

# MINIMUM PROFICIENCY LEVELS

Described, unpacked and illustrated

*Global Alliance for Monitoring Learning  
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## SDG Indicator 4.1.1

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*Proportion of children and young people:*

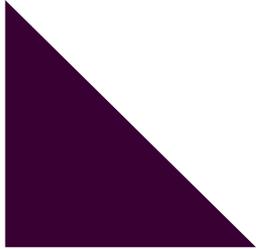
*(a) in grades 2/3;*

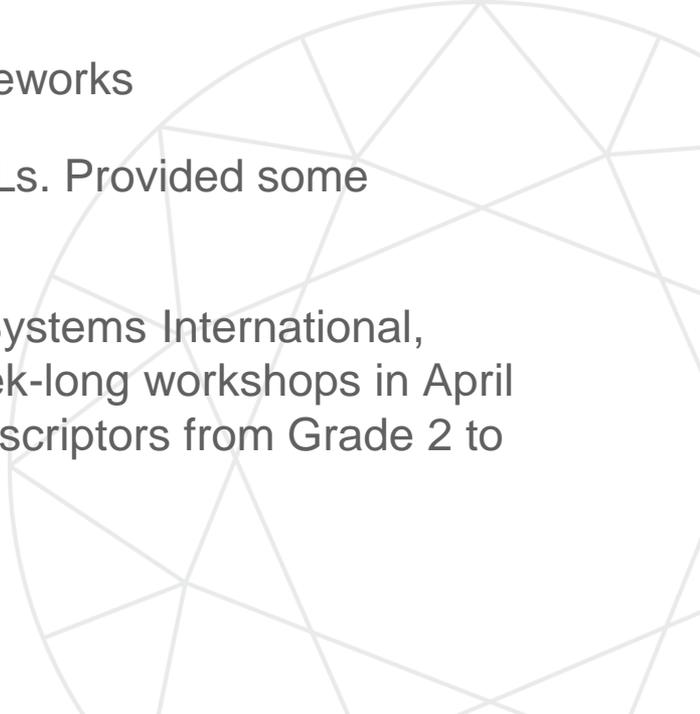
*(b) at the end of primary; and*

*(c) at the end of lower secondary*

*achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex*

# A collaborative process



- Consultants worked with UIS to draft Minimum Proficiency Levels (MPLs) mid 2018
  - Consensus building meeting around MPLs, Paris August 2018
  - Consultants worked with UIS to tidy up MPLs
  - Tidied version of MPLs taken to GAML 5
  - IBE produced Curriculum and Assessment Frameworks
  - Early 2019, ACER conducted a review of the MPLs. Provided some illustrative materials
  - The Global Reading Network and Management Systems International, supported by USAID and UIS, organized two week-long workshops in April and May 2019, to develop Performance Level Descriptors from Grade 2 to Grade 6 in reading and mathematics.
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# Culmination

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**The reference document on MPLs prepared by ACER for GAML 6 is based on the substantive body of work undertaken by these various groups in the last 12 months**

## **It provides:**

- Refined MPL statements
- Expanded descriptions of MPLs suitable for experts
- A comprehensive list of constructs within each domain
- Example descriptors of tasks within each construct
- Items that illustrate the descriptors

## **It recommends:**

- Terms consistent with IBE curriculum and assessment frameworks
- Focusing on the lower grade level in each MPL

# Refinement Example:

## Reading

### End of Lower Primary (Grades 2/3)

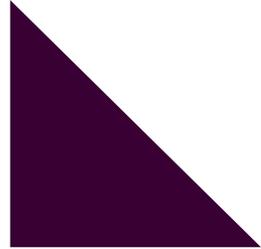
<b>Consensual Levels (Nitko, October 2018)</b>	<b>Refinement (ACER, July 2019)</b>
<p><b>Grade 2: They read and comprehend most of written words, particularly familiar ones, and extract explicit information from sentences.</b></p> <p><b>Grade 3: Students read aloud written words accurately and fluently. They understand the overall meaning of sentences and short texts. Students identify the texts' topic.</b></p>	<p><b>Students read aloud and comprehend many single written words, particularly familiar ones, and extract explicit information from sentences. They make simple inferences when longer texts are read aloud to them.</b></p>

