## Saddle River Wandell School Curricular Overview GRADE 4

Created/BOE Adopted August 2024

### **Curriculum Overview**

The Saddle River School District is committed to providing all K-5 students with an outstanding education focused on building essential foundation skills, deepening students' understanding of important concepts in academic subjects, encouraging all students to be inquisitive lifelong learners. We believe that each student can fulfill their greatest potential by giving all students access to the highest quality curriculum and instruction.

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## **English Language Arts**

#### **Course Description**

Within the K-5 English Language Arts program, The Saddle River School District seeks to provide students with ongoing, authentic reading and writing experiences that are both personally enriching and academically challenging. Wandell students will develop strong foundational skills in reading, writing, speaking and listening, and word study that in turn will allow students to develop as critical thinkers across every discipline. We strive to develop actively engaged students who are able to appreciate, and communicate ideas effectively.

Through reading, writing, speaking, and listening, students will critically examine texts and media to better understand themselves and the world in which they live.

Wandell students will collaborate thoughtfully and solve problems creatively with sensitivity to diverse perspectives.

## **English Language Arts**

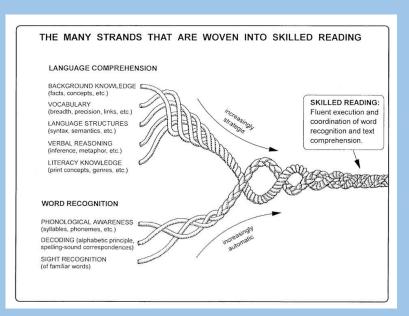
#### Course Proficiencies:

The following is a list of the proficiencies that describe what the students are expected to know, and be able to do as a result of successfully completing this course. The proficiencies are the basis of assessment of student achievement. The learner will demonstrate the ability to:

- 1.Refer to details and examples as textual evidence when explaining what a literary text says explicitly and make relevant connections when drawing inferences from the text. (RL.CR.4.1)
- 2.Refer to details and examples as textual evidence when explaining what an informational text says explicitly and make relevant connections when drawing inferences from the text. (RI.CR.4.1.)
- 3.Summarize a literary text and interpret the author's theme, citing key details from the text. (RL.CI.4.2)
- 4.Summarize an informational text and interpret the author's purpose or a main idea, citing key details from the text. (RI.CI.4.2)
- 5.Describe the impact of individuals and events throughout the course of a text, using an in-depth analysis of the character, setting, or event that draws on textual evidence. (RL.IT.4.3)
- 6.Describe the impact of individuals and events throughout the course of a text, explaining events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on evidence in the text. (RI.IT.4.3)
- 7.Explain major differences in structure between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text. (RL.TS.4.4)
- 8.Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. (RI.TS.4.4)
- 9.Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations. (RL.PP.4.5)
- 10. Compare and contrast multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. (RI.PP.4.5)

- 11.Make connections between specific descriptions and directions in a text and a visual or oral representation of the text. (RL.MF.4.6)
- 12. Use evidence to show how graphics and visuals (e.g. illustrations, charts, captions, diagrams, tables, animations) support central ideas. (RL.MF.4.6)
- 13.Know and apply grade-level phonics and word analysis skills in decoding and encoding words; use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. (L.RF.4.3)
- 14. Read with sufficient accuracy and fluency to support comprehension. (L.RF.4.4)
- 15. Use knowledge of language and its conventions when writing, speaking, reading, or listening. (L.KL.4.1)
- 16. Determine or clarify the meaning of unknown and multiple-meaning academic and domain-specific words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. (L.VL.4.2)
- 17. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. (L.VI.4.3)
- 18. Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (L.VI.4.3)
- 19. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. (W.IW.4.2)
- 20. Write narratives to develop real or imagined experiences or events using narrative technique, descriptive details, and clear event sequences. (W.IW.4.2)
- $21.\ Demonstrate\ command\ of\ the\ conventions\ of\ writing,\ including\ those\ listed\ under\ grade\ three\ foundational\ skills.\ (L.WF.4.3)$

## **English Language Arts**



Writing Cultivating Speaking & Word Study/ Student Listening Vocabulary Literacy Reading

Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), *Handbook for research in early literacy* (pp. 97–110). New York, NY: Guilford Press.

