

Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds



Prepared by
Office of Humanities and Early Childhood
Virginia Department of Education

2013

Notice to the Reader

The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups.

Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds can be found in PDF file format on the Virginia Department of Education's Web site

http://www.doe.virginia.gov/instruction/early_childhood/preschool_initiative/foundationblocks.pdf

Supporting Documents

Virginia's Quality Indicators for Responsive Teaching: Creating a High Quality Preschool Learning Environment can be found in PDF format on the Virginia Department of Education's Web site

http://www.doe.virginia.gov/instruction/early_childhood/preschool_initiative/preschool_quality_indicators.pdf

Virginia's Preschool Curriculum Review Rubric and Planning Tool can be found in PDF format on the Virginia Department of Education's Web site

http://www.doe.virginia.gov/instruction/early_childhood/preschool_initiative/preschool_rubric.pdf

Copyright © 2013

by the Virginia Department of Education

P.O. Box 2120

Richmond, Virginia 23218-2120

<http://www.doe.virginia.gov>

All rights reserved.

Reproduction of these materials for instructional purposes in public classrooms in Virginia is permitted.

Superintendent of Public Instruction

Patricia I. Wright

Assistant Superintendent for Instruction

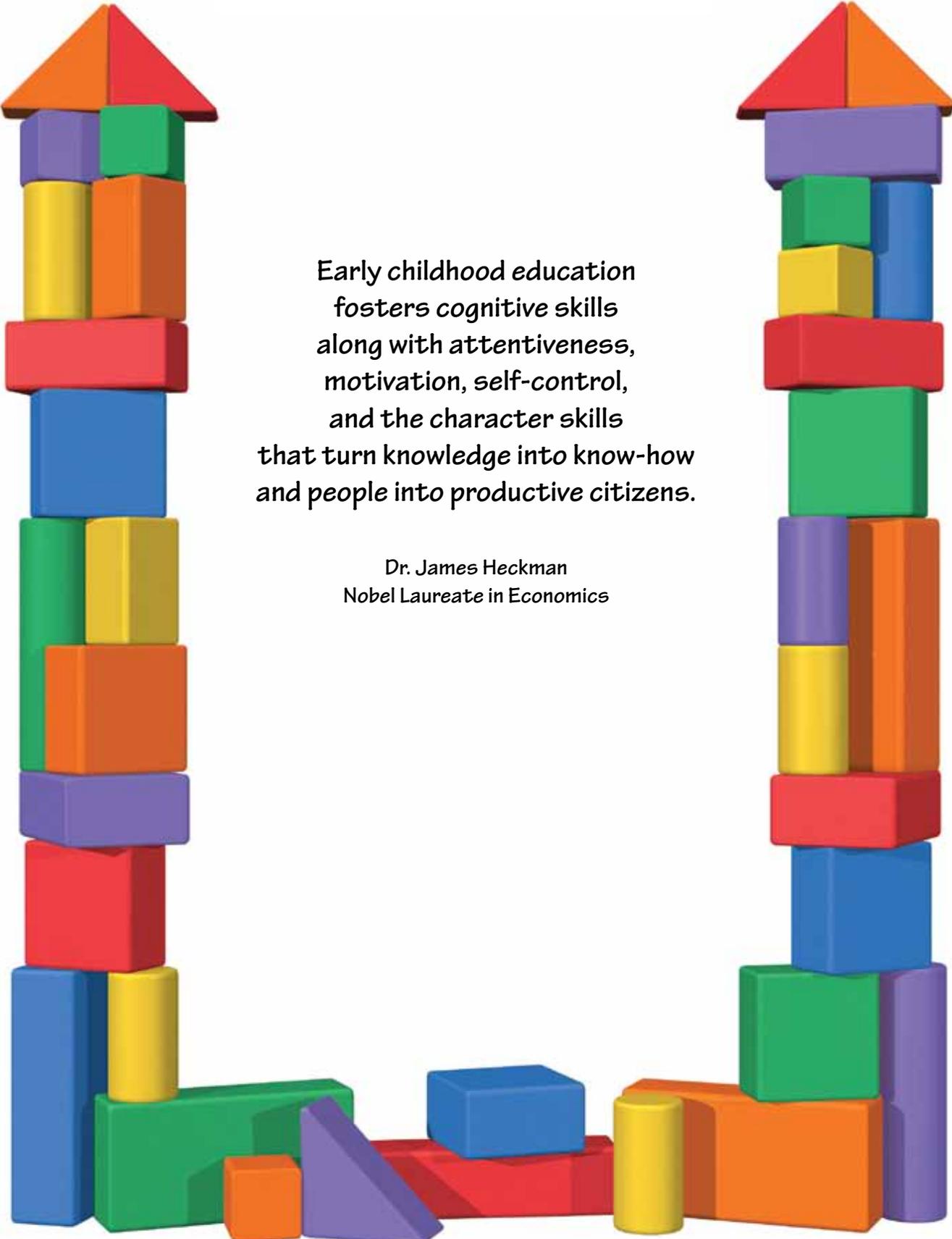
Linda M. Wallinger

Office of Humanities and Early Childhood

Christine Harris, Director

Cheryl Strobel, Associate Director for Early Childhood Education



The image features two tall, narrow towers of colorful blocks on either side of the central text. Each tower is composed of various colored blocks (red, orange, yellow, green, blue, purple) stacked on top of each other. The blocks are arranged in a way that creates a sense of height and stability. The central text is positioned between the two towers, and the overall composition is balanced and visually appealing.

Early childhood education
fosters cognitive skills
along with attentiveness,
motivation, self-control,
and the character skills
that turn knowledge into know-how
and people into productive citizens.

Dr. James Heckman
Nobel Laureate in Economics

Acknowledgements

The Virginia Department of Education wishes to express sincere thanks to the following individuals who assisted in the development and review of ***Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds*** for their time and expertise in early childhood education.

Carolyn Baker, Charlotte County Public Schools
Zelda Boyd, Virginia Department of Social Services
Toni Cacace-Beshears, Children's Harbor
Vonnie Colvin, Longwood University
Jennifer Cooper, Wolf Trap Foundation for the Performing Arts
Mark Ginsburg, George Mason University
Kathy Glazer, Virginia Early Childhood Foundation
Kate Graham, Arlington County Public Schools
Teresa Harris, James Madison University
Anita James, Chesapeake City Public Schools
Gail Jones, Henrico County Public Schools
Sheila Jones, Loudoun County Public Schools
Jaye Harvey, Roanoke City Public Schools
Brenda Hess, Russell County Public Schools
Jo Hodgkin, Wolf Trap Foundation for the Performing Arts
Akua Femi Kouyate, Wolf Trap Foundation for the Performing Arts
Nancy Lantz, Rockingham County Public Schools
Clair Mowling, Longwood University
J. Lee LaPradd, II, Richmond City Public Schools
Marie Masterson, Old Dominion University and Dominican University
Tonjia McCullom, Child, Youth, and School Services, Fort Lee
John Morgan, Voices for Virginia's Children
Boyoung Park, Radford University
Bob Pianta, University of Virginia
Lori Phillips, Wolf Trap Foundation for the Performing Arts
Katie Squibb, Virginia Early Childhood Foundation
Sharon R. Veatch, Child Care Aware of Virginia

DOE Staff Members

Betsy Barton, History and Social Science Specialist
Stacy Freeman, English as a Second Language Specialist
Cherry Gardner, Principal Specialist for Fine Arts
Phyllis Mondak, Early Childhood Special Education Specialist
Donna Poland, Governor's Schools & Gifted Education
Thomas Santangelo, English and Reading Specialist
Lynn Sodat, School Improvement Specialist
Deborah Wickham, Mathematics Specialist
Vanessa Wigand, Principal Specialist for Health, Physical, and Driver Education
Barbara Young, Science Specialist

Table of Contents

Overview of Virginia’s Foundation Blocks for Early Learning	1
--	----------

Virginia Standards for Literacy

Introduction	2
Virginia Literacy Foundation Blocks	3
1 Oral Language	4
2 Vocabulary	5
3 Phonological Awareness	6
4 Letter Knowledge and Early Word Recognition	7
5 Print and Book Awareness	8
6 Writing	9

Virginia Standards for Mathematics

Introduction	10
Virginia Mathematics Foundation Blocks	10
1 Number and Number Sense	11
2 Computation	12
3 Measurement	13
4 Geometry	14
5 Data Collection and Statistics	15
6 Patterns and Relationships	16

