



Fourth Grade Curriculum Overview

Reading and Language Arts

Language arts activities and lessons are taught daily and focus on developing skills in the areas of listening, speaking, reading and writing. Lessons are often integrated with Social Studies, the Arts, and other curricular areas.

Reading instruction focuses comprehension and analysis of text. The selections include novels, short stories and poetry. Students also read non-fiction in Islamic texts, reference and resource books, newspapers, and magazines.

Reading aloud and independent silent reading occur regularly in class. Book Projects are assigned throughout the year, and children are encouraged to read at home on a daily basis.

Students are led through the process of writing which involves drafting, conferencing with peers or teachers, improving writing through revising and editing. Grammar and mechanics are taught as group lessons and may be reviewed on an individual basis during teacher conferences. Children have the opportunity to experiment with a variety of genres including short stories, poetry, news articles, scripts, and research reports.

Spelling is taught in a manner, which enables children to apply spelling generalizations to a wide variety of words. Other spelling words and vocabulary are generated from reading material and word frequency lists.

Handwriting instruction focuses on letter formation and joining guidelines.

Reading Support Services

Children who need additional support to develop their reading and language arts skills are offered reading support

on an individual or small group basis. They work closely with the homeroom teacher to design instruction that meets students' needs in these areas: oral reading, comprehension, spelling, handwriting, written expression, and study skills.

Social Studies

At Mutanafisun Academy, social studies are taught in order to cultivate the children's understanding of themselves and of other peoples and cultures in the world around them. This begins as simply as their families and eventually extends to Medieval Civilizations and The Islamic World. All subjects are viewed through the Islamic perspective giving the children a clear understanding of Allah's desire for mankind on earth in the context of history.

These themes begin as month long topics and become half year topics in First Grade, and year long topics in Fourth Grade, teaching the children in depth exploration and investigation skills valuable throughout their whole lives. The chosen theme is incorporated into the language arts, arts, and science giving the children a rich and complete learning experience.

As this subject is language based, some of the methods used are reading and making books and poetry, singing songs in the early classrooms, seeing films, visiting museums and related places, hands on projects, listening to experts, real experience when possible, and other exciting classroom activities. Large topics studied in Fourth Grade focus on Medieval Civilizations of The World, including China.

Mathematics

At Mutanafisun Academy we use Harcourt math for all grades K2 and up. While math is taught as a discipline with its own language and conventions, lessons also offer ample opportunities for linking mathematics with other disciplines. Math requires incremental review and steady practice, approaching problems from a variety of angle. Major concepts studied include:

Number and Operation

Number Sense

- Identify place value through the millions place
- Understand, interpret, read and write large numbers
- Extend understanding of our base ten system and relationships between places
- Develop and use a set of familiar referents to make sense of numbers
- Develop flexibility with the use of numbers in a variety of contexts

Whole Number Operations and Computation

- Link conceptual, concrete and procedural knowledge
- Understand links between operations
- Recognize when situations require estimates or specific answers
- Use common sense to choose appropriate method of computation
(calculator, mental strategy, or paper and pencil)
- Add and subtract with regrouping
- Learn and use strategies to estimate sums and differences
- Learn and use strategies to calculate sums and

differences mentally

- Review and master multiplication facts
- Recognize patterns of multiplying by tens and hundreds
- Compute 1-digit X 3-digit equations, and 2-digit x 2-digit equations
- Learn and use strategies to estimate products and to calculate products mentally
- Practice division facts
- Understand concepts of remainders
- Compute 3-digit divided by 1-digit equations
- Learn and use strategies for estimating quotients

Fractions and Decimals

Fractions

- Create and use manipulative objects to demonstrate understanding of concepts
- Recognize fractional parts of a whole
- Determine fractional parts of groups of objects
- Compare and order fractions
- Link improper fractions and mixed numbers
- Add and subtract fractions with like and unlike denominators

Decimals

- Extend place value understanding to include decimals to the hundredths place
- Link decimals and common fractions
- Add and subtract with tenths and hundredths

Patterns, Functions, and Algebra

- Recognize, describe, extend and create a variety of non-numerical patterns
- Identify and extend number patterns
- Use pattern identification and extension skills as a

problem solving strategy

Geometry and Spatial Sense

- Recognize and explore: congruency, symmetry, parallelism, perpendicularity, slides, flips and turns
- Build, draw and compare properties of polygons
- Understand concepts of angle measurement and degrees in a circle
- Develop perspective and visual perception

