K12 ACADEMICS — REFERENCE SERIES

The K-12 Milestones Guide

Pre-K to graduation, grade by grade — reading, math, science, and social milestones, the warning signs to watch, and what to do at every stage.

K12 ACADEMICS

Find Your Community

2026 EDITION

ABOUT K12 ACADEMICS

The world's largest education resource.

Online since 2004, K12 Academics has helped millions of families, students and educators **find the right school, college, camp, business and program in their community** — a search engine, a community, and a resource in one.

HOW TO READ EACH GRADE

Every grade gets one page with four subject milestones, a **Watch For** warning-sign, and a **For Families** action. Color key:

Reading **Math** **Science & Social Studies** **Social & Emotional**

Every child is different. These are typical milestones, not a schedule — children develop at their own pace. Use this for conversations, not as a scorecard, and raise concerns with teachers early.

AGES 3–4 — STAGE 01 OF 14

Pre-Kindergarten

The world is a classroom

READING & WRITING

Recognizes some letters and their sounds; loves being read to; understands print has meaning; scribbles and pretend-writes.

MATHEMATICS

Counts to 10; names shapes and colors; sorts objects; grasps *more* vs. *less* and simple patterns.

SCIENCE & SOCIAL STUDIES

Explores through play and the senses — weather, plants, animals — and learns about family, home, and community.

SOCIAL & EMOTIONAL

Plays with (not just beside) peers; shares and takes turns; separates from caregivers; follows simple routines.

✓ WATCH FOR

Not speaking in short sentences, no interest in books, or extreme separation distress — worth raising with a pediatrician.

FOR FAMILIES

Read aloud daily and talk about the pictures; choose a quality program (public Pre-K, Head Start, or private); build routines.

AGE 5 — STAGE 02 OF 14

Kindergarten

The foundation year

READING & WRITING

Learns all letter sounds; reads simple three-letter words (cat, dog); knows 25+ sight words; writes their name.

MATHEMATICS

Counts to 100; writes numbers 0–20; adds/subtracts within 10 with objects; compares quantities; names 2D & 3D shapes.

SCIENCE & SOCIAL STUDIES

Basic science (living vs. non-living, seasons); community helpers and simple maps; lots of hands-on exploration.

SOCIAL & EMOTIONAL

Follows multi-step directions; works in groups; manages big feelings with help; grows independent in self-care.

✓ WATCH FOR

Trouble learning letter sounds, rhyming, or blending — ask about an early-literacy screening.

FOR FAMILIES

Build strong attendance from day one; read nightly; practice letter sounds and counting in everyday moments.

AGE 6 — STAGE 03 OF 14

Grade 1

Learning to read

READING & WRITING

Decodes new words with phonics; reads simple books aloud; retells a story; writes full sentences with capitals and periods.

MATHEMATICS

Adds/subtracts within 20; understands place value (tens and ones); tells time to the hour and half-hour; measures length.

SCIENCE & SOCIAL STUDIES

Life cycles, weather, and habitats; families, neighborhoods, and basic geography and maps.

SOCIAL & EMOTIONAL

Builds real friendships; follows classroom rules; develops focus and stamina for seated work.

✓ WATCH FOR

Struggling to blend sounds or decode by mid-year — a key window for dyslexia screening and early intervention.

FOR FAMILIES

Read together daily and have your child read *to* you; if decoding is hard, request a screening — early help works best.

AGE 7 — STAGE 04 OF 14

Grade 2

Building fluency

READING & WRITING

Reads fluently and with expression; tackles longer chapter books; finds the main idea; writes multi-sentence paragraphs.

MATHEMATICS

Adds/subtracts within 100 with regrouping; place value to hundreds; early arrays (multiplication); money and time.

SCIENCE & SOCIAL STUDIES

Matter and energy basics; maps, continents, and simple civics; hands-on experiments.

SOCIAL & EMOTIONAL

Works independently longer; resolves minor conflicts; shows empathy for others.

