

Council of Ministers of Education, Canada

School Achievement Indicators Program

Science III Assessment (2004)

Student Questionnaire

DIRECTIONS

In this part of the assessment, you will find questions about yourself and your science skills and habits, both in school and out of school. Some questions ask for facts, while others ask for opinions. There will also be some questions about the assessment itself. Your answers, along with your test results and those of other students, will provide a picture of how students in Canada are doing in their science courses.

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 indicated by a number. For these questions, please respond by circling the number next to or below your choice as shown in Example 1.

Example 1

(Circle one of the responses.)

| | | | | |
|---|----------------------|----------|-------|-------------------|
| | strongly disagree | disagree | agree | strongly agree |
| I like to listen to music. | 1 | 2 | 3 | ④ |

For other questions, you will be asked to write a number or word on a blank line as in Example 2. For these questions, please write clearly so that your response can be read.

Example 2

What year is this? 2004

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

1. Are you female or male?

Female 1
Male 2

2. Were you born in Canada?

Yes 1
No 2

3. If you were not born in Canada, how old were you when you came to Canada?

I came to Canada when I was ____ ____ years old.

4. Which of these languages is (are) spoken in your home and how often?

| | often spoken | sometimes spoken | not spoken |
|------------------------------|-------------------------|-----------------------------|-----------------------|
| (a) English..... | 1 | 2 | 3 |
| (b) French | 1 | 2 | 3 |
| (c) Aboriginal language..... | 1 | 2 | 3 |
| (d) Other..... | 1 | 2 | 3 |

5. Which of these languages do you speak at school between classes or at breaks or lunch and how often?

| | often spoken | sometimes spoken | not spoken |
|------------------------------|-------------------------|-----------------------------|-----------------------|
| (a) English..... | 1 | 2 | 3 |
| (b) French | 1 | 2 | 3 |
| (c) Aboriginal language..... | 1 | 2 | 3 |
| (d) Other..... | 1 | 2 | 3 |

6. Which statement best describes the science course(s) you are taking this year?

- I am now taking one science course. 1
- I took a science course last semester, but not this semester. 2
- I started taking a science course this year, but dropped it. 3
- I have not taken any science courses this year..... 4
- I am now taking more than one science course. 5

7. What is your average mark in your science courses this year?

- above 90 1
- between 80 and 89 2
- between 70 and 79 3
- between 60 and 69 4
- between 50 and 59 5
- below 50 6
- don't know or no grades given..... 7
- not taking science this year 8

8. How satisfied are you with how well you are doing in your science courses this year?

- very satisfied 1
- satisfied..... 2
- dissatisfied 3
- very dissatisfied 4

9. After you finish high school, do you expect to continue your education?

- Yes 1
- No..... 2

(If NO, please go to question 11.)

10. If YES, what form of further education do you intend to take?

- specialized work or trade training..... 1
- technical or technology training..... 2
- college or university..... 3
- other 4

- don't know 5
- 11. Do you expect to eventually work in a field that requires education in science or technology?**
- yes..... 1
- no 2
- don't know 3
- (if NO or don't know, please go to the question 13.)*

- 12. If YES, which one of the following comes closest to the area in which you would most like to work?**
- (Circle one category only)**
- sciences (e.g., biologist, chemist, geologist)..... 1
- engineering or engineering technology (e.g., civil engineer, electronics engineer)..... 2
- health sciences or technology (e.g., medical doctor, nurse, X-ray technician) 3
- computer sciences 4
- science or mathematics teacher..... 5
- other area of science or technology (excluding social sciences) 6
- don't know 7

- 13. How important do the following people think it is for you to do well in SCHOOL?**

| | not important at all | unimportant | important | very important |
|-------------------|-------------------------|-------------|-----------|-------------------|
| (a) parents..... | 1 | 2 | 3 | 4 |
| (b) friends..... | 1 | 2 | 3 | 4 |
| (c) teachers..... | 1 | 2 | 3 | 4 |
| (d) yourself..... | 1 | 2 | 3 | 4 |

- 14. How important do the following people think it is for you to do well in SCIENCE?**

| | not important at all | unimportant | important | very important |
|----------------------------|-------------------------|-------------|-----------|-------------------|
| (a) parents | 1 | 2 | 3 | 4 |
| (b) friends | 1 | 2 | 3 | 4 |
| (c) science teachers | 1 | 2 | 3 | 4 |
| (d) other teachers | 1 | 2 | 3 | 4 |

