Summary of 5th Grade Standards
What your 5th grader is expected to learn

APS invites you to get familiar with the content standards your child should master this year. The complete text for State standards can be found at www.aps.edu. *(Please note: Examples are provided to illustrate concepts, but are not meant as a complete list.)*

LANGUAGE ARTS

Reading Process

Apply Skills & Strategies to Read Increasingly Complex Text & Expand Vocabulary

- Actively read a variety of fiction & nonfiction
  - Make predictions
  - Formulate questions
  - Connect with prior knowledge
  - Seek additional information

- Expand & refine vocabulary through discussion, writing & reference materials

- Explain common synonyms(words with similar meaning) antonyms(opposite meaning) & homographs (same spelling, different meaning)

- Read aloud fluently, with comprehension, expression & personal style

Reading Analysis

Understand, Analyze & Interpret What's Read

- Ask & answer questions that use:
  - Analysis (examine & break down info into parts)
  - Synthesis (put info together, elaborate, interpret)
  - Evaluation (draw conclusions & give reasons)

- Support answers & interpret new information using the text & prior knowledge

- Identify a plot's main conflict or problem & how it's resolved (examine other perspectives)

- Compare & contrast actions & motives of characters in different books

- Explain how author supports character & plot development (story type, style & word choices, imagery, symbolism, character action)

- Create & present a product that demonstrates a personal response to what's being read

Writing

Write Clearly and Effectively

- Apply effective writing strategies
  - Plan topics & pre-write
  - Compose rough draft using multiple related paragraphs

- Revise for clear communication of ideas

- Edit for writing conventions
  - Grammar, spelling, punctuation, capitalization & penmanship

- Improve on:
  - Sentence structure
  - Sequence
  - Descriptions
  - Variety of sentence types
  - Word choice

- Write for different audiences & purposes
  - Stories, reports, essays, letters, poetry, drama & journals
  - Describe, narrate, express, explain, persuade & analyze

Research

Locate Information • Gather Data • Synthesize Findings • Develop a Conclusion • Present Results

- Conduct research using a variety of primary (people, artifacts) & secondary sources (reference materials, databases, internet)

- Evaluate usefulness & quality of information

- Apply research skills to all content area

Speaking, Listening & Viewing

Improve Communication Skills: Reflect & Respond

- Create & deliver focused presentations:
  - Pose hypothesis, evaluate information & ideas, support arguments
  - Address intended purpose & audience
  - Use clear language, suitable grammar & vocabulary, avoid overused phrases

- Participate in discussions, ask questions

- Memorize & recite passages

- Listen actively: evaluate information & ideas, make inferences & elaborate on information

- Perform interviews

- Follow multi-step directions

SOCIAL STUDIES

People • Events • Cultures • Interactions • Citizenship

History

- Describe colonization in North America: *(the explorers, identify the European countries & their motives, interactions with Native Americans)*

- Describe how slavery limited freedoms & potentials

- Explain the significance of major historical documents *(U.S. Constitution, Bill of Rights, Gettysburg Address)*

- Use primary *(interviews)* & secondary *(books)* sources as ways to gather information & research

Geography

- Identify & locate tribal territories, the 50 States & their capitals

- Make & use different kinds of maps, use geographic vocabulary *(latitude, longitude)*

- Describe the NM land forms *(plains, mountains, plateau, basin & range)* & how they support life

- Explain how U.S. expansion was influenced by Earth's features *(plains, mountains, resources)*

- Describe resource use & human impacts on the environment

Civics & Government

- Explain the basic principles of the U.S. government *(liberty, justice & equality under the law)*

- Describe the ideals, *(independence, religious freedom)* people, *(Washington)* events & documents related to the development of the U.S. Constitution, *(Articles of Confederation; Constitutional Convention; Declaration of Independence)* & other essential U.S. documents *(Treaty of Guadalupe Hidalgo)*

- Explain the 3 branches of government *(executive, legislative, judicial)*

- Compare & contrast the authority of local, state, tribal & national governments

- Identify contributions of different groups to national identity

- Explain U.S. citizen responsibilities *(safeguard liberty, respect the rule of law, preserve the constitution)*

Economics

- Understand the impact of supply & demand on producers & consumers in a free enterprise system