✓ **WATCH FOR**

Slow, choppy, word-by-word reading past mid-year signals a fluency gap that compounds later.

FOR FAMILIES

Build reading stamina with slightly longer books; make math part of daily life through cooking and money.

AGE 8 — STAGE 05 OF 14

Grade 3

Reading to learn

READING & WRITING

The pivotal shift — from *learning to read* to *reading to learn*. Summarizes, infers, and writes paragraphs with evidence.

MATHEMATICS

Masters multiplication & division facts; understands fractions as numbers; area and perimeter; multi-step word problems.

SCIENCE & SOCIAL STUDIES

Ecosystems, forces, and states of matter; local and U.S. history and how government works.

SOCIAL & EMOTIONAL

More independence; navigating friend groups; building persistence through harder work.

✓ WATCH FOR

Reading proficiency by the end of Grade 3 is a major predictor of later success — a child behind now needs support before content deepens.

FOR FAMILIES

The critical year: close reading gaps **now**; lock in multiplication fluency; watch for frustration and step in early.

AGE 9 — STAGE 06 OF 14

Grade 4

Going deeper

READING & WRITING

Reads complex texts across every subject; compares sources; writes longer informative and opinion pieces; vocabulary expands fast.

MATHEMATICS

Multi-digit multiplication and long division; equivalent fractions and decimals; factors and multiples.

SCIENCE & SOCIAL STUDIES

Energy, ecosystems, and Earth science; state history, geography, and government; first real research.

SOCIAL & EMOTIONAL

Peer relationships intensify; self-esteem ties to feeling competent; the "fourth-grade slump" in motivation can appear.

✓ WATCH FOR

A drop in reading motivation or confidence, or gaps in math facts that make new content feel impossible.

FOR FAMILIES

Keep reading fun and tied to their interests; make sure math facts are automatic; praise effort over talent.

AGE 10 — STAGE 07 OF 14

Grade 5

Ready for more

READING & WRITING

Analyzes theme and author's purpose; synthesizes several sources; writes structured multi-paragraph essays.

MATHEMATICS

Operations with decimals and fractions; volume; the coordinate plane; order of operations.

SCIENCE & SOCIAL STUDIES

Body systems, matter, and space science; U.S. history and the Constitution; independent projects.

SOCIAL & EMOTIONAL

Abstract thinking grows; preparing socially for middle school; ready for leadership roles.

✓ WATCH FOR

Weak organization and homework follow-through — habits that will be tested hard in middle school.

FOR FAMILIES

Build organization and study routines now; start planning the middle-school move and tour your options.

AGE 11 — STAGE 08 OF 14

Grade 6

A new kind of school

READING & WRITING

Cites textual evidence; analyzes across genres; writes arguments and research reports with real sources.

MATHEMATICS

Ratios, rates, and percentages; negative numbers; expressions and equations (pre-algebra foundations); basic statistics.

SCIENCE & SOCIAL STUDIES

Earth and life science with labs; ancient civilizations and world geography; a different teacher for each subject.

SOCIAL & EMOTIONAL

Middle school begins — changing classes, lockers, and far more social complexity as identity develops.

✓ WATCH FOR

Disorganization, missed assignments, or social withdrawal during the transition.

FOR FAMILIES

Support executive-function skills (planners, routines, checklists); stay closely connected as independence grows.

AGE 12 — STAGE 09 OF 14

Grade 7

Abstract thinking

READING & WRITING

Analyzes how texts build arguments; evaluates evidence and reasoning; writes structured, evidence-based essays.

MATHEMATICS

Proportional relationships; operations with rational numbers; expressions, equations, and inequalities; probability.

SCIENCE & SOCIAL STUDIES

Life or physical science with labs; world history and cultures; genuinely abstract reasoning emerges.

SOCIAL & EMOTIONAL

Peer influence peaks; identity and belonging feel central; a common year to disengage.

✓ WATCH FOR

Declining engagement, grades, or motivation — the earliest sign a student is drifting.

FOR FAMILIES

Keep your child anchored to something they love; watch engagement closely; keep communication open.