Measurement

- Develop measurement estimations skills through comparisons with familiar referents
- Measure length, volume, mass and angles
- Extend concepts of area and perimeter and explore the relationship between them
- Develop familiarity with common units of measurement, and become familiar with conversions between units of measurement that are commonly used

Data Analysis, Statistics and Probability

- Collect, organize and interpret data
- Create, read and interpret pictographs, bar and line graphs
- Develop a beginning understanding of chance and predicting outcomes
- Develop vocabulary: range, mean, average, data, certain, uncertain, likely, unlikely, 50/50 chance, sample

Problem Solving

- Understanding, extend and practice strategies for solving non-routine problems including: make an organized list, look for a pattern, make a table or chart, guess and check, draw a picture or diagram, create an

- equation, work backwards, use logical reasoning
- Learn to choose appropriate strategies
 - Strengthen “if...then” reasoning skills
 - Use a matrix to organize known information and draw conclusions
 - Review concepts of attributes and classification systems

Communication

- Explain (verbally, in writing, with a model) the approach used to solve a problem and to justify the reasonableness of a solution

Science

Fourth Graders study science using a hand-on, discovery approach. This approach allows students to develop and use process skills in order to gain a body of scientific knowledge. Science process skills include observing, comparing, classifying, measuring, predicting, inferring, communicating, formulating hypotheses, collecting and interpreting data, and recognizing variables.

A variety of topics are covered including:

A world of Living things

Classifying living things, animal growth and adaptations, plant growth and reproduction, types of plants, and adaptations, human body systems

Looking at Ecosystems

Ecosystems, soil-a natural resource, protecting ecosystems

Earth's Surface

Earthquakes and volcanoes, rocks and minerals, fossils

Patterns on Earth and in Space

Weather conditions, water in the oceans, planets and other objects in space

Matter and Energy

Physical properties of matter, heat-energy on the move, sound, electricity and magnetism

Forces and Motion

Motion-forces at work, simple machines

Biographies of Scientists, including Muslim scientists

Arabic

Arabic class in grades 1 and up and held four times a week for one hour. Uhibbul Arabiyyah textbooks and work books are used and are supplemented with other Arabic children's literature, games and songs. The over all goal is to help the children reach fluency in reading and writing, and to begin to have an understanding of the Qur'an and Islamic literature as well as spoken modern standard Arabic. The text book focuses on building vocabulary, sentence structure, grammar, and improving reading and writing skills.

Computers

Computers in fourth grade support and enhance the curriculum. The students have computer lab twice weekly and there is a computer located in each of the classrooms. A variety of software programs are available to the teachers. Programs are chosen to be developmentally appropriate, relate to classroom content, offer new ways of looking at the traditional curriculum, encourage creativity, foster

collaboration and communication, encourage thinking and stimulate inquiry, and challenge and motivate a wide range of students.

Both homeroom and special subject teachers are invited to bring their classes to the computer room when appropriate. A visit to the computer room is seen as an extension of the regular classroom.

Visual Art

Fourth grade has art classes once a week. Painting, drawing, collage, ceramics, woodworking, and paper constructions are explored throughout the year. Children are reminded about the prohibition of making images in Islam and are gently guided towards expressing their creativity in other ways. Many projects are based on classroom curriculum or are integrated into science or language arts.

Library

Children visit the local public library once a week. They earn the responsibility of borrowing and returning books. Topics covered include:

- Using the Almanac to find information on a given topic
- Locating and using an atlas and geographical encyclopedias
- Using given 'quick references' to find facts quickly
- Choosing appropriate sources to answer given questions
- Discussing fiction in terms of plot, themes, characters, settings and point of view
- Locating biographies
- Understanding the broad areas of non-fiction by the Dewey Decimal System

“Reading aloud is the single most important activity you can do to make a successful reader,” says Lucy Calkins, Ph.D. author of *Raising Lifelong Learners*. Parents are encouraged to read aloud to children even after they have learned to read. Children should themselves read at least 15 minutes per day.

Physical Education

In fourth grade we continue to focus on team sports. Games are played with an emphasis on participation, effort and sportsmanship. Physical fitness is covered throughout the year. Students are introduced to various activities and exercises to improve their fitness level. Activities may include the following:

Group games

Team Sports

Frisbee

Kickball

Basketball

Floor Hockey

Softball

Track and Field events

Homework

Homework compliments and reinforces what is being learned in class. It helps to instill good study and time management habits. It also helps to keep parents informed of what their child is learning. Children are encouraged to become homework “all-stars”. Children are expected to read for twenty minutes daily. Reading “contracts” are used to

record the details of this daily reading.