# Content Alignment Tool

## Contents

## Content Alignment Tool Questionnaire

The UIS invites you to complete the online UIS Content alignment tool (CAT) questionnaires on reading and mathematics.

Each questionnaire, once completed, will provide you with valuable feedback on the level of alignment of the content of your national learning assessment with respect to the UIS Global content framework in [Reading](#) and/or [Mathematics](#).

Before you start, please identify the relevant national learning assessment that your country would use to report on SDG indicator 4.1.1.

The questionnaires ask questions related to the mathematics and reading constructs on which your national assessment evaluates students. They are independent and can be completed individually by different respondents.

It is strongly recommended to have a copy of the national assessment for which the questionnaire is being completed. If you are not a mathematics and/or reading (or language arts) educator, you may need a specialist to help you answer the questions.

The questionnaires can be completed more than once and the tool will consider the latest submitted answers.

Should you have any questions regarding this tool, or require support, please do not hesitate to contact us by email at [uis.lo@unesco.org](mailto:uis.lo@unesco.org).

Select a questionnaire: Mathematics / Reading

## Mathematics - Questions

### Registration – Please provide your contact information:

| | |
|---|---|
| Select a Country | |
| Full name | |
| Organization | |
| Organization unit | |
| Function | |
| Email address | |
| Phone number | |

| | |
|---|---|
| Does your country conduct a national learning assessment covering Reading? | Yes (*Q3*)<br>No (*End*) |

### Please complete the following information

| | | | |
|---|---|---|---|
| Full name of the assessment in national or official language | | | |
| Full name of the assessment in English | | | |
| Administration year *(please select all that apply)* | | | |
| Target grade *(select all that apply)* | ISCED 1:<br>Grade 1<br>Grade 2<br>Grade 3<br>Grade 4<br>Grade 5<br>Grade 6<br>Grade 7<br>Grade 8 | ISCED 2:<br>Grade 1<br>Grade 2<br>Grade 3<br>Grade 4<br>Grade 5<br>Grade 6 | ISCED 3:<br>Grade 1<br>Grade 2<br>Grade 3<br>Grade 4<br>Grade 5 |
| Measurement Point (s*elect all that apply*) | Grade 2/3<br>End of primary<br>End of lower secondary | | |
| Data source | Census | | |

| | Sample |
|---|---|
| Assessment scale | National<br>Regional<br>Provincial<br>Other |

**Instructions**

The following questions are specific to the content of your national assessment at each measurement point (grade 2/3, end of primary, end of lower secondary).

The answers to the questions could be either "yes" or "no". Each "yes" response is assigned a 1; each "no" response is assigned a 0. The percent of 1s forms the basis for scoring the questionnaire.

Once all the questions for a given measurement point are answered, the tool will display the scoring and coverage of the content of your national assessment for that measurement point.

At the end of the questionnaire, scoring and coverage of the content of other countries will be also displayed.

Mathematics – Grade 2/3

## 1. Please identify whether this national assessment evaluates the following domain

| | |
|---|---|
| <u>Number Knowledge</u><br>Understanding and using pre-number ideas (e.g., counting), symbols, and different number systems (e.g., whole numbers, fractions) | Yes (*Q1.1*)<br>No (*Q2*) |

### 1.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| | |
|---|---|
| <u>Number sense</u><br>Counting concrete objects, number words, number games, rhymes | Yes<br>No |
| <u>Operations with objects</u><br>Grouping and taking away concrete objects from a collection of objects | Yes<br>No |
| <u>Natural numbers</u><br>Counting and operations with positive integers including zero (i.e.,0, 1, 2, 3, …) | Yes<br>No |
| <u>Fractions</u><br>Counting and operations with rational numbers expressed as a/b where a is the numerator and b is the denominator; b does not equal 0 | Yes<br>No |
| <u>Decimals</u><br>Counting and operations with real numbers expressed in base ten notation | Yes<br>No |

## 2. Please identify whether this national assessment evaluates the following domain

| | |
|---|---|
| <u>Measurement</u><br>Understanding and using non-standard units (e.g., pencil lengths, teacup amounts) and standard units (e.g., inches, grams, litres) to measure various quantities | Yes (*Q2.1*)<br>No (*Q3*) |

