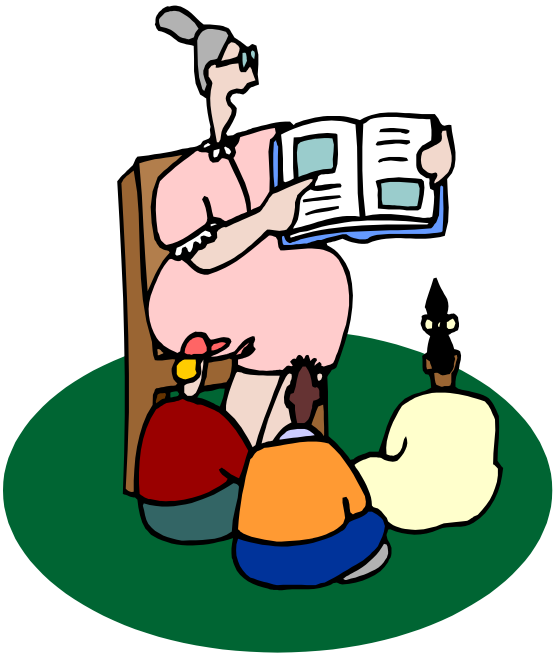
# Kindergarten

## Grade Level Expectations
## in
## Reading & Mathematics



# KINDERGARTEN - READING

***In kindergarten**, students understand and apply concepts of print, phonological, and phonemic awareness. They expand their oral language skills and gain meaningful vocabulary for reading. Students demonstrate comprehension through a variety of responses when listening to or viewing informational and literary text. They are interested in a variety of books.*

## EALR 1: The student understands and uses different skills and strategies to read.

**Component 1.1 Use word recognition skills and strategies to read and comprehend text.**

**1.1.1 Understand and apply concepts of print.**

- Use directionality when listening to or following text.
- Identify front cover, back cover, and title of books.
- Recognize that print represents spoken language (e.g., environmental print and own name).
- Recognize letters and spaces between words.

**1.1.2 Understand and apply phonological awareness and phonemic awareness.**

- Substitute auditorially one phoneme for another to make a new word (e.g., beginning and ending sounds; oddity tasks).
- Discriminate auditorially rhyme and identify rhyming words in response to an oral prompt.
- Manipulate and segment words orally by onset and rime.
- Segment and blend two and three phoneme words orally.

**1.1.3 Apply understanding of oral language skills to develop reading skills.**

- Participate orally in discussions/interactions (e.g., contribute descriptions, explanations, and details) when listening to stories read aloud and/or during shared reading.

**1.1.4 Apply understanding of phonics.**

- Identify letters of the alphabet.
- Identify common consonant sounds and short vowel sounds.
- Use common consonant sounds with short vowel sounds to decode three- and four-letter words.
- Use knowledge of phonics to read unfamiliar words in isolation and in context.

**Component 1.2 Use vocabulary (word meaning) strategies to comprehend text.**

**1.2.1 Understand how to use resources to learn new word meanings.**

- Use simple resources with teacher guidance (e.g., picture dictionaries).

**1.2.2 Apply vocabulary strategies in grade-level text.**

- Use oral language structure, letters, and pictures to predict and confirm word meaning with teacher guidance.
- Use prior knowledge and context in read aloud and/or shared reading to predict meaning of unfamiliar words.

**Component 1.3 Build vocabulary through wide reading.**

**1.3.1 Understand and apply new vocabulary.**

- Use oral vocabulary gained through listening to a variety of read alouds from informational/expository text and literary/narrative text, including text from a variety of cultures and communities.

**1.3.2 Understand and apply content/academic vocabulary.**

- Use content/academic vocabulary during class discussions.

**Component 1.4 Apply word recognition skills and strategies to read fluently.**

**1.4.1 Know common sight words appropriate to grade-level.**

- Read selected sight words in isolation/lists.
- Recognize common sight words in text.

## EALR 2: The student understands the meaning of what is read.

**Component 2.1 Demonstrate evidence of reading comprehension.**

**2.1.1 Understand how to ask questions about text.**

- Ask and answer questions before, during, and after read aloud and/or shared reading.

