# Kindergarten Mathematics Performance Level Descriptors

## Limited

A student performing at the **Limited Level** demonstrates a minimal command of Ohio's Learning Standards for Kindergarten Mathematics. A student at this level has an **emerging ability** to write some numerals, identify numerals, two-dimensional shapes, three-dimensional figures, and attributes of shapes and figures, and subitize small groups of numbers.

A student whose performance lies within the **Limited Level** typically can:

- Demonstrate understanding of grade-level concepts when provided additional guidance, prompts, or supports;
- Inconsistently perform grade-level operations with simple numbers accurately;
- Recognize solutions to some simple computations, straightforward problems;
- Recognize a few grade-level mathematical concepts, terms, shapes, figures, and attributes.

A student at the **Limited Level** can:

- Count to 10 by ones orally. (K.CC.1)
- Identify some numerals from 0 to 5. (K.CC.1-3)
- Write numerals 0–5. (K.CC.3)
- Identify more or fewer small collections with concrete objects. (K.CC.6)
- Use objects or fingers to show joining or separating within 5. (K.OA.1)
- Represent addition as putting together with concrete objects. (K.OA.1)
- Represent subtraction as taking apart or taking from using concrete objects. (K.OA.1)
- Group together objects into small amounts of 5 or fewer. (K.NBT.1)
- Identify basic attributes (e.g., long/short) of shape. (K.MD.1)
- Identify basic shapes (e.g., circle, triangle, square, rectangle). (K.G.2)

## Basic

A student performing at the **Basic Level** demonstrates a partial command of Ohio's Learning Standards for Kindergarten Mathematics. A student at this level has a **general ability** to demonstrate counting strategies, compose and decompose simple numbers, and classify and describe shapes.

A student whose performance falls within the **Basic Level** typically can**:**

- Carry out routine procedures.
- Solve simple addition and subtraction problems using concrete objects and pictorial representations.
- Compute some grade-level numbers and operations.
- Recall and recognize some grade-level mathematical concepts and terms.

A student at the **Basic Level** can:

- Count to 20 by ones. (K.CC.1)
- Count beyond 20 by ones with support. (K.CC.1)
- Count orally by tens with some errors. (K.CC.1)
- Write numerals 0–10. (K.CC.3)
- Count objects up to 10 with one-to-one correspondence. (K.CC.4)
- Compare two groups of objects by using the word "more" or "less". (K.CC.6)
- Understand the meaning of addition and subtraction. (K.OA.1-4)
- Solve addition and subtraction problems within 5 using manipulatives or drawings (see Table 1 of the Ohio Learning Standards). (K.OA.1-2)
- Decompose numbers within 5. (K.OA.3)
- Identify numerals and numbers 0–19. (K.NBT.1)
- Compose numbers 11–19 using ten ones and some further ones with support. (K.NBT.1)
- Compare two objects using measurable attributes. (K.MD.2)
- Classify a small group of objects with a given attribute. (K.MD.3)
- Use informal language to compare shapes. (K.G.4)

## Proficient

A student performing at the **Proficient Level** demonstrates an appropriate command of Ohio's Learning Standards for Kindergarten Mathematics. A student at this level has a **consistent ability** to count using a variety of strategies, compose and decompose numbers, represent numbers of different quantities, identify, describe, and compare shapes.

A student whose performance falls within the **Proficient Level** typically can:

- Solve most routine and straightforward problems accurately.
- Compute accurately with most grade-level numbers and operations.
- Apply most grade-level mathematical concepts and terms.
- Use informal (visual representation and language) and some formal reasoning.

