



# Summary of 2<sup>nd</sup> Grade Standards

What your 2<sup>nd</sup> 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](http://www.aps.edu). (Please note: Examples are provided to illustrate concepts, but are not meant as a complete list.)

## LANGUAGE ARTS

### Reading Process

#### Expand Reading Skills & Increase Vocabulary

- ✎ Use many strategies to read & comprehend what's read:
  - Letter sounds & letter combinations
  - Knowledge of related words
  - Illustrations
  - Connection to meaning
  - Re-read, cross-check & self-correct
- ✎ Read common & irregularly spelled words
- ✎ Build vocabulary through:
  - Reading, listening & interacting
  - Reference materials (*dictionary*)
  - Context (*usage*)
- ✎ Read grade level text aloud with fluency & comprehension

### Reading Analysis

#### Understand, Analyze & Interpret What's Read

- ✎ Retell & summarize in own words:
  - Setting, characters & events
  - Recall facts & details
  - Ask "what," "how" and "why" questions to understand & interpret text
- ✎ Make, confirm & revise predictions
- ✎ Find important information from diagrams, charts & graphs
- ✎ Identify characteristics of fact & fiction
- ✎ Compare & contrast plots, settings & characters by different authors, cultures & media

## Writing

### Write & Revise for Different Purposes & Audiences

- ✎ Plan & compose fiction, non-fiction, poetry & drama (*stories, reports, letters, journals*)
- ✎ Write for different purposes & audiences:
  - Describe • Express • Persuade
  - Narrate • Explain • Analyze
- ✎ Revise to:
  - Clarify ideas
  - Add descriptive words & phrases
  - Sequence ideas & events
  - Write complete sentences
  - Combine short, related sentences
  - Strengthen word choice
- ✎ Edit for writing conventions:
  - Penmanship • Spelling
  - Grammar • Capitalization
  - Punctuation • Sentence type

## Research

### Locate . Gather . Record . Organize . Present

- ✎ Identify & use appropriate sources of information to complete learning tasks (*dictionary, encyclopedia, technology, people*)
- ✎ Locate information from images, text, sound, video

## Speaking, Listening & Viewing

### Improve Communication Skills

- ✎ Participate in class discussions
- ✎ Communicate ideas using proper phrasing, tone, vocabulary & grammar
- ✎ Communicate to identify, organize & analyze information or to solve problems
- ✎ Listen & view with focused attention
- ✎ Follow 3 - 4 step directions

## SOCIAL STUDIES

### People • Events • Cultures • Interactions • Citizenship

#### History

- ✎ Describe how historic people, groups & events have impacted our community
- ✎ Describe the contributions of culturally diverse individuals & groups (*Ben Franklin, Cesar Chavez, NAACP, tribal leaders*)
- ✎ Use stories (*folk tales, fables*) to share the history of peoples in North America
- ✎ Put historic events in order

#### Geography

- ✎ Use & identify map elements (*find land or water formations & places*)
- ✎ Describe how nature affects where people live & what they do
- ✎ Identify how natural & man-made environments help meet basic needs (*food, shelter*)
- ✎ Describe how earth systems (*weather, water cycle*) can shape land features (*arroyos from erosion*)
- ✎ Describe how characteristics of culture can impact behaviors & lifestyles (*traditions, housing*)
- ✎ Describe ways to conserve & replenish natural resources (*recycling*)

#### Civics & Government

- ✎ Describe the purposes of government
- ✎ Describe & compare rules made in a democracy (*direct vote, elect a representative to make decisions*)
- ✎ Identify local governing officials & explain their roles
- ✎ Identify & describe examples of "public good" (*street lights, clean air, public schools*)
- ✎ Describe traits of good citizenship in historic & ordinary people
- ✎ Explain the rights & responsibilities of "good citizenship" (*as a member of a family, school & community*)

#### Economics

- ✎ Identify decisions people make based on their financial resources (*wages, money in the bank*)
- ✎ Understand the roles of producers & consumers for goods & services
- ✎ Understand that money is what we use for exchanging goods & service



