

K-8 Homeschooling Learning Milestones Checklist

**Please note these milestones are not intended to be hard and fixed rules. These are general guidelines to provide a helpful resource for homeschooling families.*

Kindergarten Learning Milestones Checklist

Math Milestones for Kindergarten

- Recognize numbers and count to 100
- Basic addition and subtraction
- Creating and understanding patterns
- Calendar components - days, weeks, months
- Time - hour and half hour

Reading Milestones for Kindergarten

- Identify letters of the alphabet and their sound
- How sounds go together to form words (phonemic awareness)
- Simple sight words
- Printing letters in both capital and lowercase
- Write simple stories, poems, and even journaling
- Rhyming words and vocabulary building

Social Studies Milestones for Kindergarten

- Learn about the world starting with family
- Extended family
- Community helpers
- Cultures
- Personal information such as phone number and address

Science Milestones for Kindergarten

- Children learn about plants and
- The animal kingdom
- Health habits
- The Weather
- Their own body
- The five senses
- Simple science experiments

First Grade Learning Milestones Checklist

Math Milestones

- Counting to 100 by variables such as 2s, 5s, and 10s
- Write numbers up to 100
- More complex addition and subtraction
- Understanding “equal to”, “greater than”, and “less than”
- Understanding the concept of money and what value coins and dollars have
- A Deeper understanding of more complex patterns
- Beginning fraction concepts
- Measurements such as length and weight
- Telling time with an analog clock

Language Arts Milestones

- Begin independent reading
- Read in small groups
- Identify details of the story
- Expanded list of sight words
- Handwriting
- Can write their full name
- Writing simple words and sentences, short paragraphs and even short stories
- Beginning use of punctuation.
- Understanding the plurals of nouns

Science Milestones

- Ability to classify animals into groups
- Ocean and sea life
- Life cycles
- Living and nonliving
- What living things need to grow
- Better understanding of the senses

Social Studies Milestones

- Learn about the U.S
- Learning basic geography

Social Skills

- Ability to pay attention and follow instructions
- Understand fairness and justice
- Gaining more confidence in expressing thoughts and sharing stories
- Learning how to work together

Second Grade Learning Milestones Checklist

Math Milestones

- Using tally marks
- Even and odd numbers
- Read and making graphs
- More complex addition and subtraction
- Begin multiplication and division
- Complex patterns
- Rounding whole numbers
- Place Value to the thousands
- Money concepts and adding and subtracting money
- Measurements of length, weight, and time
- Two-dimensional geometry

Language Arts Milestones

- Reading and comprehension
- Retell of main ideas, characters, setting, and events
- Extended silent reading
- Write in complete sentences
- Understand and use contractions
- Edit personal writing
- Use the first and third person in writing
- Use of capitalization rules
- Use of chronological order in writing

Science Milestones

- Make observations
- Recognize similarities and differences
- Life stages of living things
- The various types of earth materials
- Water and marine life

Social Studies Milestones

- Human needs
- Understanding our location
- Their National Identity
- How Communities Work

Third Grade Learning Milestones Checklist

Math Milestones

- Rounding and number comparison
- Equivalent fractions, mixed numbers, improper fractions
- Read and write numbers through the thousands
- Read and write decimals to the one-hundredth place
- Number lines
- Mental addition and subtraction, subtraction with regrouping
- Graphing
- Basic geometry, perimeter and area, two-dimensional shapes
- Measurement with English and Metric systems, length, weight, volume, and temperature
- Multiplication and division of 3 digit numbers

Language Arts Milestones

- Understanding character, setting, main ideas, inferences and summarizing
- Using context clues to understand vocabulary
- Compare and contrast information
- Genres of fiction
- Use of word maps
- Ability to write letters, narratives, fiction and research
- Write in paragraphs
- Write in cursive
- Understanding the basic parts of speech
- Understanding basic punctuation
- Use of prefixes, suffixes, homophones
- Use of dictionaries, encyclopedias, and thesaurus

Science Milestones

- Science experiments using the scientific method
- Earth and weather
- Water cycles
- States of matter
- Astronomy
- Human body
- Animal life

Social Studies Milestones

- Geography and maps
- Native Americans
- Explorers

Fourth Grade Learning Milestones Checklist

Math Milestones

- Using patterns to find factors and multiples of numbers
- Fractions, adding and subtracting, equivalent and non-equivalent
- Lines and angles
- Convert and calculate units of measure
- Analyzing and collecting data
- Using graphs to present data