A student at the **Proficient Level** can:

- Count to 100 by ones and tens. (K.CC.1)
- Count on from any number within 100. (K.CC.2)
- Write numerals 0–20. (K.CC.3)
- Count up to 20 objects in various arrangements. (K.CC.5)
- Compare groups of objects and numbers up to 10. (K.CC.6-7)
- Solve addition and subtraction problems within 10 using objects and/or drawings (see Table 1 of the Ohio Learning Standards). (K.OA.1-2)
- Decompose numbers less than or equal to 10 in multiple ways. (K.OA.3)
- Fluently add and subtract within 5. (K.OA.5)
- Represent numbers 11–19 as a group of ten ones and additional ones using objects or drawings. (K.NBT.1)
- Describe measurable attributes of a single object. (K.MD.1)
- Directly compare two objects with measurable attributes to see which has "more of" or "less of" an attribute. (K.MD.2)
- Name and describe two-dimensional shapes and three-dimensional figures. (K.G.1-3)
- Identify shapes. (K.G.4-6)
- Describe and compare shapes. (K.G.4-6)
- Model shapes using objects or drawings. (K.G.5)

## Accomplished

A student performing at the **Accomplished Level** demonstrates a strong command of Ohio's Learning Standards for Kindergarten Mathematics. A student at this level has a **superior ability to** count on from numbers other than one and to use and explain various problem-solving strategies across multiple grade-level concepts.

Students whose performance falls within the **Accomplished Level** typically can:

- Accurately solve routine and straightforward problems.
- Solve a variety of routine problems.
- Compute accurately and efficiently with familiar numbers.
- Recognize connections between mathematical concepts, terms, and properties.
- Use equations or models to explain mathematical concepts.
- Use informal and some formal reasoning with symbolic representation.

A student at the **Accomplished Level** can:

- Count backward within 100. (K.CC.1-2)
- Explain cardinality and the relationship between numbers. (K.CC.4)
- Compare and order numbers using reasoning. (K.CC.7)
- Apply strategies for solving problems (see Table 1 of the Ohio Learning Standards). (K.OA.2-5)
- Use equations to represent thinking. (K.OA.3-5)
- Find missing addends to make 10. (K.OA.4)
- Explain the structure of teen numbers using place value concepts. (K.NBT.1)
- Sort and organize data into categories. (K.MD.1-3)
- Explain comparisons using measurement vocabulary. (K.MD.1-3)
- Create composite shapes. (K.G.4-6)
- Explain how composite shapes are made using grade-level appropriate vocabulary and reasoning. (K.OA.4-6)
- Explain commonalities and differences using attributes. (K.G.4-6)

## Advanced

A student performing at the **Advanced Level** demonstrates a distinguished command of Ohio's Learning Standards for Kindergarten Mathematics. A student at this level has a **sophisticated ability** to demonstrate a variety of addition and subtraction strategies, uses a variety of problem-solving strategies to demonstrate their understanding, and explains multiple-grade-level concepts using more precise language.

A student whose performance falls within the **Advanced Level** typically can:

- Explain thinking and reasoning using grade-level appropriate vocabulary.
- Apply grade-level concepts in real-world situations.
- Apply place value understanding to solve problems and explain reasoning.
- Solve routine and straightforward problems accurately and efficiently.
- Solve a variety of non-routine problems.
- Compute accurately and efficiently.

Recognize, apply, and justify mathematical concepts and terms using more formal reasoning and symbolic representation (precise mathematical language).

A student at the **Advanced Level** can:

- Explain counting strategies to solve real-world problems (see Table 1 of the Ohio Learning Standards). (K.CC.4-5)
- Explain and justify comparisons. (K.CC.6-7)
- Justify solutions using multiple representations. (K.OA.1-5)
- Apply understanding of part-part-whole relationships to solve non-routine problems (see Table 1 of the Ohio Learning Standards). (K.OA.2-3)
- Apply place value understanding to solve problems involving teen numbers. (K.NBT.1)
- Analyze and interpret data from classifications. (K.MD.1-3)
- Justify comparisons using measurement reasoning. (K.MD.1-3)
- Use spatial reasoning to solve shape composition problems. (K.G.1-6)