- Understand patterns of work in NM & the U.S. *(ranching, high-tech)*

- Understand economic patterns of early societies *(hunter-gatherers, farming)*

Summary of 5th Grade Standards
What your 5th grader is expected to learn

MATHEMATICS

Whole Numbers
Understand number relationships, place value & how to work with numbers

- Read, write, sequence & use numbers to 1 billion

- Represent place value to 1,000,000,000

- Identify, compare & order:
    - numbers to millions
    - decimals to 1,000ths *(0.013)*
    - common fractions *(3/4 > 2/3 > 1/2)*

- Find factors & multiples of whole numbers to 50 *(Factors of 21: 1,3,7,21; Multiples of 7: 7,14,21,28...)*

- Identify prime numbers to 50 *(can be divided only by itself & 1, e.g. 23)*

Addition, Subtraction, Multiplication & Division

- Add, subtract, multiply & divide whole numbers

- Divide with 1- & 2-digit numbers that result in remainders *(95 ÷ 10 = 9 and R5)*

- Solve real world situations using operations (+, -, x, ÷) & their inverse *(opposite)* operation *(Will 5 packages of 25 plates serve 120 people? 25 x 5 = 125, 125 ÷ 25 = 5)*

- Use & explain strategies to estimate if results are reasonable *(4,826 ÷ 59 ≈ 4800 ÷ 60 ≈ 80)*

Fractions & Decimals

- Add, subtract & simplify fractions & decimals *(5/8 + 3/4 = 11/8 = 1 3/8 | 1.85 - 0.9 = 0.95)*

- Represent & compute equivalents of numbers as fractions, decimals & percent *(1/2 = 0.5 = 50%)*

Algebra

- Identify, describe, represent, analyze & continue number patterns *(double the given amount: 24 x 2 = 48, 48 x 2 = 96...)*

- Compute equations with a symbol representing an unknown variable *(240 ÷ y = 80, y =)*

- Use math models to show number relationships *(number lines, diagrams, graphs, less than (<), greater than (>))*

- Identify & graph number pairs

Geometry

- Identify, describe, & classify 2- & 3-dimensional shapes up to 10 sides *(faces, edges, base)*

- Recognize parallel (‖) & perpendicular lines (⊥)

- Identify the line of symmetry in simple geometric figures *(equal when folded in half)*

- Compute perimeter of regular shapes

- Identify & explain circumference, radius & diameter

Measurement

- Use U.S. & metric systems to measure & solve problems for length, perimeter, area, weight, volume, time & temperature

- Perform conversions within measuring systems *(inches to feet)*

- Select & use strategies to estimate measurements

Data Analysis & Probability

- Form questions & identify data needed to answer the questions

- Organize, read & display data so it's clear, organized & accurate *(tables, graphs, diagrams)*

- Compare the use of display types for different data sets

- Make & justify valid predictions, arguments, & conclusions. Compare prediction with results.

- Determine probabilities through experiments & compare results using mathematical expressions *(fractions)*

SCIENCE

Do Scientific Investigations:
OBSERVE, PREDICT, EXPERIMENT & VALIDATE

Scientific Thinking & Practice

- Plan & conduct systematic experiments
    - form testable questions, *(single variable & control)*
    - record observations *(same time, same technology)*
    - develop conclusions, & communicate findings using charts, graphs or tables

Physical Science

- Describe how atoms are ordered in solids, liquids & gases & the changes that occur to them when heated

- Know that the periodic table is a chart of pure elements that make up all matter

- Describe how energy can be stored & converted into different forms *(use electricity to charge a battery)*

- Identify forces that produce motion in objects *(gravity, magnetism, electricity, friction)*

- Identify simple machines & how they are used *(lever, pulley, axle, ramp)*

Life Science

- Identify animal & plant roles in habitats, food chains & ecosystems

- Understand the effect of environmental changes on plants & animals

- Know about plant & animal life cycles *(birth, growth & development, reproduction, & death)*

- Identify traits resulting from heredity, learning & environmental influences

- Describe the relationship of cells, tissues, organs & systems in plants & animals

Earth & Space Science

- Understand that the Earth is part of the solar system, that is part of the Milky Way, that is one of many galaxies

- Know about manned & unmanned journeys into space

- Understand water & air processes & their relation to weather *(water cycle, atmosphere, wind)*

- Recognize that seasons are caused by the Earth's rotation around the sun & tilt of the Earth's axis