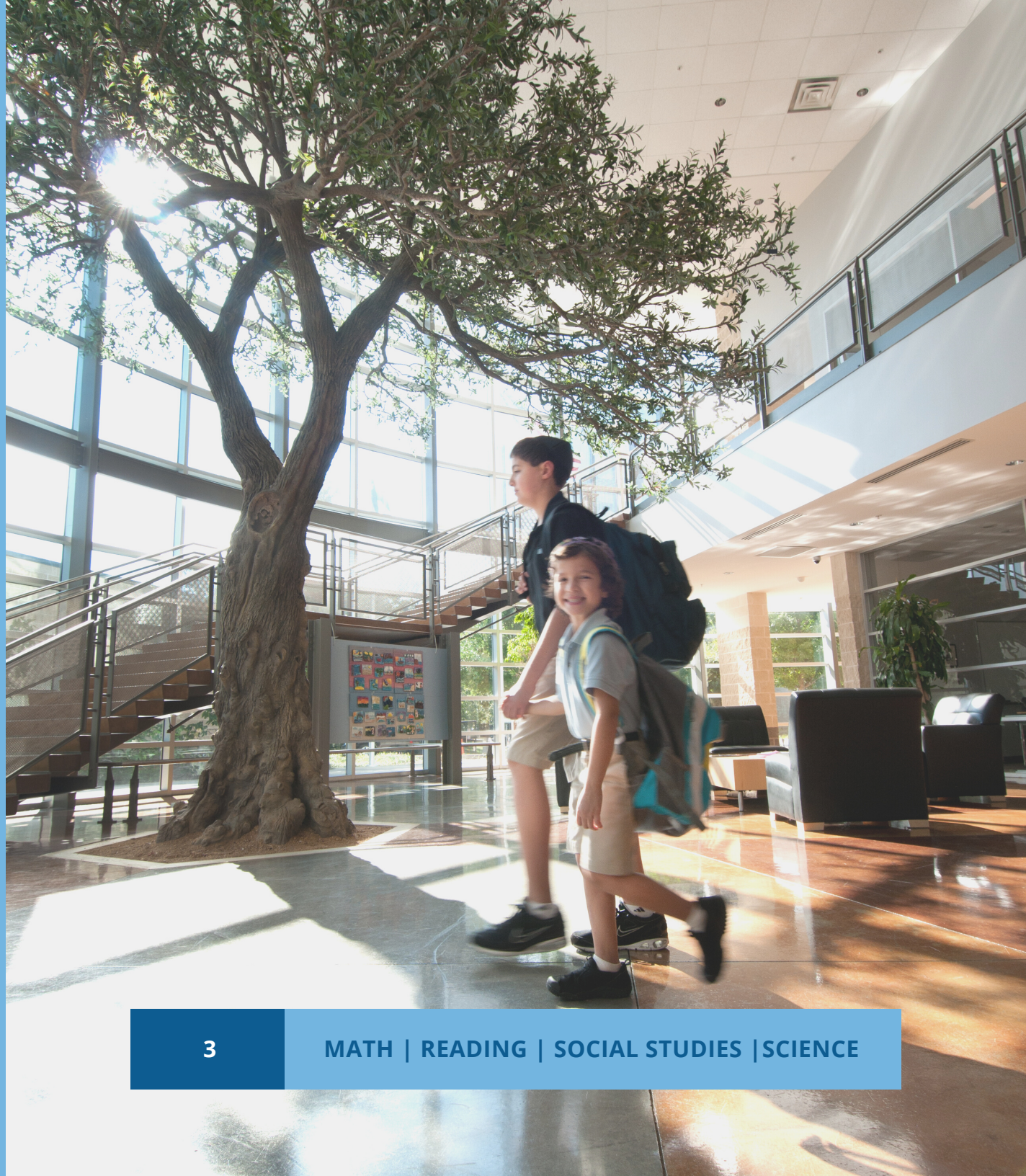
# WHAT YOUR CHILD WILL LEARN IN 3RD GRADE

Akiba Yavneh Academy

בית ספר עקיבא יבנה



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MATH | READING | SOCIAL STUDIES |SCIENCE