Virginia Standards for Science

Introduction	17
Virginia Science Foundation Blocks	17
1 Scientific Investigation, Reasoning, and Logic	18
2 Force, Motion, and Energy	19
3 Matter/Physical Properties	20
4 Matter/Simple Physical and Chemical Reactions	21
5 Life Processes	22
6 Interrelationships in Earth/Space Systems	23
7 Earth Patterns, Cycles and Change	24
8 Resources	25

Table of Contents *continued*

Virginia Standards for History and Social Science

Introduction	26
Virginia History and Social Science Foundation Blocks	26
1 History/Similarities and Differences	27
2 History/Change Over Time.....	28
3 Geography/Location.....	29
4 Geography/Descriptive Words	30
5 Economics/World of Work.....	31
6 Economics/Making Choices and Earning Money	32
7 Civics/Citizenship.....	33

Virginia Standards for Health and Physical Development

Introduction	34
Virginia Health and Physical Development Foundation Blocks	35
1 Skilled Movement/Locomotor Skills	36
1 Skilled Movement/Non-locomotor Skills.....	37
1 Skilled Movement/Manipulative Skills.....	38
2 Movement Principles and Concepts.....	39
3 Personal Fitness.....	40
4 Responsible Behaviors	41
5 Physically Active Lifestyle.....	42
6 Health Knowledge and Skills.....	43
7 Information Access and Use.....	45
8 Community Health and Safety.....	46

Virginia Standards for Personal and Social Development

Introduction	47
Virginia Personal and Social Development Foundation Blocks	47
1 Self-Concept.....	48
2 Self-Regulation.....	49
3 Approaches to Learning	50
4 Interaction with Others.....	51
5 Social Problem Solving.....	52

Table of Contents *continued*

Virginia Standards for Music

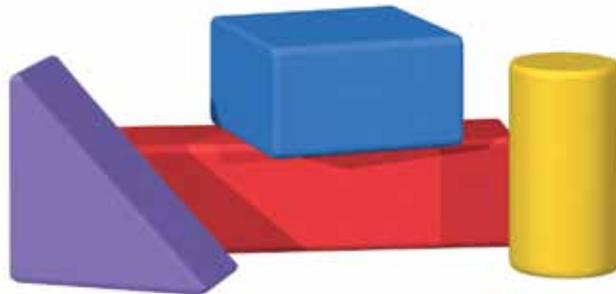
Introduction	53
Virginia Music Foundation Blocks.....	53
1 Music Theory/Literacy	54
2 Performance.....	55
3 Music History and Cultural Context	56
4 Analysis, Evaluation, and Critique.....	57
5 Aesthetics.....	58

Virginia Standards for the Visual Arts

Introduction	59
Virginia Visual Arts Foundation Blocks.....	59
1 Visual Communication and Production	60
2 Art History and Cultural Context.....	61
3 Analysis, Evaluation, and Critique.....	62
4 Aesthetics.....	63

Terms and Definitions	64
------------------------------------	-----------

Resources	66
------------------------	-----------



Overview of Virginia's Foundation Blocks for Early Learning

The value of early education is imperative to the future academic success and the growth of children's intellectual development. ***Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds*** provides a measurable range of skills and knowledge essential for four-year-olds to be successful in kindergarten.

The purpose of this document is to provide early childhood educators a set of minimum standards in literacy, mathematics, science, history and social science, health and physical development, personal and social development, music, and the visual arts, with indicators of success for entering kindergarten that are derived from scientifically-based research. The standards reflect a consensus of children's conceptual learning, acquisition of basic knowledge, and participation in meaningful and relevant learning experiences. The standards are aligned with ***Virginia's Kindergarten Standards of Learning (SOL)*** and ***Virginia's Phonological Awareness Literacy Screening (PALS)***.

The material is organized for use as a tool for early childhood educators in developing curriculum and meaningful classroom activities for every child. Observant and responsive teachers adapt the curriculum, learning environment, and materials and equipment to meet the needs of children with disabilities and developmental delays, with special health care needs, children who are homeless, children who are English Language Learners, and children who are gifted. The type of instructional activities typically present in early childhood programs facilitate this development. Some examples of such activities are: using real-life, hand-on activities, repetition, visual representation, and experiential activities. All of these activities provide a context for meaningful learning necessary for all children, but especially critical for English Language Learners and children with special needs.

Each ***Foundation Block*** is in box format and is organized to build towards the ***Virginia Kindergarten Standards of Learning***. Following the boxes are expectation indicators for the ***Foundation Blocks***. Sample teaching activities are included to assist teachers in the planning of meaningful classroom activities. Helpful definitions and references to national consensus documents and resources are listed in the back of this document.

Although subject area blocks are presented separately, teachers should emphasize integration of learning across subjects. Many of the sample activities show how teachers can integrate experiences for young children across subject areas effectively. For example, supporting enriched language experiences within science and social studies can provide children with the opportunity to increase vocabulary development through meaningful conversation. Curriculum integration enables preschool teachers to identify the connections within and among the content areas, and to provide a relevant context for children's engagement in learning.

Self-regulation is emerging as a strong predictor of school achievement and is a priority focus area along with literacy and mathematics. Social development is supported when children participate in small and large group learning activities and engage in positive interactions with teachers and peers. The priority is to encourage growing independence through a broad range of activities and experiences that promote children's developing competence. The ***Foundation Blocks*** provide practical application within and across content areas to promote quality teaching and learning.

Virginia Standards for Literacy

Introduction

Successful experiences with listening, speaking, reading, and writing are critical to a child becoming a successful reader. Given quality opportunities to interact with responsive adults and peers in language and print-rich environments, young children make connections and interact with the world around them by developing listening and speaking skills, phonological awareness, letter knowledge and print awareness, comprehension, vocabulary and word knowledge, and writing. The following descriptions are based on scientifically-based reading research that will help frame the categories of Literacy Foundation Blocks.

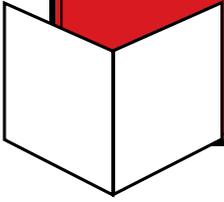
Oral language experiences include communication activities that focus on speaking and listening. Educators and caregivers of young children must engage them in conversation throughout daily and consistent routines, asking open-ended questions, and presenting new words to allow expansion of vocabulary. In addition, being responsive to children's questions and allowing them to lead conversations are essential in building oral language skills.

Reading begins early with the understanding that print and sound are related, and occurs through ongoing positive interactions and daily experiences with literacy that are predictive of early success in reading. Phonological awareness or the ability to notice and manipulate sounds in spoken language includes alliteration, or identifying the same beginning consonant sounds in a group of words, recognizing

and producing rhymes, and segmenting, or separating individual syllables into sounds. Through these kinds of daily activities, young children begin to develop initial understandings about language and build the necessary prerequisite skills to learn to read.

Children's interest in writing is heightened when adults around them use it as a means of communication. Children need to be given daily experiences where they observe writing as communication and have numerous opportunities throughout the day to be writers themselves. Reading, oral language, and writing become connected as children develop and follow a sequential progression through daily and frequent classroom activities. Thus, it is important for teachers to encourage this progression, and foster it in relation to multiple literacy activities.

Research has shown that children who progress well in literacy development are immersed in environments consisting of rich children's literature, varied and frequent language experiences, and many opportunities to write. Children develop proficiency at different rates, and benefit from individual support through varied approaches and enriched activities that are designed to build competence. By listening and telling stories, reading aloud frequently throughout the school day, rereading familiar texts, and providing repeated opportunities to write, children will develop literacy skills that foster ongoing academic success.



Virginia Literacy Foundation Blocks

Oral Language:

The child will develop listening and speaking skills by communicating experiences and ideas orally.

The child will develop an understanding of word meanings through the use of appropriate and expanding vocabulary.

Reading:

The child will manipulate various units of speech sounds in words.

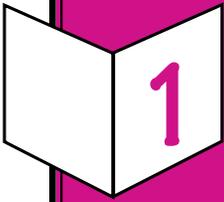
The child will demonstrate basic knowledge of the alphabetic principle and understand that the letters in written words represent the sounds in spoken words.

The child will demonstrate knowledge of print concepts and understand the connection between the spoken and written word.

Writing:

The child will write using a variety of materials and technology to convey thoughts, ideas, and experiences.





