

Fourth Grade Curriculum



Wondering what your child will be expected to know and do in reading, writing, math, art, science, PE and social studies in both English and Japanese? This guide briefly outlines the Oregon standards for each subject at the 4th grade level. Please do not hesitate to ask your child's teachers if you have questions or would like more information about any aspect of your child's academic program.

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LITERACY BENCHMARKS

READING

- Read aloud 4th grade material with 90-100% accuracy.
- Read familiar material with natural phrasing, flow and pace.
- Self-correct consistently using phonics, language structure, contextual clues and illustrations.
- Determine word meaning in text.
- Use information from charts and diagrams to assist in comprehension.
- Reread text to locate key information and/or support details.
- Identify sequence of events, main ideas and details or facts in literary and informational text.
- Retell, summarize and paraphrase what is read.
- Relate new information to personal experiences and previous knowledge.
- Identify cause and effect relationships to make inferences and draw conclusions.
- Extend ideas and evaluate information to form opinions, conclusions and judgments.
- Read and compare two or more texts about a topic or from one genre.
- Read for a sustained period of time (30-45 minutes independently per day).

LITERATURE

- Listen to and experience traditional and contemporary literature from a variety of cultures and genres.

- Choose books for interest and purpose.
- Begin to make inferences and draw conclusions about how the character, plot, and setting contribute to the impact of the selection.
- Compare and begin to contrast similar stories from several geo-cultural groups.

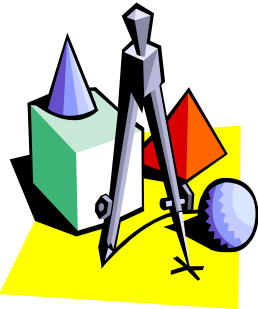
WRITING

- Use prewriting activities to initiate writing (e.g. mapping, listing, webbing).
- Write a clear and cohesive drafts of multiple sentences with supporting details.
- Revise writing based on input from self, peers and adults.
- Edit writing to correct most punctuation, grammar and spelling errors.
- Produce a final draft appropriate to grade level, for a variety of purposes.
- Write narrative, imaginative, expository and persuasive pieces of writing.
- Research and write to convey a clear understanding of at least two resources.
- Demonstrate organization by developing an introduction, body of text and conclusion with sequencing of ideas.
- Use knowledge of phonics, complex word patterns, and frequently written words to improve spelling.
- Demonstrate correct use of most grammar and punctuation.
- Select descriptive words/phrases to create a picture in writing.
- Use legible handwriting.

NUMBER & COMPUTATION FOR FOURTH GRADE

M A T H

- Select and use appropriate operations and computation to solve problems.
- Calculate and explain $+$ / $-$ of commonly used fractions and decimals; recognize equivalent forms of fractions, decimals and percents.
- Know multiplication facts through 10 and factors and multiples through 100.
- Estimate the results of adding, subtracting, multiplying and dividing whole numbers, fractions and decimals.
- Have a variety of efficient paper/pencil and mental strategies for multiplying and dividing whole numbers (up to 2 place divisors).
- Explain concepts of odd/even, primes, factors, multiples and composites.



GEOMETRY

- Use definitions to classify and compare shapes.
- Identify and describe line and rotational symmetry in 2-dimensional shapes and designs.
- Understand the concepts of congruence and similarity.
- Recognize the result of a transformation on a shape (e.g. flip, turn or slide).
- Understand the sum of angles in a triangle equals 180 degrees.
- Locate points on a coordinate grid and describe paths between points.

ALGEBRAIC THINKING

- Recognize, describe and extend geometric & number patterns.
- Given a number pattern, determine subsequent terms and describe the rule for generating the pattern.
- Use pictures, words, graphs and symbols to describe relationships between quantities.
- Use equations and number sentences to solve problems, including those involving a single variable.
- Represent the idea of a variable as an unknown quantity using a letter or symbol.

MEASUREMENT

- Measure length, weight, temperature, angle and volume with accuracy, and make reasonable estimates.
- Develop understanding of formulas to determine the area and perimeter of rectangles, triangles, and parallelograms.
- Carry out simple unit conversions to solve problems.
- Determine volume of simple rectangular prisms using unit cubes.

STATISTICS & PROBABILITY

- Read, construct and interpret a variety of graphs, including line, circle, bar graphs, and tables for two related sets of data.
- Use knowledge about sample size to evaluate data..
- Determine and compare the mean and median of set of data..

PROBLEM-SOLVING

- Communicate mathematical thinking is a variety of ways.
- Use multiple strategies to solve problems.

A R T

CREATE, PRESENT & PERFORM: Apply ideas, techniques and processes in the arts.

AESTHETICS & CRITICISM: Respond to and analyze works of art, based on essential elements, organizational principles and aesthetic criteria.

HISTORICAL & CULTURAL PERSPECTIVES: Understand the relationship of works of art to their social, historical and cultural contexts, and the influence of the arts on individuals, communities and cultures.