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### MATHEMATICS

#### Whole Numbers

#### Understand place value, representation & relationships of numbers to 1,000

- ✎ Use strategies to explore:
  - place value (1s, 10s, 100s)
  - number relationships
  - compare & order numbers (*less than, greater than, even, odd*)
- ✎ Break apart & recombine numbers to solve problems (*48+25 would be 40+20=60, 8+5=13, 60+13=73*)
- ✎ Show an understanding of place value when solving problems (*43+25 = 4 tens + 2 tens & 3 ones + 5 ones*)
- ✎ Skip count by 2s, 5s & 10s & see how it helps prepare for multiplication by working with groups (*5, 10, 15, 20; 4 groups of 5 is 20*)
- ✎ Count up & down from any number to 1,000 (*987, 986, 985, 984*)

#### Addition and Subtraction

- ✎ Develop strategies based on number facts to solve problems (*10 - 6 = 4 so 30 - 6 = 24*)
- ✎ Add & subtract numbers up to 3 digits (*235 + 476 = 711*) (*55 - 37 = 18*)
- ✎ Add & subtract using dollars & coins (*\$1.00 - 63¢ = 37¢*)
- ✎ Understand the inverse (*opposite*) relationship of addition & subtraction to solve problems & check solutions (*23 + 7 = 30 so 30 - 7 = 23*)
- ✎ Model how equal fractions make a whole
- ✎ Explain strategies used to solve problems

#### Algebra

- ✎ Recognize, reproduce, describe, extend & create repeating & growing patterns (*25 + 10 = 35, 35 + 10 = 45...*)
- ✎ Solve addition & subtraction problems using data from simple charts, picture graphs & numbers sentences
- ✎ Construct & solve problems with a 'variable' (*missing number*) *20 = + 6*
- ✎ Solve story problems (*5 kids fit in a car. 25 are going to the store. How many cars are needed?*)

#### Geometry

- ✎ Identify, describe, sort & analyze 2- & 3-dimensional shapes
  - combine shapes to form new shapes
  - explore 'symmetry' in lines & shapes (*equal when folded in half*)
- ✎ Create paths using landmarks, space, shapes & language (*use maps to locate points & navigate*)
- ✎ Relate geometric ideas to numbers (*e.g., model repeated addition in rows*)

2+2+2 or 3+3 →

#### Measurement

- ✎ Represent coins & dollars up to \$5.00
- ✎ Tell time to the nearest quarter hour
- ✎ Measure things with non-standard (*paper clip*) & standard (*inch*) units of measure
- ✎ Estimate & measure with the units that apply (*inches for length, grams for weight*)

#### Data Analysis & Probability

- ✎ Represent data using objects, pictures, tables, numbers, tallies & graphs
- ✎ Pose questions & identify data needed to answer the question
- ✎ Collect & display data
- ✎ Recognize conclusions that follow
- ✎ Investigate concepts of chance
- ✎ Discuss as "likely" or "unlikely"

### SCIENCE

#### Do Scientific Investigations: OBSERVE, PREDICT, EXPERIMENT & VALIDATE

#### Scientific Thinking & Practice

- ✎ Conduct simple experiments, make predictions & record observations

#### Physical Science

- ✎ Describe what happens when substances (*solid, liquid, gas*) are mixed, cooled or heated
- ✎ Describe how heat is made (*burning, rubbing*) & how it travels (*from hot to cold objects*)
- ✎ Know that some forms of energy (*sunlight, wind, electricity*) can do useful things (*warm the earth, light up a light bulb*)
- ✎ Describe how force (*push, pull*) can change an object's motion
- ✎ Observe that sound is made from vibrating objects & describe its pitch & loudness
- ✎ Observe that magnets & electrically charged materials attract & repel each other

#### Life Science

- ✎ Observe differences within animal & plant families
- ✎ Know that bacteria & viruses are germs & describe ways to prevent the spread of germs (*soap*) & prevent & treat illness (*vaccines, antibiotics*)
- ✎ Describe the varied life cycles of different animals (*frog, mouse, butterfly*)
- ✎ Observe inherited characteristics in plants & animals (*flower color, type of fur*)
- ✎ Identify human organs (*lungs, heart, stomach*) & their functions (*breathing, circulation, digestion*)
- ✎ Know that nutrients meet specific needs (*milk has calcium for bones & teeth*)

#### Earth & Space Science

- ✎ Observe phases of the moon (*nightly changes*)
- ✎ Know that the sun is a star
- ✎ Observe that rocks are made of materials (*minerals*) with special properties (*strong, magnetic*)
- ✎ Recognize characteristics of the seasons (*temperature, rain, plant growth*)