Virginia Literacy Foundation Block 1

Oral Language

The child will develop listening and speaking skills by communicating experiences and ideas orally.

Oral Language

Children gain language and vocabulary skills by having multiple and frequent opportunities to talk, as well as listen to, adults and peers. These opportunities must occur frequently throughout the day as children begin to read and write.

- a) Listen with increasing attention to spoken language, conversations, and texts read aloud.
- b) Correctly identify characters, objects, and actions in a text with or without pictures and begin to comment about each.
- c) Make predictions about what might happen in a story.
- d) Use complete sentences to ask and answer questions about experiences or about what has been read.
- e) Use appropriate and expanding language for a variety of purposes, e.g., ask questions, express needs, get information.
- f) Engage in turn taking exchanges and rules of polite conversation with adults and peers, understanding that conversation is interactive.
- g) Listen attentively to stories in a whole class setting.
- h) Follow simple one and two step oral directions.

Sample Activities

- ◆ Engage children in conversation frequently throughout the day. Model the etiquette of conversation by using complete sentences, correct grammar, and responding accordingly in both the speaker and listener roles.
- ◆ Respond to children's communication and allow them to take the conversational lead while encouraging them to speak audibly in complete sentences, expressing thoughts, feelings and ideas clearly.
- ◆ Model asking who, what, where, when, why, and how questions to obtain information, seek help, or clarify something not understood.
- ◆ Engage in interactive activities or games with children to focus on listening comprehension, e.g., "Simon Says."
- ◆ Consistently support rules of good listening and speaking on a daily basis.
- ◆ When reading aloud, provide opportunities for children to predict what will happen next, to comment on the story, and to connect the story to personal experiences. Model questioning and visualizations for students.



Virginia Literacy Foundation Block 2

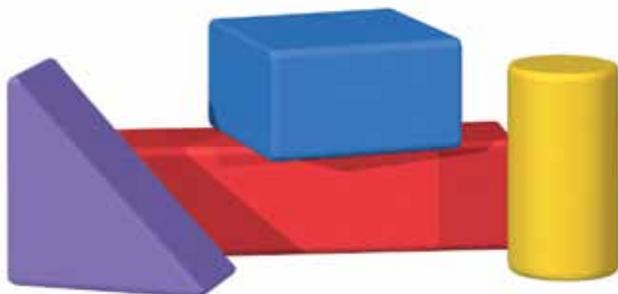
Vocabulary

The child will develop an understanding of word meanings through the use of appropriate and expanding vocabulary.

Vocabulary

The more children know about the world around them, the easier it is for them to express new information, ideas, and vocabulary to communicate this knowledge. Helping children to relate experiences to new ideas and concepts also assists in the development of vocabulary and related skills.

- a) Use size, shape, color, and spatial words to describe people, places, and things.
- b) Listen with increasing understanding to conversations and directions.
- c) Use expanding vocabulary with increasing frequency and sophistication to express and describe feelings, needs, and ideas.
- d) Participate in a wide variety of active sensory experiences to build vocabulary.



Sample Activities

- ◆ Read books and stories aloud to children daily, e.g., *Growing Vegetable Soup*. Have children re-enact the story through dramatic play. Help children print the names of plants from the story on signs. Match garden signs with real objects in the rooms.
- ◆ Make vegetable soup. Use the recipe at the end of the book to make vegetable soup with ingredients donated by families.
- ◆ Read poems, sing songs, and take field trips or walks to build enriched vocabulary about a certain theme or topic, such as plants, animals, seasons, or neighborhood helpers.
- ◆ Have a “song jar” or “poem pocket” where children can select a song to sing or a poem to read during the day.
- ◆ Use simple songs, poems, chants, and rhymes to teach students daily classroom procedures such as lining up, meeting for large group, transitions, and cleaning up.
- ◆ Provide daily opportunities for children to use new vocabulary and engage in conversation in center or play-based activities as they take on roles or act out book characters.
- ◆ Play learning games like “I Spy” and “Twenty Questions.”
- ◆ Provide children with a collection of everyday objects and have students describe and sort the objects according to various characteristics.



Virginia Literacy Foundation Block 3

Phonological Awareness

The child will manipulate the various units of speech sounds in words.

Phonological Awareness

Phonological awareness is a broad term that includes phonemic awareness. Phonological awareness is highly predictive of a young child's success in beginning to read. It is the term used to describe a child's understanding that spoken words consist of sounds. Children who are phonologically aware demonstrate an ability to hear and manipulate the sound structure of language at the word, syllable and phoneme (individual sound) levels. Phonological awareness typically progresses in this developmental continuum: rhyming, alliteration, sentence blending and segmenting, syllable splitting [onset and rime], and phoneme blending, and segmenting.

Research has proven that how quickly children learn to read often depends on how much phonological awareness they have prior to, and in conjunction with, formal reading instruction.

- a) Identify words that rhyme and generate simple rhymes.
- b) Identify words within spoken sentences.
- c) Begin to produce consonant letter sounds in isolation.
- d) Successfully detect beginning sounds in words.
- e) Begin to isolate or produce syllables within multisyllable words.

Sample Activities

- ◆ Complete familiar nursery rhymes by leaving out a word, e.g., "Hickory, Dickory Dock. The mouse ran up the ____." Hold up a picture of the missing word.
- ◆ Ask children to listen for a target sound, e.g., /t/. Have children put "thumbs up" if they hear the /t/ sound or thumbs down if they do not hear the /t/ sound at the beginning of words.
- ◆ Play rhyming word games, like making up new verses to familiar songs or rhymes or replacing familiar rhymes with silly ones, e.g., "Humpty Dumpty," "Gumpty, Numpty."
- ◆ Use words from a story you have just read aloud. Ask children to listen to pairs of words and determine if they rhyme, e.g., "house/mouse" or "cook/clean."
- ◆ Clap hands to segment words in sentences, syllables within multisyllabic words, or phonemes within single-syllable words.
- ◆ Target sounds in context through rhyming songs, poems, and raps. Raise your voice when the words rhyme, e.g., "Jack and Jill, went up the hill."



Virginia Literacy Foundation Block 4

Letter Knowledge and Early Word Recognition

The child will demonstrate basic knowledge of the alphabetic principle and understand that the letters in written words represent the sounds in spoken words.

Letter Knowledge and Early Word Recognition

Letter knowledge is an essential component to beginning reading and writing. Functions of letters in writing and their connection to sounds are critical components in children's success in learning to read. In combination with phonological awareness, letter knowledge is the critical indicator to children's understanding of the alphabetic principle and the beginning connection to printed words. Classroom alphabets should be placed at the child's level of sight.

- a) Identify and name uppercase and lowercase letters in random order.
- b) Identify the letter that represents a spoken sound.
- c) Provide the most common sound for the majority of letters.
- d) Begin to match uppercase and lowercase letters.
- e) Read simple/familiar high-frequency words, including child's name.
- f) Notice letters in familiar everyday context and ask an adult how to spell words, names, or titles.

Sample Activities

- ◆ Go on letter and word hunts in familiar areas. Have children identify letters and/or high-frequency words in their environment.
- ◆ Create classroom labels. Brainstorm with students a list of simple labels for common classroom objects. Write the words on sentence strips with pictures. Have children place the labels on the correct object.
- ◆ Provide varied forms of printed materials and props in centers for dramatic play, e.g., menus, calendars, labels, pictures and photographs with captions, recipes, and envelopes with printed words.
- ◆ Encourage the use of technology for early literacy activities, such as phonics, letter or word matching games that represent various levels of academic ability.
- ◆ Provide sensory materials for children to form, model, and create letters with paint, yarn, pipe cleaners, play dough, and sand.
- ◆ Use letter tiles, picture tiles, and children's names to assist in letter knowledge and word recognition.



Virginia Literacy Foundation Block 5

Print and Book Awareness

The child will demonstrate knowledge of print concepts and understand the connection between the spoken and written word.

Print and Book Awareness

The ability to match spoken words to print involves developing a child's concept of words. Instruction may include modeling how print is organized, pointing to words on a page as they are read, and having children "finger-point read" memorized text. Through daily experiences with reading and writing, young children develop their emerging concept of words. They learn that print conveys meaning and accompanying images or illustrations help them comprehend print. An understanding that reading and writing are ways to obtain information and knowledge, generate and communicate thoughts and ideas, and solve problems is developed as young children consistently explore books and engage with print.