## **English Language Arts Assessments**

- 1. myView Benchmark & Unit Tests
- 2. Teachers College Running Records
- 3. Phonics assessments/spelling inventories
- 4. Classroom discussion
- 5. Student writing samples
- 6. Conferencing notes
- 7. Feedback during reading partnerships
- 8. Formal and Informal Assessments

## **English Language Arts Instructional Resources**

- 1. myView workbook
- 2. Reader's Workshop
- 3. Writer's Workshop
- 4. IXL
- 5. iReady
- 6. Orton-Gillingham Morphology
- 7. Leveled Readers
- 8. Trade Books
- 9. Kahoot

## **English Language Arts NJDOE Resource Links**

Click Here for 2023 ELA Standards

### **Mathematics**

#### **Course Description**

Fourth grade is constructed to focus on Number and Operations, Geometry, Measurement, Algebraic Thinking, and Numbers in Base Ten. Appropriately drawing off of third grade, students will expand their basic understanding of multiplication and division of whole numbers to include products and quotients of multi-digit numbers. Students' previous experience with the unit fraction will extend to understanding fraction equivalence and limited forms of addition, subtraction, and multiplication involving fractions. The core focus of this work includes sums and differences of fractions with common denominators and products of whole numbers and fractions. Geometric thinking involves analyzing and classifying geometric figures based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

Curriculum aspires to develop deep- and transfer- level understanding and connections between and among concepts and their real world applications. Our emphasis on the importance of clarifying misconceptions and learning from mistakes develops perseverance using the CPA model (concrete, pictorial, and abstract).

### **Mathematics**

#### **Course Proficiencies**

The following is a list of the proficiencies that describe what the students are expected to know and be able to do as a result of successfully completing this course. The proficiencies are the basis of assessment of student achievement. The learner will demonstrate the ability to:

- 1. Understand operations and algebraic thinking through using the four operations with whole numbers to solve problems (NJSLS 4.OA.1, 4.OA.2, 4.OA.3).
- 2. Gain familiarity with factors and multiples (NJSLS 4.OA.4).
- 3. Generate and analyze patterns (NJSLS 4.OA.5).
- 4. Generalize place value understanding for multi-digit whole numbers (NJSLS 4.NBT.1, 4.NBT.2, 4.NBT.3).
- 5. Use place value understanding and properties of operations to perform multi-digit arithmetic (NJSLS 4.NBT.4, 4.NBT.B.4,, 4.NBT.6).
- 6. Extend understanding of fraction equivalence and ordering (NJSLS 4.NF.1, 4.NF.2).
- 7. Build fractions from unit fractions by applying and extending previous operations on whole numbers (NJSLS 4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3c, 4.NF.3d, 4.NF.4, 4.NF.4b, 4.NF.4c).
- 8. Understand decimal notation for fractions, and compare decimal fractions (NJSLS  $4.{\rm NF.5},\,4.{\rm NF.6},\,4.{\rm NF.7}).$
- 9. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit (NJSLS 4.M.A.1, 4.M.A.2, 4.M.A.3).

- 10. Represent and interpret data (NJSLS 4.M.A.4).
- 11. Understand concepts of angles, measure angles, draw and identify lines and angles, and classify shapes by properties of their lines and angles (NJSLS 4.M.B.4, 4.M.A5, 4.M.A5a, 4.M.A5b, 4.M.B.5, 4.M.B.6, 4.G.1, 4.G.2, 4.G.3).
- 12. Create data-based questions, generate ideas based on questions and then refine the questions (4.DL.A.1)
- 13. Develop strategies to collect various types of data and organize data digitally. Understand subsets of data and organize data digitally (4.DL.A.1 and 4. DL.A.2).
- 14. Analyze visualizations of a signal data set, share explanations, and draw conclusions that the the data supports (4.DL.B.5)
- 15. Learn and apply key literacies surrounding technology and information media literacy, including innovation, creativity, critical thinking and problem solving while gaining a global/cultural awareness (NJSLS 9.4).
- 16. Develop and apply computational and design thinking to address real-world problems and design creative solutions (NJSLS 8.1 and 8.2).
- 17. Create data-based questions, generate ideas based on the questions, and then refine the questions. Understand that subsets of data can be selected and analyzed for a particular purpose. (4.DL.A.1, 4.DL.A.3)
- 18.. Develop strategies to collect various types of data and organize data digitally. Analyse visualization of a single data set, share explanations, and draw conclusions that data supports (4.DL.A.2, 4.DL.A.4)