**2.1.2 Understand how to create mental imagery.**

- Compose visual images from what is read aloud and/or during shared reading. (e.g., draw a picture to represent something that was read in a story).

**2.1.3 Understand that some parts of the text are more important than others.**

- Identify important parts of informational/expository text and literary/narrative text in a group discussion.

**2.1.4 Understand how to use prior knowledge.**

- Make connections or identify similarities between self and text from a variety of cultures and communities after read alouds and/or shared reading.

**2.1.5 Understand how to infer/ predict meaning.**

- Use pictures and culturally relevant text read aloud and/or during shared reading to predict what will happen next; support predictions using information from the text.
- Make inferences orally before, during, and after hearing a story using prior knowledge, story structure, and prediction.

**Component 2.2 Understand and apply knowledge of text components to comprehend text.**

**2.2.1 Understand story sequence.**

- Retell familiar stories using a beginning, middle, and end. (Note: Story telling order can differ between cultures. For example, in some cultures the end of the story is told first. )

**2.2.2 Understand features of printed text and electronic sources.**
- Identify page numbers and titles in text.
- Identify and use icons.

**2.2.3 Understand story elements.**
- Identify story elements of character, setting, and important events with teacher guidance.

**Component 2.3 Expand comprehension by analyzing, interpreting, and synthesizing information and ideas in literary and informational text.**

**2.3.1 Understand similarities within and between informational/expository text and literary/narrative text.**
- Identify similarities in characters and settings within and between culturally relevant literary/narrative texts read aloud and/or during shared reading.
- Identify common information about a topic within and between texts (e.g., all birds in the text build their nests on the ground).

**2.3.2 Understand concept of categories.**
- Sort objects by various attributes such as color, size, and purpose.
- Orally sort words by various attributes (e.g., food, animals, colors, shapes).

**Component 2.4 Think critically and analyze author's use of language, style, purpose, and perspective in informational and literary text.**

**2.4.1 Understand how to give personal responses and make connections to text.**
- Generate a personal response or make connections to text based on a teacher prompt using information from a culturally relevant read aloud and/or shared reading.

**2.4.2 Understand purposes of simple text.**
- Identify the purpose of everyday printed materials (e.g., signs, labels, newspapers, story books, lists, etc.).

## EALR 3: The student reads different materials for a variety of purposes.

**Component 3.1 Read to learn new information.**

**3.1.1 Understand that resources contain information needed to answer questions and solve problems.**
- Listen to and talk about information from a variety of types of informational/expository text.
- Participate in whole-group discussions to generate questions and listen to informational/expository text for answers to those questions.

**Component 3.2 Read to perform a task.**

**3.2.1 Understand that signs and labels convey information.**
- Explain the meaning of labels and environmental print.

**Component 3.4 Read for literary/narrative experience in a variety of genres.**

**3.4.1 Understand different perspectives of family, friendship, culture, and traditions found in literature.**

- Listen to and discuss a variety of literature representing different perspectives of family, friendship, culture and tradition and generate a personal response.

**3.4.2 Understand traditional and contemporary literature written in a variety of genres.**

- Listen to and provide a personal response to literature including culturally relevant texts from a variety of genres by drawing, performing, and explaining.

**3.4.3 Understand that literature represents different cultures and traditions.**

- Identify and discuss the culture and/or traditions represented in a story (with teacher guidance).

## EALR 4: The student sets goals and evaluates progress to improve reading.

**Component 4.2 Develop interests and share reading experiences.**

**4.2.1 Understand how readers choose books.**

- Choose books and share with others with teacher guidance.

## KINDERGARTEN - MATHEMATICS

# EALR 1: The student understands and applies the concepts and procedures of mathematics.

**Component 1.1: Understand and apply concepts and procedures from number sense.**

***Number and numeration***

**1.1.1 Understand the concept of number.**

- Count to at least 31.
- Represent a number to at least 10 in different ways (e.g., numerals, spoken words, pictures, physical models). [CU]
- Show that the last count word names the quantity of the set (cardinality) (i.e., when counting fingers on a hand "one, two, three, four, five," the "five" says how many fingers there are). [CU, MC]
- Identify the base ten digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.
- Explain how numbers are used and give examples (e.g., to count, to order). [CU]

**1.1.2 Understand sequential relationships among whole numbers.**

- Tell what number comes before or after a given number.
- Use comparative language (e.g., less than, more than, equal to) to compare numbers to at least 20. [CU]
- Use a known quantity to at least 10 (benchmark) to compare sets (e.g., sets of counters).
- Identify the ordinal position of objects at least through tenth (e.g., first, second …).