- a) Identify the front and back cover of a book.
- b) Identify the location of the title and title page of a book.
- c) Identify where reading begins on a page (first word).
- d) Follow text with a finger, pointing to each word as it is read from left to right and top to bottom with assistance.
- e) Distinguish print from pictures.
- f) Turn pages one at a time from the front to the back of a book.

Sample Activities

- ◆ Display a book, tell the children, "This is the front of the book," and read the title of the book while pointing out each word (matching voice to print), "This is the title of the book."
- ◆ Model opening a book, "We will read this page first," and continue modeling to point out the first word, "we read this way," moving finger from left to right (tracking). This should become a daily practice when reading aloud to children (voice-to-print match).
- ◆ Introduce various forms of print and talk about why people read with different types of print. Forms of print can include: nonfiction topic books, how-to books, poetry books, storybooks, labels, directions on products, street signs, and ads.
- ◆ Read aloud frequently on a daily basis. Advanced readers may be able to assist with this activity.
- ◆ Enable the child to engage with print in a variety of formats including electronic media.
- ◆ Participate in class reading clubs, trips to the local public library, and other reading events. Provide a variety of reading materials at various skill levels.



Virginia Literacy Foundation Block 6

Writing

The child will write using a variety of materials and technology to convey thoughts, ideas, and experiences.

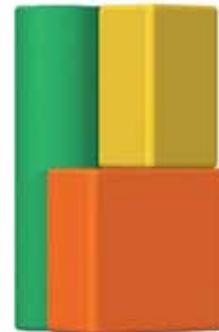
Writing

Through early writing experiences, young children develop understandings about the functions of written language. Children develop an awareness that words can be written. They begin to generate ideas about how written language works and explore its uses. Young children's attempts to write through scribbling, drawing, letter approximations, and phonetic spellings help them to understand writing as a means to communicate ideas and information. Over time, attempts at early writing will more closely align to conventional writing.

- a) Distinguish print from images or illustrations.
- b) Demonstrate use of print to convey meaning.
- c) Copy or write letters and numbers using various materials.
- d) Print first name independently.
- e) Begin to use correct manuscript letter and number formation.
- f) Copy various words associated with people or objects within the child's environment.
- g) Use phonetically spelled words to convey messages or tell a story.
- h) Understands that writing proceeds left to right and top to bottom.

Sample Activities

- ◆ Provide opportunities for children to write in a variety of contexts including group writing and individual writing.
- ◆ Place clipboards with unlined paper and a variety of writing materials (colored pencils, crayons, markers) in learning centers.
- ◆ Use available digital tools for reading and writing, such as children's stories, creating books that compile children's drawings, and providing books with digital recordings at a listening center.
- ◆ Encourage children to "write" about their play experiences, e.g., what they build in the block center, grocery lists in the dramatic play center, etc.
- ◆ Encourage children to dictate words, phrases, or sentences to an adult to record on paper.

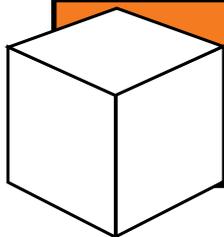


Virginia Standards for Mathematics

Introduction

Young children are natural learners, and they bring informal mathematics knowledge and experiences to the preschool classroom. They continually construct mathematical ideas based on their experiences with the environment, their interactions with adults and other children, and their daily observations. Children approach new problem solving tasks with curiosity and a sense of experimentation. Mathematics learning

builds on these characteristics of young children, and challenges children to explore ideas about patterns and relationships, order and predictability, and logic and meaning. Appropriate instruction occurs in environments that are rich in language, encourage children's thinking, and nurture children's explorations and ideas. These ideas include the concepts of number, pattern, measurement, shape, space, and classification.



Virginia Mathematics Foundation Blocks

Number and Number Sense:

The child will count with understanding and use numbers to tell how many, describe order, and compare.

Computation:

The child will recognize change in groups (sets/collections) when objects are both added to and taken away from the groups (sets/collections).

Measurement:

The child will identify and compare the attributes of length, capacity, weight, time, and temperature.

Geometry:

The child will describe simple geometric shapes (circle, triangle, rectangle, and square) and indicate their position in relation to an individual, and to other objects.

Data Collection and Statistics:

The child will participate in the data gathering process in order to answer questions of interest.

Patterns and Relationships:

The child will identify simple patterns of concrete objects and use them to recognize relationships.



Virginia Mathematics Foundation Block 1

Number and Number Sense

The child will count with understanding and use numbers to tell how many, describe order, and compare.

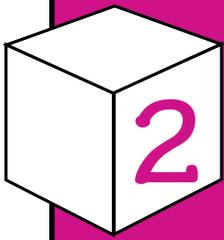
Number and Number Sense

Young children enter preschool with a foundation of experiences with numbers. To develop an understanding of numbers and number sense, children must have daily experiences where they compare numbers and count in ways that are personally meaningful and challenging.

- a) Count forward to 20 or more. Count backward from 5.
- b) Count a group (set/collection) of five to ten objects by touching each object as it is counted and saying the correct number (one-to-one correspondence).
- c) Count the items in a collection of one to ten items and know the last counting word tells “how many.”
- d) Compare two groups (sets/collections) of matched objects (zero through ten in each set) and describe the groups using the terms more, fewer, or same.
- e) Use ordinal numbers (first through fifth) when describing the position of objects or groups of children in a sequence.

Sample Activities

- ◆ Include counting as part of the daily routine (count days in a week, months in a year, lunch count, and attendance).
- ◆ Read counting books.
- ◆ Include counting as a part of special classroom activities and materials (recipes, recording science observations, names).
- ◆ Provide collections of one to twenty objects (buttons, plastic animals, plastic lids, keys) that encourage counting.
- ◆ Encourage one-to-one correspondence as children hand out materials (one item for each child).
- ◆ Ask children, as they line up, who is first in the line, second, third, fourth, and fifth. As children participate in races on the playground, ask who crossed the line first, second, third, fourth, and fifth (ordinal numbers).
- ◆ Count backwards from 5 to prepare students for transitions from one activity to another.
- ◆ Play simple board games that promote one-to-one correspondence as children count spaces and take turns.



Virginia Mathematics Foundation Block 2

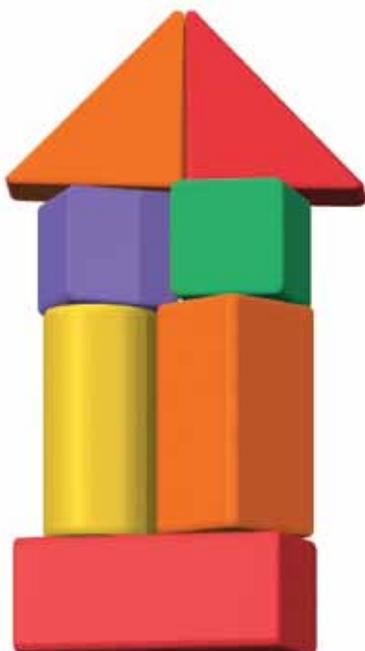
Computation

The child will recognize change in groups (sets/collections) when objects are both added to and taken away from the groups (sets/collections).

Computation

Young children notice the effects of increasing or decreasing the items in a collection of objects. To develop an understanding of computation, children need many opportunities to match and count objects. This will allow children to find out more dependably which quantity is more and to use counting to describe changes in a set.

- a) Describe changes in groups (sets/ collections) by using more when groups of objects (sets) are combined (added together).
- b) Describe changes in groups (sets/ collections) by using fewer when groups of objects (sets) are separated (taken away).



Sample Activities

- ◆ Tell stories and have the children use counting objects (toy cars, toy animals, cookie shapes) to solve problems involving adding together or combining groups. For example, “A mama bear and a daddy bear are walking in the woods with their two baby bears. How many bears are there altogether?”
- ◆ Tell stories using visual supports where groups or objects are taken away or separated. For example, “Three cars were parked in front of the school, then two cars drove away; how many are left? Five goldfish swam in the aquarium; the teacher used a net to take two out. How many goldfish are left in the aquarium?” Have children use toy cars or goldfish crackers to show what happens in each story.
- ◆ Use predictable finger plays and traditional counting songs, i.e., “Five Little Monkeys,” “Ten in the Bed” to practice adding and taking away objects. Have children act out the songs and finger plays or use finger puppets or other manipulatives to represent the characters as they determine how many are left or how many are added.