# Math

| Operations and Algebra | Numbers and Computation | Measurement and Data | Geometry |
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## What Your Child Will Learn

| Operations and Algebra | Numbers and Computation | Measurement and Data | Geometry |
|---|---|---|---|
| • **Understand Multiplication and Division of Whole Numbers**<br>• **Use Multiplication to Divide**<br>• **Multiply and Divide within 100**<br>• **Use Operations with Whole Numbers to Solve Problems** | • **Use Strategies and Properties to Add and Subtract**<br>• **Fluently Add and Subtract within 1,000**<br>• **Multiply by Multiples of 10**<br>• **Understand Fractions as Numbers**<br>• **Fraction Equivalence and Comparison** | • **Connect Area to Multiplication and Addition**<br>• **Represent and Interpret Data**<br>• **Solve Time, Capacity, and Mass Problems**<br>• **Solve Perimeter Problems** | • **Attributes of Two-Dimensional Shapes** |

## What Your Child Will Do

| Operations and Algebra | Numbers and Computation | Measurement and Data | Geometry |
|---|---|---|---|
| • Students are introduced to multiplication and division. They use patterns to solve multiplication facts.<br>• Students apply properties of multiplication and use the relationship between multiplication and division to solve problems.<br>• Students explore strategies for solving multiplication and division facts within 100.<br>• Students learn strategies to solve two-step word problems involving the four operations. They draw diagrams and write equations to represent relationships in a problem. | • Students use strategies based on place value and properties of operations to add and subtract within 1,000 and to multiply a one-digit number by a multiple of 10.<br>• Students develop an understanding of fractions including unit fractions and equivalent fractions. They represent measurement data involving fractions on a line plot. | • Students develop an understanding of the concepts of area and a unit square. They learn different ways to measure the area of a rectangle. They relate area to multiplication and addition.<br>• Students represent data on picture graphs and bar graphs. They analyze and interpret data on graphs to solve problems.<br>• Students learn to tell and write time to the nearest minute. They estimate and measure liquid volumes and masses, using appropriate units and tools.<br>• Students recognize perimeter as a measurable attribute of plane figures and distinguish between perimeter and area. | • Students analyze and classify two-dimensional shapes, focusing on quadrilaterals. They use attributes to classify quadrilaterals into more specific groups. |

# Math

## What You Will See

### Operations and Algebra

- Interpret products of whole numbers
- Interpret whole-number quotients of whole numbers
- Use multiplication and/or division within 100 to solve word problems
- Determine the unknown whole number in a multiplication and/or division equation
- Apply properties of multiplication and/or division
- Understand division as an unknown-factor problem
- Fluently multiply and/or divide within 100
- Solve two-step word problems
- Assess the reasonableness of answers to two-step word problems
- Identify and explain arithmetic patterns

### Numbers and Computation

- Round whole numbers to the nearest 10 and 100
- Fluently add and/or subtract within 1000
- Fluently subtract within 1000 using the relationship between addition and subtraction
- Multiply one-digit whole numbers by multiples of 10
- Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts
- Relate fractions to numbers on the number line
- Interpret and show unit fractions on the number line
- Interpret and show fractions of the form a/b on the number line
- Explain equivalence of fractions
- Compare fractions by reasoning about their size
- Relate fraction equivalence to size
- Relate fraction equivalence to the number line
- Generate and model equivalent fractions
- Relate whole numbers and fractions
- Compare two fractions with the same numerator or same denominator and use the symbols >, =, or <

### Measurement and Data

- Tell and write time to the nearest minute
- Measure time intervals in minutes.
- Solve word problems involving addition and subtraction of time intervals in minutes
- Represent a time problem on a number line
- Measure and estimate liquid volumes
- Measure and estimate masses
- Solve one-step word problems involving masses or liquid volumes.
- Recognize area
- Understand concepts of area and square unit measurement
- Relate n unit squares to an area of square units
- Measure areas by counting in square centimeters, square meters, square inches, and square feet
- Measure areas by counting unit squares in improvised units.
- Relate area to the operation of multiplication
- Relate area to the operation of addition
- Find the area of a rectangle by tiling it and/by multiplying the side lengths
- Use area models to represent the distributive property
- Solve perimeter problems
- Exhibit rectangles with the same perimeter and different areas and/or same area and different perimeters
- Draw a scaled picture graph to represent a data set with several categories
- Draw a scaled bar graph to represent a data set with several categories
- Solve problems using information presented in scaled bar graphs
- Find lengths involving halves and fourths of a unit and display them in a line plot

