**INTERNATIONAL ASSOCIATION for the
EVALUATION of EDUCATIONAL ACHIEVEMENT**

SECOND

Study of

MATHEMATICS

GRADE 8
TEACHER OPPORTUNITY-TO-LEARN QUESTIONNAIRE
ROTATED FORM B

BOOKLET 19L

**The Ontario Institute for
Studies in Education
Educational Evaluation Centre**

POPULATION A

TEACHER OPPORTUNITY-TO-LEARN QUESTIONNAIRE

ROTATED FORM B

The cognitive tests taken by your students contain items that reflect mathematics taught during this year to students in many countries. Because mathematics curricula differ from country to country, some of the items may not be appropriate for your students. Other items, however, should represent mathematics you taught your students this year.

The purpose of this questionnaire is to find out which items are appropriate for your students, and which are inappropriate. A way to determine this is for you to answer three questions about the items in the test. Below is an example of what is sought.

"There are 35 students in a class. $\frac{1}{5}$ of them come to school by ... and another $\frac{2}{5}$ come by bicycle. How many come to school by other means?

    A   *7*

    B   *14*

    .   *21*

    :   *28*

    E   *35 "*

This item asks students to solve a verbal problem that involves operations with fractions.

The first question about this item asks *"What percentage of the students from the target class do you estimate will get the item correct without guessing?"*

You are asked to choose from the following options:

" ☐ A   *Virtually none*

☐ B   *6 - 40%*

☐ C   *41 - 60%*

☐ D   *61 - 94%*

☐ E   *Virtually all "*

Should you think about $\frac{1}{2}$ of your students will answer this item correctly, then check box *C*.

The second question for this item asks *"During this school year, did you teach or review the mathematics needed to answer the item correctly?*

☐ A   *No*

☐ B   *Yes "*

For this question, you are asked whether you taught most students in your target class to solve verbal problems that involve operations with fractions. Suppose you did not teach this topic. Then check box *A*.

The third question for this item should be answered only if you responded "No" to the second question. The question asks *"If, in this school year, you did not teach or review the mathematics needed to answer this item correctly, was it because:*

☐ A   *It had been taught prior to this school year*

☐ B   *It will be taught later (this year or later)*

☐ C   *It is not in the school curriculum at all*

☐ D   *For other reasons "*

If the necessary mathematics had been taught in earlier years, you should check box *A*.

The following pages contain all of the items from one form of the test which were answered by students in the target class. In terms of this class, please answer the three questions for each item.

1.

72% is equal to

A   7200

B   720

C   72

D   7.2

E   0.72

What percentage of the students from the target class do you estimate will get the item correct without guessing?

- [ ] A   Virtually none
- [ ] B   6 - 40%
- [ ] C   41 - 60%
- [ ] D   61 - 94%
- [x] E   Virtually all

During this school year, did you teach or review the mathematics needed to answer the item correctly?

- [ ] A   No
- [x] B   Yes

If, in this school year, you did not teach or review the mathematics needed to answer this item correctly, was it because:

- [ ] A   It had been taught prior to this school year
- [ ] B   It will be taught later (this year or later)
- [ ] C   It is not in the school curriculum at all
- [ ] D   For other reasons

2.

Which of the following is thirty-seven thousandths?

A   37 000

B   37

C   0.37

D   0.037

E   0.0037

What percentage of the students from the target class do you estimate will get the item correct without guessing?

- [ ] A   Virtually none
- [ ] B   6 - 40%
- [ ] C   41 - 60%
- [ ] D   61 - 94%
- [x] E   Virtually all

During this school year, did you teach or review the mathematics needed to answer the item correctly?

- [ ] A   No
- [x] B   Yes

If, in this school year, you did not teach or review the mathematics needed to answer this item correctly, was it because:

- [ ] A   It had been taught prior to this school year
- [ ] B   It will be taught later (this year or later)
- [ ] C   It is not in the school curriculum at all
- [ ] D   For other reasons

3.

The petals on 100 flowers of different kinds were carefully counted, and the results are shown in this table.

No. of petals	Frequency
10-12	5
13-15	22
16-18	48
19-21	18
22-24	7

How many of the flowers had FEWER than 19 petals?

A   48

B   52

C   73

D   75

E   93

What percentage of the students from the target class do you estimate will get the item correct without guessing?

- [ ] A   Virtually none
- [ ] B   6 - 40%
- [ ] C   41 - 60%
- [x] D   61 - 94%
- [ ] E   Virtually all

During this school year, did you teach or review the mathematics needed to answer the item correctly?

- [ ] A   No
- [x] B   Yes

If, in this school year, you did not teach or review the mathematics needed to answer this item correctly, was it because:

- [ ] A   It had been taught prior to this school year
- [ ] B   It will be taught later (this year or later)
- [ ] C   It is not in the school curriculum at all
- [ ] D   For other reasons

4.

There are 7 000 000 girls under the age of 21 in a country with a total population of 36 000 000. If a circle graph were drawn showing the distribution of the population, the angle in the sector representing girls under the age of 21 would have measure

A   7°

B   20°

C   21°

D   70°

E   72°

What percentage of the students from the target class do you estimate will get the item correct without guessing?

- [ ] A   Virtually none
- [ ] B   6 - 40%
- [ ] C   41 - 60%
- [x] D   61 - 94%
- [ ] E   Virtually all

During this school year, did you teach or review the mathematics needed to answer the item correctly?

- [ ] A   No
- [x] B   Yes

If, in this school year, you did not teach or review the mathematics needed to answer this item correctly, was it because:

- [ ] A   It had been taught prior to this school year
- [ ] B   It will be taught later (this year or later)
- [ ] C   It is not in the school curriculum at all
- [ ] D   For other reasons