***Computation***

**1.1.5 Understand the meaning of addition.**

- Express stories involving addition (e.g., join) with models, pictures, and symbols. [CU, MC]
- Use addition in the classroom environment (e.g., tables and chairs in the classroom). [MC]

**Component 1.2: Understand and apply concepts and procedures from measurement.**

***Attributes, units, and systems***

**1.2.1 Understand and apply appropriate terminology to compare attributes.**

- Use comparative vocabulary to describe objects (e.g., longer/shorter, heavier/lighter, nearer/further, thicker/thinner, shorter/taller). [CU]
- Use terms to describe the duration of events (e.g., long time or short time). [CU]
- Identify and sort objects based on an attribute (e.g., color, shape, texture). [RL]

***Procedures, precision, and estimation***

**1.2.4 Understand and apply procedures to measure with non-standard units.**

- Use non-standard units to measure (e.g., paper strips, cubes, beans, hand widths).
- Explain how to use a non-standard unit to measure a given length (e.g., length of a table, width of a desk). [CU]

**Component 1.3: Understand and apply concepts and procedures from geometric sense.**

***Properties and relationships***

**1.3.2 Know the characteristics of familiar objects.**

- Describe familiar objects based on characteristics (e.g., big, small, like a box). [CU, MC]
- Sort objects in their environment by characteristics (e.g., cans, balls, boxes, red, blue). [MC]
- Describe objects using comparative language (e.g., bigger, taller, shorter, smaller). [CU]

***Locations and transformations***

**1.3.3 Understand the relative position of objects in the environment.**

- Describe the location of an object relative to another (e.g., in, out, over, under, behind, above, below, next to, etc.). [CU]
- Identify where a three-dimensional object is located relative to another given object (e.g., where the eraser is relative to the desk).

**Component 1.4: Understand and apply concepts and procedures from probability and statistics.**

***Statistics***

**1.4.3 Understand how data can be collected and organized.**

- Use physical objects or pictures to build bar graphs. [CU]
- Organize objects into groups before counting them. [RL]

**1.4.5 Understand how a display provides information.**

- Answer questions about graphs (e.g., how many cats? How many dogs?). [CU]

**Component 1.5: Understand and apply concepts and procedures from algebraic sense.**

***Patterns, functions, and other relations***

**1.5.1 Know how to recognize patterns.**

- Identify and extend patterns (e.g., ABAB, green-green-blue, counting). [RL]
- Create an AB pattern.

***Symbols and representations***

**1.5.3 Understand the concepts of equality and inequality.**

- Use physical objects to model language (e.g., same, different, equal, not equal, more, less). [CU]
- Model/act out story problems to solve whole number equations and inequalities (e.g., there are three kids and two have three crayons, one has two crayons. How can you make it so all kids have the same number of crayons?). [CU, MC]

## EALR 2: The student uses mathematics to define and solve problems.

**Component 2.1: Understand problems**

*Example: A classroom needs a playground ball for each student in the class. The class has fewer playground balls than are needed.*

***Understand problems***

**2.1.1 Understand how to define a problem in a familiar situation with teacher guidance.**

- State information presented in teacher-led discussion to determine if there is a problem that needs an answer (e.g., a classroom activity requires a playground ball for each student. There are some balls available in the classroom).
- State the problem in own words (e.g., are there enough playground balls? If not, how do we get enough for the class?).
- Generate questions that would need to be answered in order to solve the problem (e.g., how many balls are in the classroom? How many more do we need?).
- Identify known and unknown information with teacher guidance (e.g., known ─ the number of students in the class, and the number of balls needed; unknown ─ the number of additional playground balls needed). [1.1.5]

**Component 2.2: Apply strategies to construct solutions.**

**2.2.1 Understand how to create a plan to solve a problem with teacher guidance.**

- Gather and organize categorical data (e.g., in a teacher-led activity, create a two-column chart ─ one column for student names and tally marks in the other to represent which students are assigned a ball). [1.4.3]

**2.2.2 Apply mathematical tools to solve the problem with teacher guidance.** W

- Use appropriate tools to find a solution (e.g., draw pictures, use chart to count how many empty spaces there are for the playground balls). [1.1.1, 1.1.5]
- Recognize when an approach is unproductive and try a new approach.