(e) yourself..... 1 2 3 4

15. In a normal week (*including the weekend*) how much time do you usually spend doing each of these things outside of school hours?

| | no time | less than 1 hr. | 1–2 hrs. | 3–4 hrs. | 5–6 hrs. | more than 6 hrs |
|--|---------|-----------------|----------|----------|----------|-----------------|
| (a) taking extra school lessons or being tutored | 1 | 2 | 3 | 4 | 5 | 6 |
| (b) taking other lessons (<i>e.g., music, swimming</i>) | 1 | 2 | 3 | 4 | 5 | 6 |
| (c) studying or doing homework in science courses..... | 1 | 2 | 3 | 4 | 5 | 6 |
| (d) studying or doing homework in other subjects | 1 | 2 | 3 | 4 | 5 | 6 |
| (e) reading for enjoyment | 1 | 2 | 3 | 4 | 5 | 6 |
| (f) using a computer for school purposes (<i>e.g., research, writing</i>)..... | 1 | 2 | 3 | 4 | 5 | 6 |
| (g) using a computer for entertainment (<i>e.g., Internet, e-mail, computer games</i>) | 1 | 2 | 3 | 4 | 5 | 6 |

16. Please respond to each of the following statements by circling the number that best illustrates your opinion.

| | strongly disagree | disagree | agree | strongly agree |
|--|-------------------|----------|-------|----------------|
| (a) Science is more difficult than other subjects. | 1 | 2 | 3 | 4 |
| (b) I am not interested in science subjects. | 1 | 2 | 3 | 4 |
| (c) I learn many new things in my science classes. | 1 | 2 | 3 | 4 |
| (d) Science brings more harm than good to the world. | 1 | 2 | 3 | 4 |
| (e) Science is one of the most important subjects in school. | 1 | 2 | 3 | 4 |
| (f) Studying science is important to be able to get a good job. | 1 | 2 | 3 | 4 |

17. Please respond to each of the following statements by circling the number that is closest to how you feel about the statement.

To do well in science you need . . .

| | strongly disagree | disagree | agree | strongly agree |
|---------------------------------------|--------------------------|-----------------|--------------|-----------------------|
| (a) natural ability. | 1 | 2 | 3 | 4 |
| (b) hard work. | 1 | 2 | 3 | 4 |
| (c) good luck. | 1 | 2 | 3 | 4 |
| (d) encouragement from teachers. | 1 | 2 | 3 | 4 |
| (e) encouragement from parents. | 1 | 2 | 3 | 4 |

When I get an unusually low mark on a science assignment, it is most likely because . . .

| | strongly disagree | disagree | agree | strongly agree |
|--|--------------------------|-----------------|--------------|-----------------------|
| (f) I did not study hard enough. | 1 | 2 | 3 | 4 |
| (g) the teacher marked too hard. | 1 | 2 | 3 | 4 |
| (h) of bad luck | 1 | 2 | 3 | 4 |
| (i) the course was difficult. | 1 | 2 | 3 | 4 |
| (j) the course was not well taught. | 1 | 2 | 3 | 4 |

When I get an unusually high mark on a science assignment, it is most likely because . . .

| | strongly disagree | disagree | agree | strongly agree |
|---|--------------------------|-----------------|--------------|-----------------------|
| (k) I studied a lot. | 1 | 2 | 3 | 4 |
| (l) the teacher was easy in marking. | 1 | 2 | 3 | 4 |
| (m) of good luck. | 1 | 2 | 3 | 4 |
| (n) the course was easy. | 1 | 2 | 3 | 4 |
| (o) the course was well taught. | 1 | 2 | 3 | 4 |

18. If I were faced with difficulties in science, I would be likely to ...

| | strongly disagree | disagree | agree | strongly agree |
|---|------------------------------|-----------------|--------------|---------------------------|
| (a) ask the teacher for help. | 1 | 2 | 3 | 4 |
| (b) ask a friend for help. | 1 | 2 | 3 | 4 |
| (c) ask my parents for help. | 1 | 2 | 3 | 4 |
| (d) keep trying until I am satisfied. | 1 | 2 | 3 | 4 |
| (e) give up and not try to overcome the difficulty. | 1 | 2 | 3 | 4 |