### 2.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| | |
|---|---|
| <u>Shapes and objects</u> | Yes<br>No |

| Measuring quantities in the world using locally derived units (e.g., book-lengths, spoon volumes, stone-weights) | |
|---|---|
| <u>Daily Living</u><br>Measuring quantities in your daily life using locally derived units (e.g., estimating time duration) | Yes<br>No |
| <u>Shapes and objects</u><br>Measuring quantities in the world using established measurement units (e.g., inches, cm, km, L, gallons, lbs., kg) | Yes<br>No |
| <u>Daily Living</u><br>Measuring quantities in daily life using established units (e.g., time in months, days, hours, mins; currency; temperature) | Yes<br>No |

3. **Please identify whether this national assessment evaluates the following domain**

| <u>Statistics and Probability</u><br>Understanding and using good data management procedures (e.g., organizing, representing, interpreting) to conduct investigations; using chance and probability experiments (e.g., coin tosses) to explore mathematics of probability | Yes (*Q3.1*)<br>No (*Q4*) |
|---|---|

    3.1. **Please identify whether this national assessment evaluates each of the following mathematics constructs**

| <u>Data management</u><br>Creating surveys and questionnaires, administering them, collecting data, summarizing and representing data, interpreting results | Yes<br>No |
|---|---|

4. **Please identify whether this national assessment evaluates the following domain**

| <u>Geometry</u><br>Understanding and using properties of 2-D shapes (e.g., lines, triangles) and 3-D objects (e.g., cubes, spheres), completing transformations (e.g., rotations, reflections), and working in the Cartesian plane (e.g., plotting points) | Yes (*Q4.1*)<br>No (*Q5*) |
|---|---|

    4.1. **Please identify whether this national assessment evaluates each of the following mathematics constructs**

| <u>Constructions</u> | Yes<br>No |
|---|---|

| | |
|---|---|
| Constructing lines, angles, plane figures, 3-D objects; investigating symmetry and congruence | |
| <u>Properties</u><br>Recognize and use properties of lines and angles, plane figures, 3-D objects, symmetry and congruence and similarity | Yes<br>No |
| <u>Position and direction</u><br>Translating, rotating, reflecting and dilatating various geometric shapes and objects | Yes<br>No |
| <u>Properties of space</u><br>Locating geometric shapes and objects in the Cartesian plane | Yes<br>No |

## 5. Please identify whether this national assessment evaluates the following domain

| | |
|---|---|
| <u>Algebra (early pre-algebra constructs)</u><br>understanding and using non-numerical patterns (e.g., patterns observed in the environment), numerical patterns (e.g., sequences) | Yes (*Q5.1*)<br>No |

### 5.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| | |
|---|---|
| <u>Relations</u><br>Investigate patterns in number sequences, investigate properties of algebraic expressions | Yes<br>No |

## 1. Please identify whether this national assessment evaluates the following domain

| | |
|---|---|
| <u>Number Knowledge</u><br>Understanding and using pre-number ideas (e.g., counting), symbols, and different number systems (e.g., whole numbers, fractions) | Yes (*Q1.1*)<br>No (*Q2*) |

### 1.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| | |
|---|---|
| <u>Operations with objects</u><br>Grouping and taking away concrete objects from a collection of objects | Yes<br>No |
| <u>Natural numbers</u><br>Counting and operations with positive integers including zero (i.e.,0, 1, 2, 3, …) | Yes<br>No |
| <u>Fractions</u><br>Counting and operations with rational numbers expressed as a/b where a is the numerator and b is the denominator; b does not equal 0 | Yes<br>No |
| <u>Decimals</u><br>Counting and operations with real numbers expressed in base ten notation | Yes<br>No |

## 2. Please identify whether this national assessment evaluates the following domain

| | |
|---|---|
| <u>Measurement</u><br>Understanding and using non-standard units (e.g., pencil lengths, teacup amounts) and standard units (e.g., inches, grams, litres) to measure various quantities | Yes (*Q2.1*)<br>No (*Q3*) |

### 2.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| | |
|---|---|
| <u>Shapes and objects</u><br>Measuring quantities in the world using established measurement units (e.g., inches, cm, km, L, gallons, lbs., kg) | Yes<br>No |
| <u>Daily Living</u> | Yes<br>No |

| Measuring quantities in daily life using established units (e.g., time in months, days, hours, mins; currency; temperature) | |
|---|---|

### 3. Please identify whether this national assessment evaluates the following domain

| Statistics and Probability<br>Understanding and using good data management procedures (e.g., organizing, representing, interpreting) to conduct investigations; using chance and probability experiments (e.g., coin tosses) to explore mathematics of probability | Yes (*Q3.1*)<br>No (*Q4*) |
|---|---|