Virginia Mathematics Foundation Block 3

Measurement

The child will identify and compare the attributes of length, capacity, weight, time, and temperature.

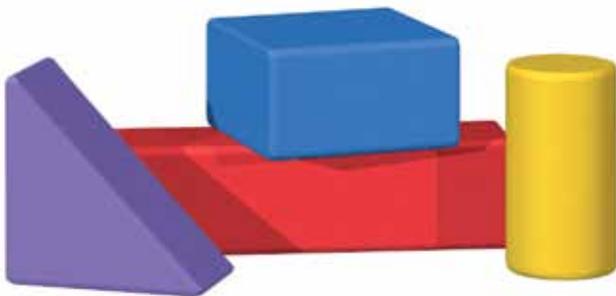
Measurement

Children naturally make comparisons. From a very young age, children compare who is taller and who has more. Comparison is the first step in developing an understanding of measurement. Young children should be immersed in activities that allow them to use their senses to make direct comparisons. They should also experience, informally, tools that are used for measurement.

- a) Recognize attributes of length by using the terms longer or shorter when comparing two objects.
- b) Know the correct names for the standard tools used for telling time and temperature, and for measuring length, capacity, and weight (clocks, calendars, thermometers, rulers, measuring cups, and scales).
- c) Use the appropriate vocabulary when comparing temperatures, e.g., hot, cold.
- d) Use appropriate vocabulary when describing duration of time, e.g., hour, day, week, month, morning, afternoon, and night.

Sample Activities

- ◆ Ask children to compare the length of two pencils or crayons of different lengths by matching the ends of the objects being compared. Ask the children to tell which of the two objects is longer and which is shorter. Provide children with opportunities to compare many examples of length, i.e., lines of children, lines of cups on a table.
- ◆ When using the standard tools for telling time and measuring attributes of length, capacity, and weight (clocks, calendars, balance scales, thermometers, rulers, measuring cups) in daily routines and activities, have children use the correct vocabulary for the tools.
- ◆ Plan food preparation activities to include the use of clocks, thermometers, and balance scales.
- ◆ Explore the concept of weight by holding two different objects to determine which one is heavier, and label one heavier and the other lighter. Children can also begin to place objects on a balance scale and determine if they balance (weigh the same), or if one pan is lower than the other (the object weighs more). Making discoveries and predictions using skills related to balance leads to standard measurement experiences.





Virginia Mathematics Foundation Block 4

Geometry

The child will describe simple geometric shapes (circle, triangle, rectangle, and square) and indicate their position in relation to an individual and to other objects.

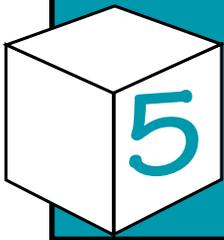
Geometry

Geometry for young children involves observing and describing the shapes found everywhere in their environment. Children naturally use geometric shapes and spatial comparisons as they begin to express themselves through drawing and constructions. This familiarity is a foundation for learning experiences involving shape, position, and orientation in space.

- a) Match and sort shapes (circle, triangle, rectangle, and square).
- b) Describe how shapes are similar and different.
- c) Recognize and name shapes (circle, triangle, rectangle, and square).
- d) Describe the position of objects in relation to other objects and themselves using the terms next to, beside, above, below, under, over, top, and bottom.

Sample Activities

- ◆ Provide opportunities for children to find shapes in their environment, inside and outside the classroom. They should find some that are similar and different, and use the appropriate language to describe how they are similar and different.
- ◆ Create cutouts of shapes (circle, triangle, rectangle, and square) from various types of materials (plastic lids, construction paper, cardboard, fabric). Have children sort the cutout shapes into groups. Have children describe the ways they have sorted the shapes, i.e., by color, shape, number, and texture. Encourage the children to label the shapes with the appropriate terms.
- ◆ Introduce children to three-dimensional shapes through everyday experiences with cans (cylinders), balls (spheres), and playground cones or ice-cream cones. Teachers can describe these objects and refer to their mathematical names.
- ◆ Provide children with a variety of materials to make shapes by tracing around cutouts of shapes and combining them to create pictures.
- ◆ Provide many opportunities for children to build with blocks (unit blocks, building bricks, and linking blocks) giving children meaningful experiences using geometric shapes.



Virginia Mathematics Foundation Block 5

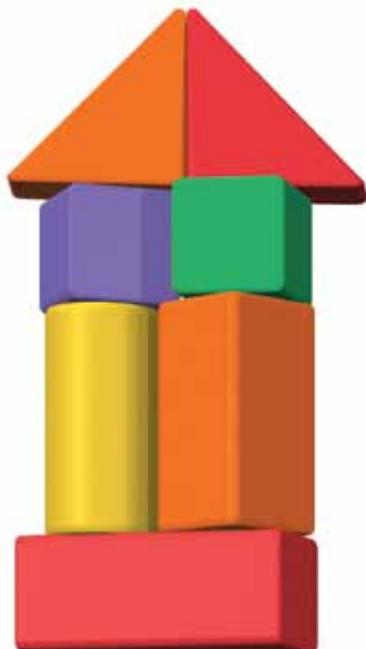
Data Collection and Statistics

The child will participate in the data gathering process in order to answer questions of interest.

Data Collection and Statistics

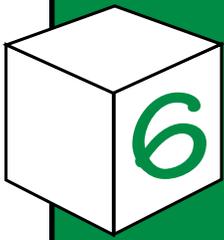
Children are naturally inquisitive; they start exploring their world, asking questions, and developing opinions from a young age. To build upon this strength, children need to be encouraged to ask questions, collect answers, and then talk about what they found out. Analyzing data is a key step in making sense of information and the world around us.

- a) Collect information to answer questions of interest to children.
- b) Use descriptive language to compare data by identifying which is more, fewer, or the same in object and picture graphs.



Sample Activities

- ◆ Provide opportunities for children to participate in the process of collecting data about a question, i.e., “How did you come to school today?” Children can place a picture of a car, bus, or a person walking to create a picture graph to indicate the way they traveled to school. Toy vehicles and toy people may be used as well to create an object graph. Ask questions about the graph once it is complete, i.e., “Which way of traveling, by car, by bus, or by walking, was used by more children? Which way was used by fewer children?”
- ◆ Use the children themselves to create a real graph of the data. For example, have children stand in groups by the types of shoes they are wearing. Now have them count the number of children who have each type of shoe. Record the information in a picture graph for children to use in comparing the data. Ask questions about the picture graph.
- ◆ Have children line up in two groups, boys and girls. Ask which group has more and which has less or are they the same. Create an object or picture graph with this information.
- ◆ Set up a chart to list the children who paint pictures each day. Use a large piece of paper and let the children write down their names. Discuss the findings at the end of the week. Encourage the use of descriptive language.



Virginia Mathematics Foundation Block 6

Patterns and Relationships

The child will identify simple patterns of concrete objects and use them to recognize relationships.

Patterns and Relationships

Algebra begins with a search for patterns. Being able to identify patterns allows young children to make generalizations and predictions beyond the information directly available. The recognition and analysis of patterns are important components of a child's intellectual development. Children should have many opportunities to engage in pattern related activities and recognize patterns in their everyday environment.

- a) Sort and classify objects according to one or two attributes (color, size, shape, and texture).
- b) Identify and explore simple patterns, i.e., AB, AB; red, blue, red, blue.
- c) Use patterns to predict relationships between objects, i.e., the blue shape follows the yellow shape, the triangle follows the square.

Sample Activities

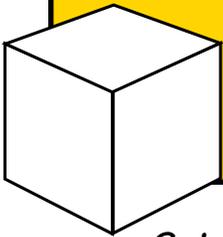
- ◆ Provide children with objects, i.e., beads, buttons, rocks, bear counters for sorting by attributes. The teacher asks children to describe (classify) their sort.
- ◆ Provide children with many opportunities to observe patterns in the environment, i.e., in clothing, buildings, brick walls, etc. Patterns are part of the world in which we live. Help children to become aware of patterns and learn ways to make patterns.
- ◆ Involve children in predicting patterns when lining up children by starting the line with a boy, a girl; a boy, a girl. Have the children predict who would come next.
- ◆ Have children sort themselves according to a particular attribute such as hair color, type of shoe, color of clothing.
- ◆ When children have had a lot of "hands-on" patterning experiences with real objects, make a pattern by drawing and coloring a string of bead shapes on a card. Encourage children to string real beads to duplicate the pattern.