Language Arts Milestones

- Gaining a more extensive vocabulary
- Understanding root words, suffixes, prefixes
- Variety of genres
- Learn effective research methods
- Punctuation and grammar
- Parts of speech
- Diagramming sentences
- Writing stories, journaling, research writing

Science Milestones

- Nature of Science
- Engineering
- Energy
- Living Things
- Earth
- Investigations
- Changes in Matter and Energy
- Sound
- Solar Systems and the Universe

Social Studies Milestones

- Ancient Civilizations
- Aztecs, Mayans, Incas
- U.S. Revolutionary Period
- Geography
- Economics
- Current Events

Fifth Grade Learning Milestones Checklist

Math Milestones

- Whole numbers and their manipulation
- Decimals and Fractions
- Basic Algebraic Concepts
- Measurement including area and perimeter
- Basic geometric shapes and angles
- Probability and data analysis
- Number plotting
- Mathematical reasoning
- Real-world problems

Language Arts Milestones

- Reading fluency
- Reading in many different genres
- Writing book reports
- Analyzing plot, characters, setting and authors purpose
- Writing through journaling, poetry, autobiography, fiction
- Editing for punctuation and grammar, flow and clarity of thought
- Creating a portfolio of their writing

Science Milestones

- Physical-world
- Solar system
- Photosynthesis
- Digestive System
- Chemical properties of elements
- The Scientific Method

Social Studies Milestones

- Citizenship
- The U.S. History
- Analyzing causes, implications, and future impact of history
- Government and its branches
- State government
- Geography
- Current events

Sixth Grade Learning Milestones Checklist

Math Milestones

- Basic algebra concepts
- Basic geometry concepts
- Statistics of a coin toss or dice rolling
- Area and volume of a 3-dimensional shape
- Number line and negative numbers
- Inverse operations
- Converting fractions, decimals, and percents

Language Arts Milestones

- Reading more difficult texts across genres
- Identifying literary elements using context clues
- Writing daily - a major focus
- Writing longer pieces on difficult topics
- Advancing vocabulary through root words, prefixes and suffixes

Science Milestones

- Scientific Method
- Well equipped to formulate hypotheses, make observations, conduct experiments
- Analyze data using charts and graphs
- Use measurements within science topics
- Atoms, elements, and compounds
- Mixtures and solutions
- Periodic table
- Chemical formulas
- States of matter and motion

Social Studies Milestones

- Ancient history
- State history
- Political science
- Globes and maps
- Economic systems

Seventh Grade Learning Milestones Checklist

Math Milestones

- Number systems and number theory
- Ratios, proportions, and percent
- Expressions and equations
- Plane geometry and 3-dimensional geometry
- Measurements
- Graphing and linear equations
- Probability and statistics

Language Arts Milestones

- Vocabulary skills (root words, affixes, Latin and Greek roots)
- Analyzing literary concepts (plot, character, setting, theme, tone)
- In-depth classic literature studies
- Writing as a daily focus
- Writing in a variety of methods (research, personal, fiction, non-fiction)
- Parts of speech, capitalization, and punctuation

Science Milestones

- Life science with living things
- Plants
- Cells
- Single-celled and multicellular organisms
- Ecology with biomes, habitats, and niches
- Ecosystems
- Genetics
- Classification
- Organs and systems
- Human Health

Social Studies Milestones (7th and 8th-grade studies are interchangeable)

- U.S. Colonization
- American Revolution
- Beginnings of the government
- Age of Jefferson and Jacksonian Democracy
- Reform Movements
- Civil War and Reconstruction
- Immigration
- World War I
- The Great Depression
- World War II and the Cold War

Eighth Grade Learning Milestones Checklist

Math Milestones

- Scientific notation and rational/irrational numbers
- Real numbers
- Ratio, proportion, and percentages
- Expressions and equations
- Plane geometry
- Estimation and significant digits
- Graphing ordered pairs, linear equations and inequalities
- Linear relationships and slope
- Conditional probability, data and statistics
- Real-world problems

Language Arts Milestones

- Classic literature studies
- Vocabulary building with Latin and Greek roots and affixes
- Literary comprehension
- Literary analysis of plot, theme, characters, cause and effect, and compare and contrast
- Standardized test prep for PSAT, SAT, ACT

Science Milestones

- Humans and the environment
- Earth's structure and history
- Rocks and minerals
- Geological processes
- Energy
- Water
- Atmosphere
- Weather and climate
- Astronomy and solar system
- Stars and galaxies

Social Studies Milestones

- World History
- Fall of Rome
- Rise of Europe
- Ancient religions
- European Renaissance, Reformation, and Enlightenment
- European government systems
- Age of Exploration