## EALR 3: The student uses mathematical reasoning.

**Component 3.1: Analyze information.**

*Example: A classroom needs a playground ball for each student in the class. The class has fewer playground balls than are needed.*

**3.1.1 Understand how to compare information presented in familiar situations with teacher guidance.**

- Restate understanding of the situation (e.g., each student requires a playground ball; there are not enough in the classroom).

**Component 3.2: Make predictions, inferences, conjectures, and draw conclusions.**

**3.2.1 Understand how to make a reasonable prediction based on the information given in a familiar situation.**

- Predict a numerical solution for a problem (e.g., guess how many more playground balls are needed).

**Component 3.3: Verify results**

**3.3.1 Understand how to justify results using evidence.**

- Use tools (e.g., tally marks, physical models, words) to check for reasonableness of an answer (e.g., line up students; pass out the playground balls to students to see how many students do not receive one).
- Check reasonableness of an estimation by acting it out, using pictures, or physical models.

## EALR 4: The student communicates knowledge and understanding in both everyday and mathematical language.

**Component 4.2: Organize, represent, and share information**

**4.2.1 Understand how to organize information to communicate to a given audience with teacher guidance.**

- Use a two-column chart to organize data (e.g., one column for student names and tally marks in the other to represent which students are assigned a ball) for the classroom with teacher guidance.
- Use physical objects or pictures to build bar graphs to answer a question generated by the class (e.g., how many of each kind of pet do we own?).

**4.2.2 Understand how to communicate or represent ideas or information using mathematical language or notation.**

- Explain or represent ideas using mathematical language from:
  - Number sense (e.g., numbers 1 to 10) [1.1.1];
  - Measurement (e.g., compare objects to describe relative size) [1.2.1];
  - Geometric sense (e.g., name objects based on their characteristics ─ I have four equal sides, what am I?) [1.3.1];
  - Algebraic sense (e.g., create a pattern such as AB). [1.5.1]

## EALR 5: The student understands how mathematical ideas connect within mathematics, to other subject areas, and to real-life situations.

**Component 5.1: Relate concepts and procedures within mathematics.**

**5.1.1 Understand how to use concepts and procedures from any two of the content components from EALR 1 in a given problem or situation.**

- Organize data collections (e.g., bar graph, sorted groups) and compare data using comparative language. [1.1.2, 1.4.3]
- Sort objects based on chosen attribute and create a simple AB pattern using the sorted objects. [1.3.2, 1.5.1]

**5.1.2 Understand how to recognize and create equivalent mathematical models and representations in familiar situations.**

- Identify different representations of a number to 20 (e.g., numerals, pictures, physical models). [1.1.1]
- Express stories involving addition (e.g., join) with models, pictures, and symbols. [1.1.5]

**Component 5.2: Relate mathematical concepts and procedures to other disciplines.**

**5.2.1 Apply and analyze the use of mathematical patterns and ideas in familiar situations in other disciplines.**

- Describe how math is used in science when a number of objects are needed for an experiment or measurement is used to illustrate change.
- Identify patterns in a piece of artwork.

**Component 5.3: Relate mathematical concepts and procedures to real-world situations.**

**5.3.1 Understand how mathematics is used in everyday life.**

- Generate examples of mathematics in everyday life:
  - counting (e.g., the number of people ahead of us in a line);
  - sorting things (e.g., grouping socks by color in order to match them up);
  - comparing things (e.g., who has the biggest piece of cake for dessert, or who is tallest/shortest in the family);
  - pointing out patterns (e.g., in clothing, fence posts, designs on buildings).
- Identify objects based on a description of their geometric attributes (e.g., buildings have sides; some windows are shaped like a rectangle).
- Describe the location of objects relative to each other (e.g., in, out, over, under, school bus stops next to each other).