Virginia Standards for Science

Introduction

Preschool children are naturally curious about the world around them. Their natural curiosity provides the basis for understanding and using science processes and practices. Preschool education provides an opportunity for students to experience the “big ideas.” Through phenomena including patterns

of weather, changes when substances are combined, and plant growth, students are introduced to the concept of change. The significance of natural resources and conservation is also introduced in the preschool standards. Preschool children are born scientists, and nurturing their natural love of science is key.



Virginia Science Foundation Blocks

Scientific Investigation, Reasoning, and Logic:

The child will make observations, separate objects into groups based on similar properties, use simple investigation tools, develop questions based upon observations using the five senses, and conduct simple scientific investigations.

Force, Motion, and Energy:

The child will describe and compare different kinds of motion that objects can make and will describe how simple tools work.

Matter/Physical Properties:

The child will develop language to describe physical properties of objects and use the identified properties to sort the objects.

Matter/Physical and Chemical Reactions:

The child will conduct simple science experiments to examine changes in matter when substances are combined.

Life Processes:

The child will observe and describe the characteristics of living things, compare the growth of a person to the growth of a plant and an animal, and describe the basic needs and the basic life processes of each.

Interrelationships in Earth/Space Systems:

The child will be able to observe and explore major features of the natural world around him/her, both on Earth and in the sky.

Earth Patterns, Cycles, and Change:

The child will identify simple patterns in his/her daily life and identify things that change over time.

Resources:

The child will practice reusing, recycling, and conserving energy on a daily basis.



Virginia Science Foundation Block 1

Scientific Investigation, Reasoning, and Logic

The child will make observations, separate objects into groups based on similar properties, use simple investigation tools, develop questions based upon observations using the five senses, and conduct simple scientific investigations.

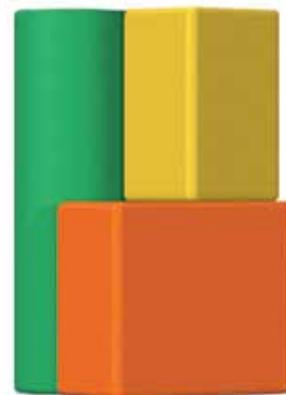
Scientific Investigation, Reasoning, and Logic

Young children have been observing the world around them since birth. This block will help children develop language to describe their observations. It will teach them to make careful observations, sometimes with the aid of tools, and to notice patterns within their observations. It should be noted that while some activities may be done to develop scientific processes and practices alone, they are best used in conjunction with other big ideas. For example, observations of leaves provide ample opportunities to tie in discussions about color, shape, and living things.

- a) Use the five senses to explore and investigate the natural world.
- b) Use simple tools and technology safely to observe and explore different objects and environments.
- c) Ask questions about the natural world related to observations.
- d) Make predictions about what will happen next based on previous experiences.
- e) Conduct simple scientific investigations.

Sample Activities

- ◆ Have children explore and collect pinecones. Use the five senses to describe how the pinecone looks, feels, and smells. Fill the pinecones with shortening, roll them in birdseed and hang outside for birds. Use pictures to identify birds that come to the feeder. Have children listen for bird songs and try to imitate the sounds.
- ◆ Have children assist the teacher in lining up a collection of rocks from smallest to largest. Describe the rocks using their five senses.
- ◆ Store all “like” toys together. All linking blocks go in one bin, all other blocks in another, etc. Place pictures on the front of bins to assist children. As children progress, sort them into more specific categories such as all blue linking blocks or all red linking blocks.
- ◆ Compare the lengths of two objects by matching the end of one object with another. Objects to use may include shoes, books, and pencils. Discuss which is longer and which is shorter.





Virginia Science Foundation Block 2

Force, Motion and Energy

The child will describe and compare different kinds of motion that objects can make and will describe how simple tools work.

Force, Motion, and Energy

Children can deepen their understanding of basic physics by describing the motion of various objects and how those objects are used in our daily lives. They can use purposeful play with objects such as a ball, a toy car, or a block of wood to observe and compare how each moves and changes position (speed and direction), and how that motion might change if the surface on which it moves is changed. They can compare the effects of common forces on the objects such as pushes and pulls. Exploration with magnets expands the study of the movement of objects by adding a unique cause of motion. Children can also explore how simple tools use motion to help us work, such as a hammer, a wheel, or a screwdriver.

- a) Describe, demonstrate, and compare the motion of common objects in terms of speed and direction, e.g., fast, slow, up, down.
- b) Describe and demonstrate the effects of common forces (pushes and pulls) on objects.
- c) Describe the effects magnets have on other objects.
- d) Investigate and describe the way simple tools work, e.g., a hammer, a wheel, a screwdriver.

Sample Activities

- ◆ Provide children with magnets and allow them the opportunity to explore by touching magnets to objects around the room. Have them make predictions. “Do you think this item will stick to the magnet?” Make a picture graph describing the results.
- ◆ Have children create ramps. Test toy cars and make predictions about speed. Use a push or other external force to influence the speed of the cars. Provide different surfaces such as carpet versus a smooth surface such as plastic.
- ◆ Provide opportunities for children to explore the use of different tools such as magnifying glasses, microscopes, scales, balances, tricycle wheels, etc.
- ◆ Allow children to explore with magnetic toys such as the magic wand that allows children to move iron filings over the man’s face and the wooden train cars that connect together with magnets.
- ◆ Have children experiment with a ball, block, acorn, top, stick, feather, seedpod, etc. Observe what happens when objects are placed on top of a slope or slide, or when they are dropped. Discuss how objects move differently. Increase the use of new vocabulary words. Describe the action with words like “slide,” “turn,” “roll,” and “twirl.”



Virginia Science Foundation Block 3

Matter/Physical Properties

The child will develop language to describe physical properties of objects and use the identified properties to sort the objects.

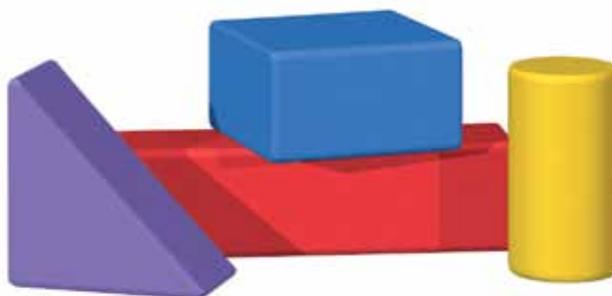
Matter/Physical Properties

Children can use their five senses to identify and describe objects by their physical properties. A variety of objects should be provided for them to sort, group, and classify in meaningful ways based on one or more of the identified properties. Children should specifically have the opportunity to experiment with water in different forms and to experiment with objects sinking or floating when put into water. This block also offers the opportunity for children to develop vocabulary that describes the physical properties of objects. For example, a child might describe a rough piece of sandpaper as “sticky” (meaning that it catches his/her hand as it passes over the sandpaper) because he/she lacks the vocabulary to properly describe it.

- a) Describe and sort objects by their physical properties, e.g., color, shape, texture, feel, size and weight, position, speed, and phase of matter (solid or liquid).
- b) Recognize water in its solid and liquid forms.
- c) Describe the differences between solid and liquid objects.
- d) Sort objects based on whether they sink or float in water.

Sample Activities

- ◆ Have shape scavenger hunts. Give children a paper shape, such as a circle. Ask them to search the room for objects with the same shape as the paper circle.
- ◆ Have children line up at transition times, such as lunch, by colors they are wearing.
- ◆ Make predictions as a class as to what will happen to ice cubes left at room temperature. Children can use popsicle sticks and place their stick in a cup matching their predictions.
- ◆ Provide a science learning area that contains a variety of items to explore, classify, and compare, e.g., shells, rocks, leaves, keys, nuts and bolts, seedpods, pine cones. Allow children to talk with each other and compare ideas.
- ◆ Use picture graphs for children to document items that sink and items that float.





Virginia Science Foundation Block 4

Matter/Simple Physical and Chemical Reactions

The child will conduct simple science experiments to examine changes in matter when substances are combined.