AGE 13 — STAGE 10 OF 14

Grade 8

The bridge to high school

READING & WRITING

Analyzes complex themes and rhetoric; runs a sustained research project; writes polished arguments and analyses.

MATHEMATICS

Algebra I for many students — linear equations, functions, systems; the Pythagorean theorem; the gateway to STEM.

SCIENCE & SOCIAL STUDIES

Physical science and often U.S. history and civics; high-school course planning begins in earnest.

SOCIAL & EMOTIONAL

Preparing for high school; growing autonomy; hypothetical and abstract reasoning solidify.

✓ WATCH FOR

Algebra readiness — falling behind here can quietly close off later math and STEM pathways.

FOR FAMILIES

Plan the high-school course sequence deliberately; push for algebra readiness; talk through goals and interests.

AGE 14 — STAGE 11 OF 14

Grade 9

Every grade counts now

READING & WRITING

College-prep English begins; analyzes literature and argument; writes analytical essays; builds academic vocabulary.

MATHEMATICS

Algebra I or Geometry; abstract reasoning and proofs; problem-solving across new contexts.

SCIENCE & SOCIAL STUDIES

Biology or physical science; world or U.S. history; **credits and GPA now count** toward graduation and college.

SOCIAL & EMOTIONAL

High school begins — new independence, a bigger environment, and questions of identity and belonging.

✓ WATCH FOR

Freshman on-track status (passing 9th grade on time) is one of the best predictors of graduating.

FOR FAMILIES

Monitor attendance, credits, and grades from day one — a strong start makes all four years easier.

AGE 15 — STAGE 12 OF 14

Grade 10

Exploring the path

READING & WRITING

Deeper literary and rhetorical analysis; research and synthesis; sharper analytical writing.

MATHEMATICS

Geometry or Algebra II; more abstract and applied problem-solving.

SCIENCE & SOCIAL STUDIES

Chemistry or biology; history and electives; first AP/honors and dual-enrollment options; the PSAT.

SOCIAL & EMOTIONAL

Exploring identity, interests, and a direction; deeper, more chosen friendships.

✓ WATCH FOR

Disengagement or a dip in rigor that quietly narrows junior-year options.

FOR FAMILIES

Encourage exploration (clubs, jobs, AP); use PSAT results to plan; open loose college conversations.

AGE 16 — STAGE 13 OF 14

Grade 11

The pivotal year

READING & WRITING

Advanced analysis and argumentation; college-level reading loads in AP/honors; strong research writing.

MATHEMATICS

Algebra II, Pre-Calculus, or higher; entrance-exam-level problem-solving.

SCIENCE & SOCIAL STUDIES

Peak course rigor, AP exams, and the SAT/ACT; building a college list and starting essays.

SOCIAL & EMOTIONAL

Balancing intense academics with activities and identity; growing autonomy — and stress.

✓ WATCH FOR

Over-scheduling and burnout — choosing rigor that's challenging but sustainable.

FOR FAMILIES

Plan testing early; visit campuses; begin the college and financial-aid conversation in earnest.

AGES 17–18 — STAGE 14 OF 14

Grade 12

The finish line

READING & WRITING

Capstone-level analysis and writing; college-ready communication; independent research.

MATHEMATICS

Calculus, Statistics, or continued math depending on the student's pathway.

SCIENCE & SOCIAL STUDIES

Applications, the **FAFSA (opens each October)**, decisions, and deposits; often a capstone or internship.

SOCIAL & EMOTIONAL

The transition to adulthood; big decisions; managing change — and "senioritis."

✓ WATCH FOR

Grade slippage after acceptances — offers can be rescinded, so finishing strong matters.

FOR FAMILIES

File the FAFSA early; meet every deadline; compare aid offers by net price; keep grades up through graduation.

EVERY STEP OF THE WAY

Find Your Community.

Wherever your child is, there's a guide for it — literacy, choosing a school, college prep & more — among **1,297 free guides** at our resource library.

tools.k12academics.com →

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