19. Please respond to each of the following statements by circling the number under the words that most closely describe your feeling.

| | strongly disagree | disagree | agree | strongly agree |
|--|------------------------------|-----------------|--------------|---------------------------|
| (a) I like to learn new things. | 1 | 2 | 3 | 4 |
| (b) I have lots of friends in school. | 1 | 2 | 3 | 4 |
| (c) I feel good about school. | 1 | 2 | 3 | 4 |
| (d) I am bossed around too much in school. | 1 | 2 | 3 | 4 |
| (e) I know how to cope with school work. | 1 | 2 | 3 | 4 |
| (f) I am genuinely interested in school work. | 1 | 2 | 3 | 4 |
| (g) I get along with most students in my school. | 1 | 2 | 3 | 4 |
| (h) I know that people respect me in school. | 1 | 2 | 3 | 4 |
| (i) I am usually bored in school. | 1 | 2 | 3 | 4 |
| (j) My teachers treat me fairly. | 1 | 2 | 3 | 4 |
| (k) I enjoy going to school. | 1 | 2 | 3 | 4 |
| (l) I feel good about my school work. ... | 1 | 2 | 3 | 4 |
| (m) There is not much interesting to do in school. | 1 | 2 | 3 | 4 |
| (n) I feel important in school. | 1 | 2 | 3 | 4 |
| (o) I get the marks I deserve. | 1 | 2 | 3 | 4 |

20. How many days would you say you have been absent from school this year?

- none 1
- 1 or 2 days 2
- 3 to 5 days 3
- 6 to 10 days 4
- more than 10 5

21. How many total hours per week would you say you spend watching television, movies, and/or videos?

- less than 5 hours 1
- 5–9 hours..... 2
- 10–14 hours..... 3
- 15–19 hours..... 4
- 20–24 hours..... 5
- 25–29 hours..... 6
- 30 hours or more 7

22. How often do you and your parent(s) or guardian(s) . . .

| | rarely or never | a few times a month | a few times a week | almost every day |
|--|----------------------------|------------------------------------|-----------------------------------|-----------------------------|
| (a) work together on your science homework? | 1 | 2 | 3 | 4 |
| (b) work together on homework in other subjects?..... | 1 | 2 | 3 | 4 |
| (c) discuss your school work, assignments, projects? | 1 | 2 | 3 | 4 |
| (d) discuss your daily activities? | 1 | 2 | 3 | 4 |
| (e) discuss your future?..... | 1 | 2 | 3 | 4 |

23. In your science courses this year, how often do the following things happen?

| | rarely or never | a few times a month | a few times a week | almost every day |
|--|--------------------|---------------------------|--------------------------|------------------------|
| (a) The teacher writes notes for us on the blackboard..... | 1 | 2 | 3 | 4 |
| (b) The teacher shows us how to solve problems..... | 1 | 2 | 3 | 4 |
| (c) We participate in scientific projects. ... | 1 | 2 | 3 | 4 |
| (d) We work in pairs or in small groups. ... | 1 | 2 | 3 | 4 |
| (e) We do experiments in the laboratory.. | 1 | 2 | 3 | 4 |
| (f) The teacher shows us experiments.... | 1 | 2 | 3 | 4 |
| (g) We have a quiz or a test..... | 1 | 2 | 3 | 4 |
| (h) The teacher assigns us homework..... | 1 | 2 | 3 | 4 |
| (i) The teacher corrects our work..... | 1 | 2 | 3 | 4 |
| (j) We discuss the exams about to come or those that have already passed. | 1 | 2 | 3 | 4 |
| (k) We work on our homework alone..... | 1 | 2 | 3 | 4 |
| (l) We study the school textbook. | 1 | 2 | 3 | 4 |
| (m) The teacher reads from the school textbook or summarizes using his/her own words. | 1 | 2 | 3 | 4 |
| (n) The teacher asks questions of students or of the class in general..... | 1 | 2 | 3 | 4 |
| (o) We go outside or out of the school for an educational outing. | 1 | 2 | 3 | 4 |
| (p) The class is usually interrupted by noise or disorder..... | 1 | 2 | 3 | 4 |
| (q) We discuss and do things other than the subject in progress. | 1 | 2 | 3 | 4 |
| (r) The teacher helps the students with their work..... | 1 | 2 | 3 | 4 |