### Geometry

- Understand that shapes in different categories may share attributes
- Understand that shared attributes of shapes can define a larger category
- Recognize rhombuses, rectangles, and squares as examples of quadrilaterals and draw quadrilaterals that are non-examples
- Partition shapes into parts with equal areas
- Express the area of each equal part of a shape as a unit fraction of the whole

# Reading/Writing - Making Meaning - Being a Writer

| Reading Comprehension | Vocabulary | Writing Craft | Language Skills and Conventions |
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## What Your Child Will Learn

- **The Reading Community**
- **Visualizing**
- **Making Inferences**
- **Wondering/Questioning**
- **Using Text Features**
- **Determining Important Ideas**

- **The Writing Community**
- **The Writing Process**
- **Personal Narrative Fiction**
- **Expository Nonfiction**
- **Functional Writing**
- **Opinion Writing Poetry**

## What Your Child Will Do

- Visualize to make sense of texts
- Use schema and make inferences informally
- Informally consider a character's point of view and distinguish it from their own Discuss characters' feelings
- Explore narrative text structure through discussions of character, setting, and problem
- Make inferences to understand characters and character change
- Make connections
- Use wondering/questioning to make sense of fiction and narrative non-fiction
- Explore the themes in fiction and non-fiction stories
- Identify information learned from nonfiction stories
- Use text features to locate and understand information in expository nonfiction texts
- Identify information learned from expository nonfiction texts
- Use wondering/questioning and schema to make sense of expository nonfiction
- Determine important ideas in fiction, nonfiction, and dramatic texts
- Explore narrative text structure through discussions of characters, setting, and theme
- Support ideas with evidence from texts

- Learn and recognizing synonyms
- Learn and antonyms
- Learn the prefixes un- and re- to determine word meanings
- Learn the suffixes -est and -ful to determine word meanings
- Understand context to determine word meanings
- Learn and recognizing idioms
- Learn and recognizing shades of meaning
- Learn and recognizing words with multiple meanings
- Understand how to use a print dictionary to determine word meanings
- Understand how to use an online dictionary to determine word meanings
- Understand how to use a glossary to determine word meanings

- Using sensory details
- Using temporal words and phrases
- Doing pre-research writing and generating questions
- Identifying effective keywords for an Internet search
- Taking notes and organizing information by subtopic
- Employing facts, details, and definitions related to the topic
- Using transitional words and phrases
- Writing tables of contents
- Generating ideas for poems
- Using simile and personification
- Using onomatopoeia and repetition of words and sounds
- Using rhythm and rhyme
- Exploring the length of lines, number of lines and stanzas, placement of words on the page, and shapes of poems

- Identify complete and incomplete sentences
- Identify compound sentences
- Identify complex sentences
- Use singular and plural nouns
- Use common and proper nouns
- Use possessive nouns
- Use subject and object pronouns
- Use possessive pronouns
- Explore noun-pronoun agreement
- Explore verbs
- Explore linking verbs
- Explore simple verb tenses
- Explore regular and irregular past-tense verbs
- Explore subject-verb agreement
- Explore adjectives
- Use comparative and superlative adjectives
- Use adverbs
- Use comparative and superlative adjectives
- Use adjectives and adverbs
- Use formal and informal English
- Explore writing book titles
- Use contractions
- Use commas in addresses
- Use commas and quotation marks in dialogue

# Reading/Writing - Making Meaning - Being a Writer

| Reading Comprehension | Vocabulary | Writing Craft | Language Skills and Conventions |
|---|---|---|---|