*A full set of comparisons is provided in the Appendix of the document*

# Refinement Example:

## Mathematics

### End of Primary



<b>Consensual Levels (Nitko, October 2018)</b>	<b>Refinement (ACER, July 2019)</b>
<b>Students demonstrate skills in number sense and computation, basic measurement, reading, interpreting, and constructing graphs, spatial orientation, and number patterns.</b>	<b>Students demonstrate skills in number sense, computation, real world problems, basic measurement, 2D shape recognition, and reading and interpreting simple data displays.</b>

*A full set of comparisons is provided in the Appendix of the document*

## Recommended terms for levels of detail

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**Learning area**

**Domain**

**Construct**

**Descriptor**

Learning area	Mathematics
Domain	Number knowledge Measurement Statistics and probability Geometry Algebra
Construct	Number sense Operations Real world problems Fractions Decimals Exponents .....
Descriptor	<i>For example:</i> Count, read, write, compare and order whole numbers up to 30  Tell time using analogue clock to the nearest half hour

# Mathematics: End of primary

## *Nutshell statement (MPL)*

**Students demonstrate skills in number sense, computation, real world problems, basic measurement, 2D shape recognition, and reading and interpreting simple data displays.**

## *Expanded statement*

Students can add and subtract whole numbers within 1,000 and demonstrate fluency with multiplication facts up to 10 x 10 and related division facts; solve simple real-world problems with whole numbers using the four operations (consistent with the grade and performance level) and identify simple equivalent fractions; select and use a variety of tools to measure and compare length, weight and capacity/volume; understand the relationships between different units of time, e.g. seconds, minutes, hours, days, weeks, months, and years; retrieve multiple pieces of information from data displays to solve problems; recognise and name two-dimensional shapes by their simple attributes; and apply the concept of equivalence by finding a missing value in a number sentence.

# Learning Area: Mathematics

## Domain: Number Knowledge

End of Primary

Construct	Descriptor
Number sense (counting, reading, writing, comparing, and ordering)	Read, write, compare, and order whole numbers up to 10,000  Skip count forwards and backwards using twos, fives, tens, hundreds, and thousands.
Real-world problems	Solve simple real-world problems using the four operations, with the unknown in different positions.
<i>Operations</i> ( <i>adding and subtracting</i> )	Add and subtract whole numbers within 1,000.

*Extract only, a full set of constructs and more example descriptors are the paper*

## Problem Solved

In the first half of a game, the Tigers score 1 goal and the Lions score 4 goals.  
In the second half, both teams score the same number of goals.  
At the end of the game, 9 goals have been scored altogether.

How many goals did each team score in the second half?

\_\_\_\_\_ goals

Domain	Construct	Descriptor
Number knowledge	Real-world problems	Solve simple real-world problems using the four operations, with the unknown in different positions.

### *Task solution: 3*

*Commentary:* This task requires students to understand what the question is asking, develop strategies to enable them to solve the problem, then carry out those strategies and calculations to determine the answer. Students may choose to solve the problem using materials, mental methods or written algorithms. They may use concrete materials such as counters to represent the goals scored. They may use known number facts (such as bonds to 9), or they may write down the numbers and develop number sentences to solve each step of the problem.

## Conclusion

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**Intelligibility for a variety of stakeholders**

**Fairness and comparability across countries**

**Consistency between mathematics and reading**

A set of tightly defined, comprehensive described MPLs illustrated with items, will:

- Assist policy linking
- Assist empirical linking of national assessments
- Identify more specific cutpoints within existing proficiency levels of assessment programs
- Contribute to and help guide development of a global item pool around the MPLs



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