Matter/Simple Physical and Chemical Reactions

Through simple experiments with familiar objects, children are able to see how combining substances sometimes changes the substances and sometimes does not. Children should make predictions about what might happen before the experiment is conducted and should analyze the actual outcome from the experiment at the conclusion. Children should be encouraged to ask questions about what they see or think might happen. This block allows children the opportunity to be “laboratory scientists” and to see how a science experiment is conducted. Expand vocabulary by promoting the use of scientific words such as “predict,” “observe,” “experiment,” “explore,” “compare,” and “record.”

- a) Predict changes to matter when various substances are to be combined.
- b) Observe and conduct simple experiments that explore what will happen when substances are combined.
- c) Observe and record the experiment results and describe what is seen.

Sample Activities

- ◆ Predict what will happen when shaking cream in a jar to make butter. Record the results by writing a paragraph together.
- ◆ Observe changes in food ingredients during cooking. Predict what will happen. Record the results by drawing before and after pictures.
- ◆ Predict what will happen when water is mixed with soil. Observe and record results by drawing before and after pictures.
- ◆ Add crackers to soup. Observe and write a sentence together about what happened.
- ◆ Predict what will happen when different colors of paint are mixed. Make tallies to count predictions.
- ◆ Mix baking soda and water and document what happens.
- ◆ Compare and contrast characteristics of known objects. For example, the mint play dough smells like mint toothpaste.
- ◆ Have each child keep a science journal that documents his/her investigations through descriptions and drawings.



Virginia Science Foundation Block 5

Life Processes

The child will observe and describe the characteristics of living things, compare the growth of a person to the growth of a plant and an animal, and describe the basic needs and the basic life processes of each.

Life Processes

Preschool children understand that they are growing and becoming bigger, and can begin to see that other animals and plants also grow and become bigger. Babies, puppies, chicks, calves, etc., fascinate young children. Use this curiosity to teach them how some young animals and adult animals are alike. Plants, too, start as seedlings and grow. Both plants and animals need food, water, and air to live. Plants and animals can make new plants and animals.

- a) Describe what living things need to live and grow (food, water, and air).
- b) Identify basic structures for plants and animals (plants-roots, stems, leaves; animals-eyes, mouth, ears, etc.).
- c) Recognize that many young plants and animals are similar but not identical to their parents and to one another.



Sample Activities

- ◆ Have children grow a "Hairy Harry." Have children draw a face on a Styrofoam cup and fill with soil. Sprinkle with grass seed and water. Watch Harry's hair grow! What happens if you do not water Harry?
- ◆ Play matching games using picture cards of mother and young animals, and a seedling and full grown plant.
- ◆ Raise various animals in the classroom such as fish, guinea pigs, frogs, and mealworms.
- ◆ Plant seeds or bulbs in clear plastic containers in the classroom. Observe and measure the growth over time. Replant outside in the spring to contribute to the school garden.
- ◆ Germinate seeds in damp paper towels. Have children examine the seedlings and identify their structures, e.g., roots, stems, leaves.



Virginia Science Foundation Block 6

Interrelationships in Earth/Space Systems

The child will be able to observe and explore major features of the natural world around him/her, both on Earth and in the sky.

Interrelationships in Earth/Space Systems

Young learners have a natural interest in and curiosity about the world around them and the sky above them. Children should be offered numerous opportunities to explore the natural world outside the classroom. Children can make collections of items found outside such as rocks, leaves, moss, etc., and use those items to sort and classify. They should also explore what they see in the sky (clouds and sun) during the day, and should have “homework” to explore what they see in the night sky (moon and stars).

- a) Use vocabulary to describe major features of Earth and the sky.
- b) Identify objects in the sky – moon, stars, sun, and clouds.
- c) Classify things seen in the night sky and those seen in the day sky.
- d) Explore and sort objects in the natural environment (sand, pebbles, rocks, leaves, moss, and other artifacts).

Sample Activities

- ◆ Read the book, *Little Cloud* with children. Have them share what they would like to see in the clouds.
- ◆ When children are at home or on vacation, have them observe the night sky over a period of time. Describe what is seen.
- ◆ Classify objects according to those seen in the day sky and those seen in the night sky.
- ◆ Make collections of rocks, leaves, pebbles, and other artifacts. Use a magnifying glass to examine and describe the objects.
- ◆ Take a nature walk and collect rocks. Sort them in as many ways as possible. Count the number of rocks.





Virginia Science Foundation Block 7

Earth Patterns, Cycles and Change

The child will identify simple patterns in his/her daily life and identify things that change over time.

Earth Patterns, Cycles and Change

Children and their parents naturally make daily weather observations when deciding what to wear and whether to carry an umbrella or bring a hat. They recognize routines of daily activities and know if they have brushed their teeth or had snack time. They are beginning to recognize patterns in the natural world as well.

- a) Make daily weather observations and use common weather related vocabulary to describe the observations, e.g., sunny, rainy, cloudy, cold, hot, etc.
- b) Identify how weather affects daily life.
- c) Describe basic weather safety rules.
- d) Observe and recognize the characteristics of the four seasons and the changes observed from season to season.
- e) Observe and classify the shapes and forms of many common natural objects, e.g., rocks, leaves, twigs, clouds, the moon, etc.
- f) Compare a variety of living things to determine how they change over time (life cycles).
- g) Describe home and school routines.

Sample Activities

- ◆ Daily routines should include a discussion of weather and include language such as sunny, cloudy, snowy, rainy, and windy. Use cutouts of clouds, sun, raindrops, etc., to record weather on a daily calendar. At the end of each month, count the sunny days, rainy days, etc. Help young learners notice a continuous weather pattern over time. Then remove cutouts one at a time and place them on a weather picture graph.
- ◆ Discuss how the day's weather influenced the clothes the child needed to wear.
- ◆ Identify a child to be the daily "meteorologist." Have the child report the weather as part of the morning meeting and make clothing suggestions based on the weather.
- ◆ Discuss the tornado drill and how to prepare.
- ◆ Read books, such as *One Dark Night* with children to talk about weather.
- ◆ Have a picture/words daily schedule posted for children to see. Help them to create a daily schedule for home using cutouts of teeth to indicate brushing, food to indicate eating, the bathtub to indicate bathing, etc. Glue the cutouts onto a sheet of paper in chronological order.



Virginia Science Foundation Block 8

Resources

The child will practice reusing, recycling, and conserving energy on a daily basis.

Resources

The best way to learn resource conservation is to practice conservation in the classroom, such as teaching children to turn off the water in the sink when it is not being used and to turn off the classroom lights when the class leaves the room. Reusing and recycling for young children involves teaching children what they can do to help. Children can learn that some things can be reused, such as the back of paper that has something on the front, but nothing on the back. The best way to learn about recycling is to have children do it. Some children may already practice recycling at home.

- a) Identify ways that some things can be conserved.
- b) Recognize that some things can be reused.
- c) Recognize that some things can be recycled.
- d) Understand and use vocabulary such as conserve, recycle, and reuse.

Sample Activities

- ◆ Keep a recycling bin in the classroom. Teach children to recycle paper, plastic, and cardboard.
- ◆ Ask children to bring in items from home that they recycle (or could recycle). Talk about what is recyclable.
- ◆ Have children go on a hunt in the classroom to find items that have been reused such as a tin can holding pencils.
- ◆ Whenever possible, engage children in reusing materials such as milk containers from the cafeteria for classroom projects.
- ◆ Remind children of the importance of turning off water and lights.
- ◆ Keep a box of scrap paper for children to use to draw or practice writing.

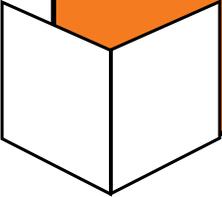


Virginia Standards for History and Social Science

Introduction

Young children are explorers and adventurers interacting with those around them. The purpose of history and social science is to enable children to understand and participate effectively in their

world. The energy, curiosity, and imagination of young children lead them to action and interaction within their surroundings. Foundational concepts and basic understandings are developed in history, geography, civics, and economics at a very young age.



Virginia History and Social Science Foundation Blocks

History:

The child will identify ways in which people are alike and different.

The child will develop an awareness of change over time.

Geography:

The child will develop an increased awareness of the physical relationship between and among people and places.

The child will use words to indicate relative location of objects and people including direction words, comparison words, and attribute words.

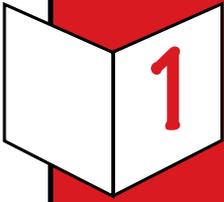
Economics:

The child will develop an increased awareness of the types of work people do and the variety of tools people use in their jobs.