## What You Will See

| Reading Comprehension | Vocabulary | Writing Craft | Language Skills and Conventions |
|---|---|---|---|
| • Experiences to texts<br>• Visualize to make sense of figurative language<br>• Wonder and ask questions before, during, and after a read-aloud<br>• Identify features of expository texts<br>• Make inferences<br>• Identify which ideas in texts are important to understand and remember and support their thinking with evidence from the texts.<br>• Use story elements to help them think about stories<br>• Identify important ideas and use those ideas to summarize informally | • Build their speaking and listening skills<br>• Understand synonyms<br>• Understand antonyms<br>• Read the prefixes un- and re- to determine word meanings<br>• Read the suffixes -est and -ful to determine word meanings<br>• Read context to determine word meanings<br>• Read idioms<br>• Read shades of meaning<br>• Read words with multiple meanings<br>• Use a print dictionary to determine word meanings<br>• Use an online dictionary to determine word meanings<br>• Use a glossary to determine word meanings | • Writing engaging openings<br>• Writing endings that draw a story's events to a close<br>• Writing interesting introductions and endings<br>• Write sensory details<br>• Write temporal words and phrases<br>• Generate pre-research writing and generating questions<br>• Identify effective keywords for an Internet search<br>• Taking notes<br>• Organize information by subtopic<br>• Write facts, details, and definitions related to the topic<br>• Write using transitional words and phrases<br>• Create a tables of contents<br>• Create ideas for poems<br>• Write using simile and personification<br>• Write using onomatopoeia and repetition of words and sounds<br>• Create rhythm and rhyme<br>• Write using the length of lines, number of lines and stanzas, placement of words on the page, and shapes of poems | • Identifying and correcting commonly misused words (then/than; your/you're)<br>• Recognizing and correcting sentence fragments<br>• Recognizing and correcting run-on sentences<br>• Proofreading for spelling, punctuation, and grammar<br>• Exploring how poets follow or intentionally break punctuation and capitalization rules for poetic effect<br>• Proofreading for spelling and (if applicable) punctuation<br>• Recognizing and correcting sentence fragments<br>• Using adjectives to make essays more persuasive<br>• Using interesting verbs and adverbs<br>• Recognizing and correcting run-on sentences<br>• Punctuating speech<br>• Punctuating the parts of a letter<br>• Using coordinating conjunctions, such as and, but, and or |

# Social Studies

| History | Geography | Civics | Economics |
|---|---|---|---|
| **What Your Child Will Learn** | | | |
| • **People and Community**<br>• **Communities Change over Time** | • **Communities in Our Country and World**<br>• **The Community and its Environment** | • **American Citizens, Symbols, and Government** | • **Economics of Community** |
| **What Your Child Will Do** | | | |
| • What is culture?<br>• How do people express their culture?<br>• What do immigrants add to a community?<br>• What can comparing different communities tell us about global culture?<br>• How did conflict and cooperation shape early communities?<br>• What makes a community grow?<br>• How do communities of the past compare to today?<br>• How can people and events change communities?<br>• What can comparing different communities tell us about how communities change over time? | • Where is my community and what is it like?<br>• How does my community fit in with my country?<br>• How does climate impact my community?<br>• How is my community affected by the land and water around it?<br>• How do resources impact a community?<br>• How does the environment change the way people live?<br>• How do people change their environment?<br>• How do we meet environmental challenges? | • What makes democracy work?<br>• What are the different parts of the government?<br>• Why do communities need local Government?<br>• Why do we follow rules?<br>• How have heroes helped communities? | • How can communities use their resources?<br>• How do businesses and communities provide goods and resources?<br>• How do people get what they want and need?<br>• What makes a communities economy change? |

# Social Studies

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|---|---|---|---|
| **What You Will See** | | | |
| • A plan for a holiday or festival that their school celebrates that show the different culture<br>• A time line showing key events that played a role in the development of their community | • Create a travel brochure that will use pictures, words, and maps to identify what features make their community special<br>• Create a plan to improve their community's environment and present it orally | • Create a class constitution that sets the rules everyone must follow to make their classroom a fair and safe community. | • Write a news story or blog about a local business and describe how it helps their community |

# Science

| Scientific Process Skills | Systems and Subsystems in Life Science | Models, Patterns, and Properties | Causes and Effects |
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## What Your Child Will Learn