## **Mathematics Assessments**

- 1. Savvas Benchmark and Unit Tests
- 2. Classroom participation
- 3. Teacher observation and anecdotal notes
- 4. Individual and group activities
- 5. Performance-based assessments
- 6. Independent Work Samples
- 7. Formal and informal assessments

# Mathematics Instructional Resources

- 1. enVision workbook
- 2. Conquer Math
- 3.IXL
- 4. iReady
- 5. Prodigy
- 6. Xtra Math
- 7. Kahoot
- 8. Math Games

## Mathematics NJDOE Resource Links

Click Here for 2023 Math Standards

## Science

#### **Course Description**

The fourth grade science course focuses on four key areas of study:

Waves and Information; Earth Systems: Processes that Shape the Earth; Energy; and Structure, Function and Information Processing. The course will address patterns of waves in terms of amplitude and wavelength. It will explore the effects of weathering and the impact of humans on the earth, as well as utilize data from maps. This course will examine the transfer of energy from object to object and will incorporate a student-constructed device that converts energy from one form to another. Students will investigate how internal and external structures support the survival growth, behavior and reproduction of plants and animals. Throughout the course of the year, students are expected to ask questions, develop and use models, plan and carry out investigations, analyze and interpret data, construct explanations and design solutions, engage in argument from evidence, and obtain, evaluate, and communicate information.

#### **Science & Engineering Practices**

- ★ Asking Questions and Defining Problems
- ★ Planning and Carrying Out Investigations
- ★ Analyzing & Interpreting Data
- ★ Developing and Using Models
- ★ Constructing Explanations and Designing Solutions
- ★ Engaging in Argument From Evidence
- ★ Using Mathematics and Computational Thinking
- ★ Obtaining, Evaluating, and Communicating Information

## **Science**

#### **Course Proficiencies:**

The following is a list of proficiencies that describe what students are expected to know and be able to do as a result of successfully completing this course. The proficiencies are the basis of the assessment of student achievement. The learner will demonstrate the ability to:

- 1. Develop models to describe how animals receive information through their senses to respond to that information in different ways (NJSLS 4-PS4-2, 4-LS1-2).
- 2. Construct arguments that all living things have internal and external structures that function to support survival, growth, behavior, and reproduction (NJSLS 4-LS1-1).
- 3. Use evidence to explain the relationship of the speed of an object to the energy of that object (NJSLS 4-PS3-1).
- 4. Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and currents (NJSLS 4-PS3-2).
- Ask questions and predict outcomes about the changes in energy that occur when objects collide (NJSLS 4-PS3-3).
- 6. Apply scientific ideas to design, test, and refine a device that converts energy from one form to another (NJSLS 4-PS3-4).
- 7. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment (NJSLS 4-ESS3-1).
- 8. Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move (NJSLS 4-PS4-1).
- Generate and compare multiple solutions that use patterns to transfer information. (NJSLS 4-PS4-3).

