	②	③	④
(e) Be able to recognize a pattern or relationship in data you have collected.	①	②	③	④
(f) Suggest a possible explanation for a pattern or relationship you have observed in an experiment.	①	②	③	④
(g) Use the result of an experiment to solve a problem in your daily life (e.g., at home, during sports).	①	②	③	④
(h) Recognize the assumptions you need to make to solve a problem or reach a conclusion.	①	②	③	④
(i) Use scientific thinking to make a decision in your daily life.	①	②	③	④
(j) Use scientific ideas to explain and support your ideas on a topic that is important to you (e.g., related to the environment or to health care).	①	②	③	④
(k) Decide whether someone has given good reasons to explain their point of view about a science topic.	①	②	③	④
(l) After listening to two different scientific explanations on the same issue, choose the one you think you would trust.	①	②	③	④

18. Please rate your general interest in the following:

	No interest	Slight interest	Some interest	A lot of interest
(a) Conducting your own experiments	①	②	③	④
(b) Understanding what happens in the world around you	①	②	③	④
(c) Understanding science in your daily life	①	②	③	④
(d) Using evidence for explanations	①	②	③	④
(e) Telling others about what you learned in science	①	②	③	④
(f) Making careful observations either in class or outside school	①	②	③	④
(g) Wanting to know more about science	①	②	③	④

19. If I do well in science, it is because of...

	Strongly disagree	Disagree	Agree	Strongly agree
(a) natural ability.	①	②	③	④
(b) good luck.	①	②	③	④
(c) working especially hard.	①	②	③	④
(d) the course being taught well.	①	②	③	④
(e) encouragement from my parents/guardians.	①	②	③	④
(f) encouragement from my friends.	①	②	③	④
(g) help with homework outside of school.	①	②	③	④

20. If I do poorly in science, it is because of...

	Strongly disagree	Disagree	Agree	Strongly agree
(a) not enough natural ability.	①	②	③	④
(b) bad luck.	①	②	③	④
(c) not working hard enough.	①	②	③	④
(d) the course being taught poorly.	①	②	③	④
(e) no encouragement from my parents/guardians.	①	②	③	④
(f) no encouragement from my friends.	①	②	③	④
(g) no help with homework outside of school.	①	②	③	④

21. When I encounter difficulty understanding science, I...

	Never	Rarely	Sometimes	Most of the time
(a) give up.	①	②	③	④
(b) ask for help from my teacher.	①	②	③	④
(c) ask for help from a classmate/friend.	①	②	③	④
(d) ask for help at home.	①	②	③	④
(e) try several ways until I find one that works.	①	②	③	④
(f) break the problem into smaller parts.	①	②	③	④
(g) look for connections to my experiences.	①	②	③	④
(h) look for patterns.	①	②	③	④
(i) memorize the facts.	①	②	③	④
(j) look for examples or explanations in textbooks or notes.	①	②	③	④
(k) do a search using keywords.	①	②	③	④
(l) check a Web site.	①	②	③	④
(m) post a question on the Internet.	①	②	③	④

Section 3

22. Which of the following statements apply to your experiences when you were younger?

	Yes	No	I don't remember
(a) I tried to figure out mechanical devices (e.g., bicycle, wheelbarrow, sewing machine).	①	②	③
(b) I tried to figure out electrical devices (e.g., batteries, light bulbs, radio, computer).	①	②	③
(c) I observed animals (e.g., bird making a nest, ant farm).	①	②	③
(d) I took care of a pet or farm animal.	①	②	③
(e) I observed or studied stars or other objects in the sky.	①	②	③
(f) I planted seeds or watched plants grow.	①	②	③
(g) I read science books.	①	②	③
(h) I did science activities at home (e.g., made liquids fizz, baked, used magnifying glasses).	①	②	③
(i) I explored nature (e.g., collected insects, made a fire, identified trees).	①	②	③

23. Which of the following statements apply to your recent experience in science?

	Yes	No
(a) I participate in science groups/clubs/camps.	①	②
(b) I participate in science competitions.	①	②
(c) I engage in personal science hobbies.	①	②
(d) I read science books or watch programs about science.	①	②
(e) I read science-fiction books or watch science-fiction programs or movies.	①	②
(f) I listen to radio programs or podcasts about advances in science.	①	②
(g) I visit places outside of class with a science focus (e.g., science centre, museum, farm, mine, fishery).	①	②
(h) I do science activities outside of class (e.g., in streams, fields, forests).	①	②