#### 3.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| Data management<br>Creating surveys and questionnaires, administering them, collecting data, summarizing and representing data, interpreting results | Yes<br>No |
|---|---|

### 4. Please identify whether this national assessment evaluates the following domain

| Geometry<br>Understanding and using properties of 2-D shapes (e.g., lines, triangles) and 3-D objects (e.g., cubes, spheres), completing transformations (e.g., rotations, reflections), and working in the Cartesian plane (e.g., plotting points) | Yes (*Q4.1*)<br>No (*Q5*) |
|---|---|

#### 4.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| Constructions<br>Constructing lines, angles, plane figures, 3-D objects; investigating symmetry and congruence | Yes<br>No |
|---|---|
| Properties<br>Recognize and use properties of lines and angles, plane figures, 3-D objects, symmetry and congruence and similarity | Yes<br>No |
| Position and direction<br>Translating, rotating, reflecting and dilatating various geometric shapes and objects | Yes<br>No |
| Properties of space<br>Locating geometric shapes and objects in the Cartesian plane | Yes<br>No |

5. **Please identify whether this national assessment evaluates the following domain**

| Algebra understanding and using non-numerical patterns (e.g., patterns observed in the environment), numerical patterns (e.g., sequences), functions (linear and non-linear), and properties of variation (i.e., ratio, proportion, percent) | Yes (*Q5.1*) No |
|---|---|

5.1. **Please identify whether this national assessment evaluates each of the following mathematics constructs**

| Relations Investigate patterns in number sequences, investigate properties of algebraic expressions | Yes No |
|---|---|
| Linear functions Recognize and use appropriate algebraic notion, properties of linear functions, linear equations, simultaneous equations | Yes No |
| Variation Recognize and use ratio, percentage and proportion to solve mathematical problems | Yes No |

Mathematics – End of lower secondary

## 1. Please identify whether this national assessment evaluates the following domain

| Number Knowledge<br>Understanding and using pre-number ideas (e.g., counting), symbols, and different number systems (e.g., whole numbers, fractions) | Yes (*Q1.1*)<br>No (*Q2*) |
|---|---|

### 1.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| Natural numbers<br>Counting and operations with positive integers including zero (i.e.,0, 1, 2, 3, ...) | Yes<br>No |
|---|---|
| Fractions<br>Counting and operations with rational numbers expressed as a/b where a is the numerator and b is the denominator; b does not equal 0 | Yes<br>No |
| Decimals<br>Counting and operations with real numbers expressed in base ten notation | Yes<br>No |
| Integers<br>Counting and operations with negative and positive real numbers (i.e., ... -2, -1, 0, 1, 2, ...) | Yes<br>No |
| Exponents<br>Operations with numbers where a quantity (the base) is raised to the power of another quantity (the exponent) | Yes<br>No |

## 2. Please identify whether this national assessment evaluates the following domain

| Measurement<br>Understanding and using non-standard units (e.g., pencil lengths, teacup amounts) and standard units (e.g., inches, grams, litres) to measure various quantities | Yes (*Q2.1*)<br>No (*Q3*) |
|---|---|

### 2.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| Shapes and objects | Yes<br>No |
|---|---|

| Measuring quantities in the world using established measurement units (e.g., inches, cm, km, L, gallons, lbs., kg) | |
|---|---|
| <u>Daily Living</u><br>Measuring quantities in daily life using established units (e.g., time in months, days, hours, mins; currency; temperature) | Yes<br>No |

## 3. Please identify whether this national assessment evaluates the following domain

| <u>Statistics and Probability</u><br>Understanding and using good data management procedures (e.g., organizing, representing, interpreting) to conduct investigations; using chance and probability experiments (e.g., coin tosses) to explore mathematics of probability | Yes (*Q3.1*)<br>No (*Q4*) |
|---|---|

### 3.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| <u>Data management</u><br>Creating surveys and questionnaires, administering them, collecting data, summarizing and representing data, interpreting results | Yes<br>No |
|---|---|
| <u>Chance and probability experiments</u><br>Recognizing and using principles of chance to make predictions, principles of probability and simple probability experiments (e.g., coin tosses) | Yes<br>No |

