# Grade 7 State Standards

## Mathematics Standards

## Content Standard 1: Students can understand and apply a variety of math concepts.

**Benchmark A:** Students can understand and apply number properties and operations.

**Grade Level Indicator:** Represent, compare, and order numbers

**Grade Level Indicator:** Describe and apply properties of numbers

**Grade Level Indicator:** Classify numbers by divisibility

**Grade Level Indicator:** Demonstrate ways of performing operations

**Grade Level Indicator:** Use place value; write numbers in standard, expanded, and exponential form

**Grade Level Indicator:** Use and interpret operational and relational symbols

**Benchmark B:** Students can understand and apply concepts and procedures of algebra.

**Grade Level Indicator:** Solve equations and inequalities

**Grade Level Indicator:** Use variable expressions to model situations

**Grade Level Indicator:** Explore numerical patterns

**Benchmark C:** Students can understand and apply concepts of geometry.

**Grade Level Indicator:** Identify, classify, and compare geometric figures

**Grade Level Indicator:** Describe geometric properties, patterns, and relationships

**Grade Level Indicator:** Apply the concepts of perimeter, area, and volume

**Benchmark D:** Students can understand and apply concepts of measurement.

**Grade Level Indicator:** Measure length/distance, time, temperature, weight, mass, and volume

**Grade Level Indicator:** Estimate measurements with appropriate precision

**Grade Level Indicator**: Identify and use appropriate units of measurement

**Benchmark E:** Students can understand and apply concepts in probability and statistics.

**Grade Level Indicator:** Apply probability concepts and counting rules

**Grade Level Indicator**: Understand and apply measures of central tendency and variability

## Content Standard 2: Students can understand and apply methods of estimation.

**Benchmark A:** Students can understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense.

**Grade Level Indicator:** Use standard rounding to estimate

**Grade Level Indicator:** Use order of magnitude to estimate

**Grade Level Indicator:** Use number sense to estimate

# Content Standard 3: Students can solve a variety of math problems.

**Benchmark A:** Students can solve math problems
    **Grade Level Indicator:** Solve single-step and multiple-step math problems
    **Grade Level Indicator:** Identify extraneous or insufficient information in problems
**Benchmark B:** Students can understand and apply problem-solving approaches and procedures.
    **Grade Level Indicator**: Choose a method for solving a problem

# Content Standard 4: Students can interpret data presented in a variety of ways.

**Benchmark A:** Students can use tables and graphs to locate and read information.
    **Grade Level Indicator:** Locate amounts in specific cells of a table
**Benchmark B:** Students can interpret data from a variety of sources.
    **Grade Level Indicator:** Read amounts on scales of bar and line graphs
    **Grade Level Indicator:** Compare quantities to determine ranks, sums, or differences and to find ratios
    **Grade Level Indicator**: Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

## Performance Standards for Mathematics

**High Performance Level:** Understands math concepts, solves word problems, and interprets data from graphs and tables. Usually can use estimation methods.
    **Distinguished:** Understands math concepts, solves word problems, and interprets data from graphs and tables. Usually can use estimation methods.
    **Accomplished**: Understands math concepts, solves word problems, and interprets data from graphs and tables. Usually can use estimation methods.
**Intermediate Performance Level:** Usually can understand math concepts, solve word problems, and interpret data from graphs and tables. Sometimes is able to use estimation methods.
    **Skilled:** Usually can understand math concepts, solve word problems, use estimation methods, and interpret data from graphs and tables.
    **Moderate:** Sometimes can understand math concepts and use estimation methods. Usually is able to solve word problems and interpret data from graphs and tables.
**Low Performance Level:** Seldom can understand math concepts, solve word problems, or use estimation methods. Sometimes can interpret data from graphs or tables.
    **Marginal:** Sometimes can understand math concepts, use estimation methods, and interpret data from graphs and tables. Seldom is able to solve word problems.
    **Weak:** Seldom can understand math concepts or solve word problems. Rarely can use estimation methods or interpret data from graphs and tables.