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| • **Scientists help us understand the world around us**<br>• **Scientists do experiments and make observations**<br>• **They use evidence to support their ideas** | • **Plant and Animal Structures**<br>• **Senses and the Nervous System** | • **Earth surface and Erosion**<br>• **Renewable and non-renewable energy**<br>• **Earthquakes, Volcanoes and Tsunami's**<br>• **Rock Layers and Earth's past Landscapes** | • **Energy: Light, Sound and Heat**<br>• **Energy: Transfer**<br>• **Waves (sound)**<br>• **Light Travel and Reflection** |

## What Your Child Will Do

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| • Students will observe and conduct investigations.<br>• Students will discover and record data.<br>• Students will learn lab safety procedures.<br>• Students will learn how to use technology and science equipment.<br>• Students will verbalize science inquires and conclusions. | • Students research animal or plant structures and present an argument based on evidence as to the function of a structure.<br>• Students design and redesign gliders using inspiration from bird structures (biomimicry) to improve its function Perform the Ruler Drop.<br>• Experiment to model how the brain receives information from the senses and responds with an action.<br>• Evaluate the concepts presented in the video and class, and develop explanations through whole class discussion and small group discussions. | • Students investigate and analyze the different changes in Earth's surface and the environment due to weathering and erosion.<br>• Conduct research on the different types of energy generation devices can do, and the environmental impacts of those devices.<br>• Describe the science behind the formation of earthquakes, volcanoes, and tsunamis and the solutions used to help mitigate their impact on humans.<br>• Test the effectiveness of different engineering designs used to protect people from volcanoes and earthquakes.<br>• Students observe rock and fossil evidence that supports an explanation that a high desert/plains landscape was once under the sea.<br>• Students research rock and fossil evidence to help them understand the history of their own landscape. | • Observe a variety of different types of energy being transferred from place to place by sound, light, heat, and electric currents. Use what they have learned about energy transfer to imagine ways to convert one type of energy to another.<br>• Make predictions based on their understanding of cause and effect relationships. Design water wheels that generate their own energy. Write and draw explanations of design strategies.<br>• Students interpret diagrams of transverse and longitudinal waves.<br>• Think about the human eye and brain and how these structures help us see and process information. Explore the human sense of sight.<br>• Explore, compare and utilize different ways that humans have used patterns to transfer information past and present. Explain how patterns in symbols can be used to transfer information using computers. |

# Science

| Scientific Process Skills | Systems and Subsystems in Life Science | Models, Patterns, and Properties | Causes and Effects |
|---|---|---|---|

## What You Will See

| | | | |
|---|---|---|---|
| • Students will make a chart of safety rules and symbols<br>• They will make Graphic Organizers.<br>• Develop graphs, tables, and charts of data Keep a science folder or journal. | • Students recognize parts of a plant or animal's entire body as having functions that help it survive in its environment.<br>• Describe the sensory network involved in receiving, transmitting, and responding to input from senses. | • Students identify the pattern or sequence of events for weathering, erosion and deposition.<br>• Students identify if weathering or erosion caused an observable change in Earth's surface and explain how this change affects the environment over time.<br>• Explain reasons for constructing water wheels in particular ways and what effect different designs have on the water wheels themselves.<br>• Understand what causes natural hazards and the effect they have on people to evaluate the different engineering designs used to protect people from harm.<br>• Students observe rock layer patterns and learn about how the relative ages of those layers help us explain the history of the landscape.<br>• Students learn about the Law of Superposition—undisturbed rock layers form consistent patterns that reflect the relative age of the rock (oldest to most recent, bottom to top) throughout history and in any location on Earth. | • Recognize that energy transfer is occurring all the time in different places in their world.<br>• Observe energy transfer through motion, heat, and sound.<br>• Discuss what types of energy devices are used in their initial functions, what transformed energy is, and what it is used for.<br>• Students observe and compare wave patterns for transverse and longitudinal waves.<br>• Students explore how changes in energy influence wave patterns. Explore the cause and effect relationship between light and vision.<br>• Use, create, and recognize patterns of dots and dashes and numbers to transfer information.<br>• Observe and test out devices engineered to transfer information using scientific concepts related to light, electricity, sound and vision. |