## 4. Please identify whether this national assessment evaluates the following domain

| <u>Geometry</u><br>Understanding and using properties of 2-D shapes (e.g., lines, triangles) and 3-D objects (e.g., cubes, spheres), completing transformations (e.g., rotations, reflections), and working in the Cartesian plane (e.g., plotting points) | Yes (*Q4.1*)<br>No (*Q5*) |
|---|---|

### 4.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| <u>Constructions</u><br>Constructing lines, angles, plane figures, 3-D objects; investigating symmetry and congruence | Yes<br>No |
|---|---|
| <u>Properties</u> | Yes |

| | |
|---|---|
| Recognize and use properties of lines and angles, plane figures, 3-D objects, symmetry and congruence and similarity | No |
| Position and direction<br>Translating, rotating, reflecting and dilatating various geometric shapes and objects | Yes<br>No |
| Properties of space<br>Locating geometric shapes and objects in the Cartesian plane | Yes<br>No |

## 5. Please identify whether this national assessment evaluates the following domain

| | |
|---|---|
| Algebra<br>understanding and using non-numerical patterns (e.g., patterns observed in the environment), numerical patterns (e.g., sequences), functions (linear and non-linear), and properties of variation (i.e., ratio, proportion, percent) | Yes (*Q5.1*)<br>No |

### 5.1. Please identify whether this national assessment evaluates each of the following mathematics constructs

| | |
|---|---|
| Relations<br>Investigate patterns in number sequences, investigate properties of algebraic expressions | Yes<br>No |
| Linear functions<br>Recognize and use appropriate algebraic notion, properties of linear functions, linear equations, simultaneous equations | Yes<br>No |
| Non-linear functions<br>Recognize and use appropriate algebraic notion, properties of non-linear functions and solve nonlinear simultaneous systems | Yes<br>No |
| Variation<br>Recognize and use ratio, percentage and proportion to solve mathematical problems | Yes<br>No |

## Mathematics - Scoring Rules

<u>Sufficient coverage:</u>
50% or greater of the grade-level appropriate constructs in 4 or 5 of the 5 content*
domains
AND
75% or greater of the grade-level appropriate constructs over all the 5 content
domains (when taken together)

<u>Insufficient coverage:</u>
The rest of the cases.

*The UIS Global Framework content domains used to determine sufficiency of
content coverage are: Number Knowledge; Measurement; Statistics; Geometry;
Algebra. The Global Framework also contains the cognitive domain Math
Proficiency, which is not a part of determining sufficiency of content coverage

## Reading - Questions

Registration (contact information):

| Select a Country | |
|---|---|
| Full name | |
| Organization | |
| Organization unit | |
| Function | |
| Email address | |
| Phone number | |

Reading (coverage)

| Does your country conduct a national learning assessment covering Reading? | Yes (*Q3*)<br>No (*End*) |
|---|---|

General information of NLA

| Full name of the assessment in national or official language | | | |
|---|---|---|---|
| Full name of the assessment in English | | | |
| Administration year | | | |
| Target grade<br>*(select all that apply)* | ISCED 1:<br>Grade 1<br>Grade 2<br>Grade 3<br>Grade 4<br>Grade 5<br>Grade 6<br>Grade 7<br>Grade 8 | ISCED 2:<br>Grade 1<br>Grade 2<br>Grade 3<br>Grade 4<br>Grade 5<br>Grade 6 | ISCED 3:<br>Grade 1<br>Grade 2<br>Grade 3<br>Grade 4<br>Grade 5 |
| Measurement Point<br>(s*elect all that apply*) | Grade 2/3<br>End of primary<br>End of lower secondary | | |
| Data source | Census<br>Sample | | |
| Assessment scale | National | | |

| | Regional |
| --- | --- |
| | Provincial |
| | Other |

Instructions

The following questions are specific to the content of your national assessment at each measurement point (grade 2/3, end of primary, end of lower secondary).

The answers to the questions could be either "yes" or "no". Each "yes" response is assigned a 1; each "no" response is assigned a 0. The percent of 1s forms the basis for scoring the questionnaire.

Once all the questions for a given measurement point are answered, the tool will display the scoring and coverage of the content of your national assessment for that measurement point.

At the end of the questionnaire, scoring and coverage of the content of other countries will be also displayed.

