



Grade 5

Royal Oak Schools has a comprehensive curriculum for all fifth graders that includes academics, foreign language, physical education, health, music and art. Our curriculum also includes areas essential to the education of the total child. We pay close attention to the physical learning environment and the learning climate of our classrooms. We recognize the uniqueness of every child and are dedicated to providing the best educational experience possible. This folder describes Royal Oak's Curriculum for fifth grade students in the core academic areas of language arts, social studies, math and science.

A Parent guide to the Royal Oak

Elementary

Grade 5

Fifth graders are at the top of their elementary experience as they move towards middle school. Greater responsibility is expected in their ability to communicate between home and school. Since fifth graders are heavily influenced by their peer group, they need clearly defined rules and expectations.

- Instruction is delivered in a variety of ways to maximize achievement.
- Our curriculum is under continuous review and revision by teachers and administrators from all buildings.
- Teachers carefully monitor the progress of all students in a variety of ways. Report cards are sent home quarterly. Reading is measured using the Michigan Literacy Progress Profile. The Michigan Educational Assessment test is administered in 5th grade and measures curriculum in the area of science and social studies.
- At every level students accomplish important milestones in each curricular area. The curriculum is developmentally appropriate and challenging at each grade.
- This brochure outlines what we expect fifth grade students to be able to demonstrate throughout the year in each of the four core curricular areas.

language arts

The K--12 English Language Arts curriculum provides a framework for students to develop reading, writing, listening, speaking, and critical thinking skills.

Students will:

- give oral and written responses to a variety of texts focusing on constructed response, story elements, summarizing, conclusions and/or opinions.
- read a minimum of 150 minutes a week and keep an on-going record of titles and time.
- read a variety of materials including science fiction, mystery, historical fiction, poetry, classics and informational books.
- use graphic organizers to demonstrate understanding of story elements and information passage contents.
- keep an assessment writing portfolio which will include: persuasive extended response, expository (information), and narrative (story).
- write: opinion relating to an issue, poetry, letters (friendly and business) at least two pieces will be completed using technology.
 - present orally for a variety of purposes. At least one of these presentations will be videotaped, and will use a Power Point Slide Show, Hyperstudio, or similar venue to support their presentation.
 - use an age-appropriate dictionary and thesaurus.
 - analyze and interpret information given as a set of data (charts, maps, and graphs).
 - use a scoring chart (rubric) to evaluate their written and oral communication skills.
 - listen to gather information.
 - take notes and summarize information.
 - explore and reflect upon universal themes by comparing two or more selections.

social studies

The K--12 Social Studies Curriculum provides the framework for students to develop social understanding and civic responsibility by building four capacities in learners: disciplinary knowledge, thinking skills, commitment to democratic values, and citizen participation.

The fifth Grade Curriculum is the study of American History to 1763. Emphasis is placed on events, people, decisions and issues that affected the Nation. Students will examine the impact geography had on the migration, economics and culture in America.

CIVICS PERSPECTIVE

(Government and the Constitution)

- identify and explain how individuals in history demonstrated good character and personal virtue.
- distinguish among local, state and national government in the United States, and describe the roles of government institutions at all three levels.
- interpret the meaning of specific rights guaranteed by the constitution including religious liberty, free expression, privacy, property, and due process of law and equal protection of the law.

HISTORICAL PERSPECTIVE

(United States History to 1763)

- identify and explain events, people, decisions and issues that affected the nation.
- describe the causes, consequences, routes and movement of major migrations to the Americas.
- locate major world events and explain how they impact people and the environment.

GEOGRAPHY

(Human/Environmental Interactions and Locations)

- locate and describe major places, cultures and communities of the nation, and compare their characteristics.
- describe the geography of major United States regions, compare the regions and explain the processes that created them.
- explain how various people and cultures have adapted to and modified the environment.

ECONOMIC PERSPECTIVE

(Regional Economic Systems)

- describe major kinds of economic activity and explain the facts influencing their location.