K-5 SCIENCE STANDARDS

LIFE SCIENCE: Understand structure, function, and interactions of living organisms and their environment.

EARTH & SPACE SCIENCE: Understand physical properties of the Earth, how those properties change, and the Earth's relationship to other celestial bodies.

HISTORY & NATURE OF SCIENCE: Understand science as a human endeavor, the nature of scientific knowledge and the history of science as it relates to and clarifies scientific inquiries.

UNIFYING CONCEPTS & PROCESSES: Understand and apply major concepts and processes embedded within all sciences.

PHYSICAL SCIENCE: Understand structures and properties of matter and changes that occur in the physical world.

SCIENCE IN PERSONAL & SOCIAL PERSPECTIVES: Understand that science provides a basis for understanding and acting on personal and social issues.

SCIENTIFIC INQUIRY: Use interrelated processes to pose questions and investigate the physical and living world.

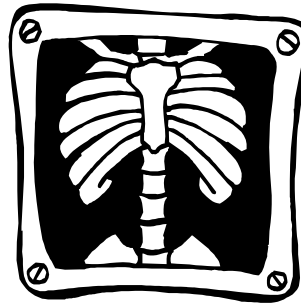
SCIENCE & TECHNOLOGY: Understand the interconnections among science, technology and society.

CONTENT STRANDS FOR FOURTH GRADE

Land & Water: This is a key earth science unit, linking weather, geology, environmental science and landscape engineering.

Bones & Skeletons: Learning experiences that explore human bone groups, teeth, and joints, as well as the skeletons of other animals to help students develop and understanding of bone structure and its relationship to function.

Circuits & Pathways: Students develop a basis for understanding electricity by exploring its properties in simple circuits.



SCIENCE

PROCESS SKILLS FOR K-5 SCIENCE

OBSERVE: Gather information by using the senses or instruments to note facts or occurrences.

MEASURE: Collect data concerning physical characteristics such as dimension, quantity or capacity.

USE NUMBERS: Count, compute, and communicate quantitative data using figures, letters, words and symbols.

CLASSIFY: Organize objects or events by their attributes.

QUESTION: Identify problems and develop testable statements relating to the problems.

COMMUNICATE: Exchange information and ideas.

DESIGN EXPERIMENTS: Plan and conduct data gathering operations to test hypotheses, answer questions and generate new ideas.

INTERPRET DATA: Find patterns or meaning in experimental results.

DEFINE OPERATIONALITY: Use experiments to develop working definitions of objects or events.

FORMULATE MODELS: Use problem-solving and questioning skills to develop mental models to explain phenomena.

HYPOTHESIZE: Use information and questions to generate statements that predict the likely outcome of an investigation.

INFER: Conclude from evidence and experience.

PREDICT: Declare in advance what is likely to happen, based on experience.

CONTROL VARIABLES: Identify and manage factors that may influence the outcome of an experiment..

Social Studies



THEME - Understanding the State of Oregon

SKILLS.CONCEPTS

- Understand key influences and people in Oregon history how they have shaped the growth of our State.
- Understand economic concepts and how available resources are allocated.
- Understand key concepts of location; how things got where they are.

HISTORY

- Indigenous people, cultures and the environment.
- Early settlement by non-native people: fur trade and missionaries.
- Oregon Trail and emigration.
- Statehood.
- Linking part to present—contemporary Oregon.

CIVICS & GOVERNMENT

- Understand key city government and political systems; rights and responsibilities of citizens.
- Understand the organization of State government.

ECONOMICS

- Economic development of Oregon in the past and present and related to the Pacific Northwest.

Physical Education

MOTOR SKILLS & CONCEPTS

- Demonstrate mature form in all locomotor patterns and selected manipulative and non-locomotor skills.
- Adapt a skill to the demands of an unpredictable table environment (e.g. dribble and pass a basketball to a moving receiver).
- Balance with control on a variety of objects (e.g. balance board, balance beam).
- Accurately recognize some of the critical elements of a throw made by a fellow students and provide some feedback to that student.
- Understand that appropriate practice improves performance.
- Jump a self-turned rope using at least five different jump rope skills.



ACTIVE LIFESTYLE

- Identify and engage in at least one activity of each component of physical fitness..
- Regularly participate in physical activity for the purpose of improving physical fitness..
- Identify major bones and muscles.

SELF-MANAGEMENT & SOCIAL BEHAVIOR

- Follow, with few reminders, activity specific rules, procedures and etiquette.
- Record performance accurately.
- Work independently and on task for short periods.

The information in this brochure has been assembled by Kathryn Anderson, Richmond principal, for the convenience of our parents and teachers. For information about the Oregon content standards in greater detail, please check the Richmond website at www.richmondjmp.org or the Oregon Department of Education website at www.ode.state.or.us.

Portland Public Schools recognizes the diversity and worth of all individuals and groups and their roles in society. All individuals and groups shall be treated with fairness in all activities, programs and operations, without regard to age, color, creed, disability, marital status, national origin, race, religion, sex or sexual activity.