## Content Standard 1: Students can understand and apply skills used in scientific inquiry.

**Benchmark A:** Students can understand and apply the processes and skills of scientific inquiry.

**Grade Level Indicator:** Understand and apply the processes and skills of investigation

**Benchmark B:** Students can analyze and interpret scientific information.

**Grade Level Indicator:** Analyze and interpret information from scientific studies

## Content Standard 2: Students can understand concepts and relationships in life science.

**Benchmark A:** Students can understand structures of living things.

**Grade Level Indicator:** Understand the structures of living things

**Benchmark B:** Students can understand life cycles.

**Grade Level Indicator**: Describe and understand life cycles

**Benchmark C:** Students can understand environmental interaction and adaptation.

**Grade Level Indicator:** Identify and explain the roles of environmental interactions and adaptations

## Content Standard 3: Students can understand concepts and relationships in Earth/space sciences.

**Benchmark A:** Students can understand ideas about Earth's composition and structure.

**Grade Level Indicator:** Describe and understand Earth's composition and structure

**Benchmark B:** Students can understand changes in and around Earth.

**Grade Level Indicator:** Identify and explain changes in and around Earth

**Benchmark C:** Students can understand concepts relating to the universe.

**Grade Level Indicator:** Understand concepts and relationships of the universe

## Content Standard 4: Students can understand concepts and relationships in physical science.

**Benchmark A:** Students can understand and apply concepts related to mechanics, forces, and motion.

**Grade Level Indicator:** Describe and explain concepts related to mechanics, forces, and motion

**Benchmark B:** Students can understand and apply the concept of energy.

**Grade Level Indicator:** Understand the concept of energy and its various forms

**Benchmark C:** Students can understand and identify properties and changes of matter.

**Grade Level Indicator:** Identify and explain the properties and changes of matter

# Content Standard 1: Students can comprehend what they read in a variety of literary and informational texts.

**Benchmark A:** Students can understand stated information they have read.
    **Grade Level Indicator:** Understand stated information

**Benchmark B:** Students can determine the meaning of new words from their context.
    **Grade Level Indicator:** Determine the meaning of new words from their context

**Benchmark C:** Students can draw conclusions, make inferences, and deduce meaning.
    **Grade Level Indicator:** Draw conclusions, make inferences, and deduce meaning

**Benchmark D:** Students can infer traits, feelings, and motives of characters.
    **Grade Level Indicator**: Infer traits, feelings, and motives of characters

**Benchmark E:** Students can interpret information in new contexts.
    **Grade Level Indicator**: Interpret information in new contexts

**Benchmark F:** Students can interpret nonliteral language used in a text.
    **Grade Level Indicator:** Interpret nonliteral language

**Benchmark G:** Students can determine the main idea of a text.
    **Grade Level Indicator:** Determine the main idea of a text

**Benchmark H:** Students can identify the writer's views or purpose.
    **Grade Level Indicator:** Identify the author's views or purpose

**Benchmark I:** Students can analyze style or structure.
    **Grade Level Indicator**: Analyze the style or structure of a text

## Performance Standards for Literacy

**High Performance Level:** Understands factual information and new words in context, is able to make inferences, can interpret non-literal language and information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

    **Distinguished:** Understands factual information and new words in context. Can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

    **Accomplished:** Usually understands factual information and new words in context. Can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

**Intermediate Performance Level:** Usually understands factual information and new words in context. Often is able to make inferences and interpret either non-literal language or information in new contexts. Sometimes can determine a selection's main ideas or analyze its style and structure.

    **Skilled:** Usually understands factual information and new words in context. Often can make inferences and interpret either non-literal language or information in new contexts. Usually can determine a selection's main ideas and analyze its style and structure.

**Moderate:** Usually understands factual information and new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Sometimes can determine a selection's main ideas and analyze its style and structure.

**Low Performance Level:** Seldom understands factual information or new words in context. Rarely is able to make inferences and interpret either non-literal language or information in new contexts. Seldom can determine a selection's main ideas or analyze its style and structure.

**Marginal:** Seldom understands factual information or new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Sometimes can determine a selection's main ideas and analyze aspects of its style and structure.

**Weak:** Seldom understands factual information or new words in context. Rarely is able to make inferences or to interpret either non-literal language or information in new contexts. Seldom can determine a selection's main ideas or analyze aspects of its style and structure.