The K--12 Mathematics Curriculum provides the framework for students to develop reasoning, communication, and problem-solving skills. The six strands of the math curriculum include: patterns, relationships and functions; geometry and measurement; data analysis and statistics; number sense and numeration; numerical and algebraic operations and analytical thinking; and probability and discrete mathematics.

Students will:

- represent and record patterns in a variety of ways including tables, charts, and graphs.
- use patterns to make and justify inferences and predictions.
- use patterns to solve and interpret problems and explore new content.
- develop spatial sense
- use shape as an analytic and descriptive tool, identify characteristics and define shapes,
- identify properties and describe relationships among shapes.
- recognize triangle, rectangle, quadrilateral, pentagon, hexagon, octagon and circle from written descriptions and/or pictures.
- relate shapes to the physical world, and solve problems involving these shapes.
- select and use appropriate tools to measure objects using standard units in metric and common system.
- measure angles in degrees.

- select appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time temperature and money.
- collect and explore data through observations, surveys and sampling
- present information using methods of graphing.
- read, interpret, and evaluate data from tables, charts and graphs.
- identify *mean, median, mode and range*.
- recognize and describe decimals and equivalent fractions.
- recognize relationships between decimals and fractions.
- distinguish between prime and composite numbers.
- identify common factors and multiples, and apply divisibility test to numbers.
- read and write simple algebraic expressions.
- represent algebraic concepts with geometric models, tables and graphs.
- Solve problems using equations and check answers for accuracy.
- use technology to explore problems and examine the many ways that mathematics is used.
- develop an understanding of probability and statistics.
- describe an event as likely or unlikely using words and numbers.
- conduct probability experiments and simulations to model and solve problems.
- develop a class or small group survey. Display this data using at least two different types of graphs. Present findings from each survey, discuss, evaluate and defend.

science

The Science Curriculum provides the framework for students to develop scientific literacy by using, constructing, and reflecting on scientific knowledge, and coming to informed conclusions. Students will learn concepts and theories of the three main science areas: earth, life, and physical.

In Fifth grade students will:

- develop a curiosity about the world through hands-on investigations.
- identify and define key scientific content terms using science logs.
- record, organize, analyze, and reflect on data collected to answer questions created from and about the natural and physical world.
- explain their findings through written and oral reporting.
- identify, define, and use key scientific content terms in student logs.

Floating and Sinking

- measure and describe things in their environment, and identify forms of energy.
- investigate the phenomenon of buoyancy.
- design and test a boat while discovering several surprising phenomena; for example, some “floaters” are heavier than some “sinkers,” and large objects are not always heavier than smaller objects.
- discover the differences between buoyancy of fresh and salt water in the form of results reported to the class.

Magnets and Motors

- identify knowledge gained in third grade and apply that information as they explore properties of magnets and the magnetic properties of electric currents.
- construct a compass as they learn about magnets.
- investigate the relationship between magnetism and electricity, as they explore the characteristics of electromagnets and motors.
- dismantle, experiment with, and reassemble a manufactured motor. Report results to the class.

Plants

- plan and conduct experiments to determine how different variables affect plant growth and seed production.
- chart the growth spurt

- examine the relationship between the bee and the flower, and record seed yield after harvesting.
- draw and write about observations, measure and graph the results of data collection.
- distinguish between germination, growth and development, pollination, and seed production. Report findings in the form of multimedia presentation.

Land and Water

- investigate the relationship between land and water in their natural environment by conducting a series of classroom investigations.
- describe the earth's surface and explain how the earth's features change over time.
- analyze the interaction of human activities with hydrosphere.

Solar System

- describe the motion of the earth around the sun and the moon around the earth.
- compare the characteristics and placement of the sun to the planets.
- investigate the similarities and differences of the planets.

What Parents Can Do...

- Talk to your child about school daily.
- Talk to and work with your child's teacher(s).
- Have your child read a variety of material daily.
- Have your child practice writing at home (e.g., thank you notes, letters, and lists.)
- Make math part of everyday life (e.g., money, time, fractions, and multiples.)
- Acknowledge a good job when you see it with positive comments.
- Check and sign your child's planner daily.
- Look over and discuss your child's work.
- Encourage regular attendance at school.
- Promote community service and involvement in school activities.



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