- 110. Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time. (NJSLS 4-ESS1-1).
- 11. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation (NJSLS 4-ESS2-1)
- 12. Analyze and interpret data from maps to describe patterns of Earth's features (NJSLS 4-ESS2-2; 4-ESS3-1) .
- 13. Generate and compare multiple solutions to reduce the impacts of natural Earth processes and climate change have on humans (NJSLS 4-ESS3-2).
- 14. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. (NJSLS 3-5-ETS1-1).
- 15. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. (NJSLS 3-5-ETS1-2).
- 16. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. (NJSLS 3-5-ETS1-3).
- 17. Learn and apply key literacies surrounding technology and information media literacy, including innovation, creativity, critical thinking and problem solving while gaining a global/cultural awareness (NJSLS 9.4)
- 18. Develop and apply computational and design thinking to address real-world problems and design creative solutions (NJSLS 8.1 and 8.2)

## **Science Assessments**

- 1. Teacher observations and anecdotal notes
- 2. Classroom discussion
- 3. Participation in general classroom assignments
- 4. Tests and quizzes
- 5. Individual and group projects
- 6. Research based assessments
- 7. Performance-based assessments
- 8. Models
- 9. Graphs and measurements
- 10. Lab reports

## Science Instructional Resources

- 1. Elevate Science workbook
- 2. Scholastic Readers
- 3. Science Spin
- 4. Science Weekly
- 5. Hands-on Activities/Explorations
- 6. IXL
- 7. Brainpop

## Science NJDOE Resource Links

Click Here for Science Standards

## **Social Studies**

#### **Course Description**

All units will integrate the following 2020 Social Studies Disciplinary Concepts: Civics, Government, and Human Rights; Geography, People and the Environment; Economics, Innovation, and Technology; and History, Culture, and Perspectives. In conjunction with this content knowledge, students will learn to develop the Social Studies Practices of Developing Questions and Planning Inquiry, Gathering and Evaluating Resources, Seeking Diverse Perspectives, Developing Claims and Using Evidence, Presenting Arguments and Explanations, Engaging in Civil Discourse and Critiquing Conclusions, and Taking Informed Actions.

#### **Social Studies Practices**

- **★** Developing Questions and Planning Inquiry
- ★ Gathering and Evaluating Sources
- ★ Seeking Diverse Perspectives
- ★ Developing Claims and Using Evidence
- **★** Presenting Arguments and Explanations
- ★ Engaging in Civil Discourse and Critiquing Conclusions
- **★** Taking Informed Action

## **Social Studies**

#### **Course Proficiencies:**

The following is a list of the proficiencies that describe what the students are expected to know, and be able to do as a result of successfully completing this course. The proficiencies are the basis of assessment of student achievement. The learner will demonstrate the ability to:

- 1. Compare and contrast the land, populations, and resources of different areas of the United States and other countries (6.1.5.GeoSV.2;6.1.5.GeoSV.4).
- 2. Explain (using multiple sources) how the availability of resources in New Jersey and other regions in the United States have impacted economic opportunities (6.1.5.EconNM.2)
- 3. Explain why it is important to understand a person's point of view, and how it can help them work together better (6.1.2.HistoryUP.3).
- 4. Examine multiple accounts of early European explorations of North America including major land and water routes, reasons for exploration, and the impact the exploration had (6.1.5.HistorySE.1)
- 5. Use multiple perspectives to evaluate the impact of the Columbian Exchange on ecology, agriculture, and culture (6.1.5.HistoryUP.3).
- 6. Describe why it is important to understand the perspectives of other cultures in an interconnected world (6.1.5.HistoryUP.7).

- 7. Define citizenship and how a person can help make a difference in their world (6.1.2.CivicsCM.1).
- 8. Identify examples of what people can do to work together to solve problems)
- (6.1.2.CivicsCM.2).
- 9. Explain how people can make sure that all members of a community feel seen and heard (6.1.2.CivicsCM.3).
- 10. Define equality, fairness, and respect and how they are important in a community
- (6.1.2.CivicsDP.2).
- 11. Communicate with another person by asking questions, listening to the ideas of others, and sharing opinions (6.1.2.CivicsPD.1).
- 12. Define climate change and the impact it can have on our community (6.3.2.GeoGI.2).

## **Social Studies Assessments**

- 1. Unit Tests
- 2. Group Projects
- 3. Multimedia Presentations
- 4. Interpretations of Data
- 5. Classroom Discussion and Participation
- 6. Teacher Observation and Anecdotal Notes

# Social Studies Instructional Resources

- 1. Studies Weekly
- 2. IXL
- 3. Brainpop

## Social Studies NJDOE Resource Links

Click Here for Social Studies Standards