Reading – Grade 2/3

## 6. Please identify whether this national assessment evaluates the following sub-domain

| Decoding <br> Ability to associate the orthographic form of a word with its phonological form, where the orthographic form is given by the sequence of the graphemes | Yes (*Q1.1*) <br> No (*Q2*) |
|---|---|

### 6.1. Please identify whether this national assessment evaluates each of the following reading constructs

| Fluency <br> Presupposes precision and speed in word recognition, as well as, qualities such as rhythm, intonation, and phrasing at the phrase, sentence, and text levels. | Yes <br> No |
|---|---|

## 7. Please identify whether this national assessment evaluates the following sub-domain

| Reading comprehension <br> Process by which information is retrieved from a written text, interpreted and reflected upon | Yes (*Q2.1*) <br> No |
|---|---|

### 7.1. Please identify whether this national assessment evaluates each of the following reading constructs

| Identify <br> Recognition of meaning and purpose of written texts. As well as, recognition of the differences between different types of sentences, texts, and the parts that compose them | Yes <br> No |
|---|---|
| Retrieve <br> Extract and explain the meaning and purpose of sentences and written texts. Distinguishing and relating main and secondary ideas, sequence of events, roles and characteristics of the characters and situations | Yes <br> No |
| Motivation and disposition <br> Set of emotional and cognitive factors that encourages a person to get involved in reading either for pleasure, information needs and/or academic purposes | Yes <br> No |

Reading – End of primary

## 1. Please identify whether this national assessment evaluates the following sub-domain

| Decoding | Yes (*Q1.1*) |
|---|---|
| Ability to associate the orthographic form of a word with its phonological form, where the orthographic form is given by the sequence of the graphemes | No (*Q2*) |

### 1.1. Please identify whether this national assessment evaluates each of the following reading constructs

| Fluency | Yes |
|---|---|
| Presupposes precision and speed in word recognition, as well as, qualities such as rhythm, intonation, and phrasing at the phrase, sentence, and text levels. | No |

## 2. Please identify whether this national assessment evaluates the following sub-domain

| Reading comprehension | Yes (*Q2.1*) |
|---|---|
| Process by which information is retrieved from a written text, interpreted and reflected upon | No |

### 2.1. Please identify whether this national assessment evaluates each of the following reading constructs

| Identify | Yes |
|---|---|
| Recognition of meaning and purpose of written texts. As well as, recognition of the differences between different types of sentences, texts, and the parts that compose them | No |
| Retrieve | Yes |
| Extract and explain the meaning and purpose of sentences and written texts. Distinguishing and relating main and secondary ideas, sequence of events, roles and characteristics of the characters and situations | No |
| Interpret | Yes |
| Extract and recognize implicit and explicit information from a written sentence or text to relate it with other information or apply it to new situations or problem solving | No |
| Reflect | Yes |
| Critically analyze and give an opinion about the information presented in a written sentence or text, as well as, regarding | No |

| | |
|---|---|
| the author´s intentions and the consequences the information may have | |
| Metacognition | Yes<br>No |
| Motivation and disposition<br>Set of emotional and cognitive factors that encourages a person to get involved in reading either for pleasure, information needs and/or academic purposes | Yes<br>No |

Reading – End of lower secondary

## 1. Please identify whether this national assessment evaluates the following sub-domain

| Reading comprehension<br>Process by which information is retrieved from a written text, interpreted and reflected upon | Yes (*Q1.1*)<br>No |
|---|---|

### 1.1. Please identify whether this national assessment evaluates each of the following reading constructs

| Identify<br>Recognition of meaning and purpose of written texts. As well as, recognition of the differences between different types of sentences, texts, and the parts that compose them | Yes<br>No |
|---|---|
| Retrieve<br>Extract and explain the meaning and purpose of sentences and written texts. Distinguishing and relating main and secondary ideas, sequence of events, roles and characteristics of the characters and situations | Yes<br>No |
| Interpret<br>Extract and recognize implicit and explicit information from a written sentence or text to relate it with other information or apply it to new situations or problem solving | Yes<br>No |
| Reflect<br>Critically analyze and give an opinion about the information presented in a written sentence or text, as well as, regarding the author´s intentions and the consequences the information may have | Yes<br>No |
| Metacognition | Yes<br>No |
| Motivation and disposition<br>Set of emotional and cognitive factors that encourages a person to get involved in reading either for pleasure, information needs and/or academic purposes | Yes<br>No |

## Reading - Scoring Rules

<u>Sufficient coverage:</u>
To be placed into this category, a NLA must assess <u>more than 50%</u> of the educational level appropriate constructs to the reading competency domain that contains selected constructs from the decoding and reading comprehension sub-domains.

<u>Insufficient coverage:</u>
The rest of the cases.