24. How often are the following resources used in your science courses this year?

| | rarely or never | a few times a year | a few times a month | almost every class |
|---|-----------------|--------------------|---------------------|--------------------|
| (a) science books and magazines (other than textbooks)..... | 1 | 2 | 3 | 4 |
| (b) Teacher uses a computer..... | 1 | 2 | 3 | 4 |
| (c) Students use computers..... | 1 | 2 | 3 | 4 |
| (d) Students use graphing calculators. ... | 1 | 2 | 3 | 4 |
| (e) overhead projector | 1 | 2 | 3 | 4 |
| (f) slides, films or videos | 1 | 2 | 3 | 4 |
| (g) a laboratory (<i>separate from the classroom</i>)..... | 1 | 2 | 3 | 4 |
| (h) a computer lab (<i>separate from the classroom</i>)..... | 1 | 2 | 3 | 4 |
| (i) museums, zoos, conservation areas, and similar non-school sites | 1 | 2 | 3 | 4 |
| (j) laboratory apparatus, specimens, or other resources not mentioned above | 1 | 2 | 3 | 4 |

The next two questions are about your mother and father. You may answer these questions by thinking either about your own parents or persons who are most like parents to you — for example, step-parents, foster parents, or guardians. It is OK to answer questions about only one person, if you prefer.

25. What level of education did your mother and father achieve?

| | (Circle the highest level.) | |
|---|-----------------------------|-------------|
| | (i) Mother | (ii) Father |
| (a) did not complete high school..... | 1 | 1 |
| (b) completed high school..... | 2 | 2 |
| (c) had some education after high school..... | 3 | 3 |
| (d) completed education as a technician or in technology education..... | 4 | 4 |
| (e) had some university education but did not complete a degree | 5 | 5 |
| (f) completed one or more university degrees | 6 | 6 |
| (g) I don't know | 7 | 7 |

26. What kind of jobs do your mother and father have?

(If your mother or father is not working now, please think about the job they had for most of the time when they were working. Also, think about the kind of work they do, not who they work for.)

(Circle one category only for mother and one for father.)

| | (i) | (ii) |
|---|---------------|---------------|
| | Mother | Father |
| (a) General worker (e.g., warehouse person, taxi driver, construction worker, server in restaurant) | 1 | 1 |
| (b) Plant or machine operator or production worker (e.g., truck driver, factory or plant worker) | 2 | 2 |
| (c) Farmer/fisher/logger/hunter/trapper | 3 | 3 |
| (d) Sales or customer service worker (e.g., clerk, secretary, salesperson) | 4 | 4 |
| (e) Trades or crafts person (e.g., carpenter, mechanic, police officer) | 5 | 5 |
| (f) Technologist or associate professional (e.g., medical technologist, computer programmer or analyst, pilot) | 6 | 6 |
| (g) Manager (e.g., small business owner/operator, manager in a large business or government office) | 7 | 7 |
| (h) Professional (e.g., lawyer, accountant, engineer, doctor, professor, teacher) | 8 | 8 |
| (i) Senior official, executive, or large business owner (e.g., legislator, senior civil servant, judge, senior officer or owner of a large company) | 9 | 9 |
| (j) Home duties | 10 | 10 |
| (k) Other | 11 | 11 |
| (l) I don't know | 12 | 12 |

27. Do you have these items in your home?

| | Yes | No |
|--|------------|-----------|
| (a) a study desk or table mainly for your own use..... | 1 | 2 |
| (b) dictionary | 1 | 2 |
| (c) encyclopedia | 1 | 2 |
| (d) computer | 1 | 2 |
| (e) Internet connection | 1 | 2 |

28. Do you or your family buy or subscribe to...

| | Yes | No |
|--|------------|-----------|
| (a) a daily newspaper | 1 | 2 |
| (b) a newsmagazine (e.g., <i>Maclean's</i> , <i>Time</i>) | 1 | 2 |
| (c) other magazines | 1 | 2 |
| (d) books | 1 | 2 |

29. Other than school books, about how many books would you say are in your home?

| | |
|---|---|
| None | 1 |
| Up to 40 (enough to fill a book shelf)..... | 2 |
| Up to 200 (enough to fill a book case)..... | 3 |
| Up to 400 (enough to fill two book cases) | 4 |
| More than 400 | 5 |

Thank you again for taking time to complete this questionnaire.