24. How often do you do the following in your science class?

	Never	Rarely	Sometimes	Often
(a) Listen to the teacher give explanations	①	②	③	④
(b) Watch the teacher do experiments as demonstrations	①	②	③	④
(c) Use the textbook	①	②	③	④
(d) Do experiments following the instructions of the teacher or textbook	①	②	③	④
(e) Choose your own investigations	①	②	③	④
(f) Design an investigation to test your own ideas	①	②	③	④
(g) Work individually on assignments or investigations	①	②	③	④
(h) Work in groups on assignments or investigations	①	②	③	④
(i) Write tests or quizzes	①	②	③	④
(j) Explain your ideas or solutions to other students	①	②	③	④
(k) Spend time doing science activities or investigations	①	②	③	④
(l) Use science-related computer software	①	②	③	④

25. How often do you do the following in your science class?

	Never	Rarely	Sometimes	Often
(a) Watch science videos	①	②	③	④
(b) Go on science-related field trips	①	②	③	④
(c) Have guests in your class to talk about science or do activities	①	②	③	④
(d) Explain how something you learned in science relates to your daily life	①	②	③	④
(e) Relate what you are learning to a problem outside of school	①	②	③	④
(f) Talk about jobs that are related to science	①	②	③	④
(g) Talk about science-related issues with the whole class	①	②	③	④
(h) Relate science to other subjects	①	②	③	④

26. How often do you talk about the following kinds topics in your science class?

	Never	Rarely	Sometimes	Often
(a) Environment (e.g., energy, climate change)	①	②	③	④
(b) Technology (e.g., building better cars, improving sports equipment)	①	②	③	④
(c) Ethics (e.g., testing drugs on animals, genetically modified food)	①	②	③	④
(d) Economics (e.g., cost of developing new types of energy or drugs)	①	②	③	④
(e) Medical (e.g., developing artificial limbs, preventing concussions in hockey)	①	②	③	④
(f) Health and wellness (e.g., eating a balanced diet, avoiding illness)	①	②	③	④
(g) Safety (e.g., preventing accidents)	①	②	③	④
(h) Jobs or careers related to science	①	②	③	④

27. In your science class, how often does your teacher give you...

	Never	Rarely	Sometimes	Often
(a) details about how your tests or assignments will be marked (e.g., scoring rubric)?	①	②	③	④
(b) feedback to help you improve your learning?	①	②	③	④

Section 4

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

	No time	Less than 1 hour	1 to 2 hours	3 to 4 hours	5 to 6 hours	More than 6 hours
(a) Doing sports or other school and community activities	①	②	③	④	⑤	⑥
(b) Getting extra help at school, outside of regular school hours	①	②	③	④	⑤	⑥
(c) Taking other lessons (e.g., music, swimming)	①	②	③	④	⑤	⑥
(d) Watching television or movies	①	②	③	④	⑤	⑥
(e) Using the telephone or texting	①	②	③	④	⑤	⑥
(f) Playing computer, video, or other electronic games	①	②	③	④	⑤	⑥
(g) Using a computer for school purposes (e.g., research, writing)	①	②	③	④	⑤	⑥
(h) Using a computer for personal reasons (e.g., Internet, e-mail)	①	②	③	④	⑤	⑥

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

	No homework is assigned	Less than 30 min.	30 min. to one hour	1 to 2 hours	2 to 3 hours	More than 3 hours
(a) In all of your school subjects?	①	②	③	④	⑤	⑥
(b) In science?	①	②	③	④	⑤	⑥

30. How often do you complete your homework?

	Never	Rarely	Sometimes	Often
(a) In all of your school subjects?	①	②	③	④
(b) In science?	①	②	③	④

31. 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, etc.)	①	②	③	④	⑤	⑥
(b) For school-related activities (e.g., field trips, science fairs, sports activities, music or cultural events, etc.)	①	②	③	④	⑤	⑥

32. How often is time lost because of the following in your science class?

	Never	Rarely	Sometimes	Often
(a) Student misbehaviour	①	②	③	④
(b) Other disruptions (e.g., announcements, assemblies, visits)	①	②	③	④
(c) Discussions unrelated to the science lesson	①	②	③	④

Thank you for taking the time to complete this questionnaire.