The child will recognize that people make choices because they cannot have everything they want and that people work to earn money to buy the things they want and need.

Civics:

The child will participate as a member/citizen of a classroom community.



Virginia History and Social Science Foundation Block 1

History/Similarities and Differences
The child will identify ways in which people are alike and different.

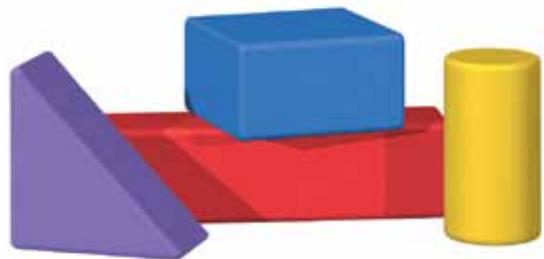
Similarities and Differences

History makes links between the child and home, between school and the wider community, between past and present. It links reasoning and imagination and begins with the child's self awareness and awareness of others.

- a) Recognize ways in which people are alike and different.
- b) Describe his/her own unique characteristics and those of others.
- c) Make the connection that he/she is both a member of a family and a member of a classroom community.
- d) Engage in pretend play to understand self and others.
- e) Participate in activities and traditions associated with different cultural heritages.

Sample Activities

- ◆ Read stories about children, families, schools, and communities.
- ◆ Tell stories and have children act out the roles of the story characters.
- ◆ Have children draw or paint pictures about themselves, their classmates, and their families.
- ◆ Create class books on differences among families and communities.
- ◆ Provide dramatic play opportunities for children to act out roles of various family members.
- ◆ Introduce children to games, dance, music, and art from the different cultures represented in the classroom. Discuss how these activities are associated with the culture of origin.





Virginia History and Social Science Foundation Block 2

History/Change Over Time

The child will develop an awareness of change over time.

Change Over Time

Young children become aware of time through events specific to themselves and to people in their immediate surroundings. Begin the focus with the child's own history, then when grandparents were children, and then to periods beyond living memory.

- a) Describe ways children have changed since they were babies.
- b) Express the difference between past and present using words such as before, after, now, and then.
- c) Order/sequence events and objects.
- d) Ask questions about artifacts from everyday life in the past.
- e) Recount episodes from stories about the past.
- f) Take on a role from a specific time, use symbols and props, and act out a story/narrative.
- g) Describe past times based on stories, pictures, visits, songs, and music.

Sample Activities

- ◆ Have children share photographs or draw pictures of when they were babies and now.
- ◆ Collect and sort sets of baby clothes/toys and children's current clothes/toys.
- ◆ Read stories about birthdays. Make a timeline for years 1-4, and put writings and photos on the timeline.
- ◆ Play word games giving two events and have children tell which event came before and which came after.
- ◆ Have a share time with children bringing in books, toys, photos, etc., belonging to their parents or grandparents. Discuss how these items are the same or different now.
- ◆ Set up a class museum with old tools or everyday objects used long ago.
- ◆ Sort pictures into now and the past (long ago).
- ◆ Put pictures of daily routine activities in order from morning to night, or early in the day until late in the day.



Virginia History and Social Science Foundation Block 3

Geography/Location

The child will develop an increased awareness of the physical relationship between and among people and places.

Location

The energy, curiosity, and imagination of young children lead them to action and interaction with their environment. Being *egocentric*, they view their world from a narrow, limited perspective. Children grow in their understanding as they become more aware of themselves in the social settings of their daily experiences – home, school, neighborhood, and community.

- a) Identify and describe prominent features of the classroom, school, neighborhood, and community.
- b) Engage in play where one item represents another (miniature vehicles, people, and blocks).
- c) Make and walk on paths between objects, *e.g.*, from the door to the window.
- d) Represent objects in the order in which they occur in the environment.
- e) Experience seeing things from different elevations.

Sample Activities

- ◆ Involve children in creating simple representations of home, school, or neighborhood through drawings or block construction.
- ◆ Provide real objects, models of objects, photographs, simple drawings, or a child's developed symbol to use in block and dramatic play experiences.
- ◆ Create line paths using tape or chalk. Play games walking the lines from one object to another.
- ◆ Make a drawing with a picture of the two objects at the ends of the path and have one trace the path on paper as a child walks the path.
- ◆ Have the child walk around a basketball or a tennis court on painted lines or create closed shapes with tape or chalk. Play "follow direction" games for stepping inside and outside the lines.
- ◆ Provide experiences for aerial view of objects such as looking down from steps, upper floor windows, top of sliding board, and standing over block constructions.



Virginia History and Social Science Foundation Block 4

Geography/Descriptive Words

The child will use words to indicate the relative location of objects and people including direction words, comparison words, and attribute words.

Descriptive Words

As children learn more about their world, they use more words to express the new ideas and information needed to share what they know. Verbalizing helps children to solidify spatial concepts. Exposing children to a wide variety of experiences, helps build vocabulary. Children need to experience direction through movement and senses in order to describe their movements with words.

- a) Use words to describe features of locations in the environment and man-made structures found in stories and seen in everyday experiences.
- b) Use direction words (on, under, over, behind, near, far, above, below, toward, and away) one direction at a time.
- c) Use comparison words (closer, farther away, taller, shorter, higher, lower, alike, different, inside, and outside).
- d) Use attribute words (hard, soft, rough, and smooth).
- e) Use labels and symbols for what the child has seen.

Sample Activities

- ◆ Read books and stories aloud to children daily noting location, direction, description, and attribute words.
- ◆ Provide daily opportunities for children to converse in dramatic play and block play situations.
- ◆ Play games like “Simon Says,” “I Spy,” and “Verbal Scavenger Hunt” giving directions to locate an object in the room.
- ◆ Sing songs like “The Hokey Pokey.”
- ◆ Help children create labels and symbols for their block constructions and drawings.
- ◆ Help children create directions to parts of the school or playground and attach to photographs or pictures of the locations.



Virginia History and Social Science Foundation Block 5

Economics/World of Work

The child will develop an increased awareness of the types of work people do and the variety of tools people use in their jobs.

World of Work

The principles of economics influence everyday routines of life. Concepts and understandings develop when young children explore individual interests and build on their own experiences and what they already know. Their interest in the work people do and the tools they use provides a strong foundation for economic basics.

- a) Identify pictures of work and name the jobs people do.
- b) Describe what people do in their community job.
- c) Match tools to jobs.
- d) Match job sites to work done.
- e) Role play the jobs of workers.

Sample Activities

- ◆ Match pictures of workers and the tools they use to perform their job.
- ◆ Visit work sites (stores, building sites) in the neighborhood to explore jobs people do. Make a list in the classroom and have children draw pictures about these sites and workers.
- ◆ Have family members of the children share about their jobs and show tools they use.
- ◆ Invite workers to visit the classroom to talk about their jobs.
- ◆ Create a list of the workers in the school; add pictures and name labels of the people doing those jobs. Make a graph of the jobs and the number of workers.
- ◆ Include hats, uniforms, and tools as props for dramatic play.



Virginia History and Social Science Foundation Block 6

Economics/Making Choices and Earning Money

The child will recognize that people make choices because they cannot have everything they want and that people work to earn money to buy the things they want and need.

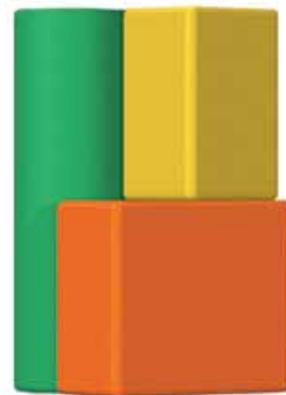
Making Choices and Earning Money

If young children are allowed to make choices, then making decisions for themselves as they grow becomes less difficult. Guiding young children to make simple choices will give them the experience and confidence to make good decisions on their own as they grow. It is important to help young children understand that people work to earn money and use money to buy the things they want and need.

- a) Identify choices.
- b) Recognize that everyone has wants and needs.
- c) Recognize that our basic needs include food, clothing, and shelter.
- d) Choose daily tasks.
- e) Role play purchasing situations where choices are made.

Sample Activities

- ◆ Read and discuss stories where characters are making choices about wants and needs.
- ◆ Make a list of wants. Ask children if they could choose two, what would they choose and why?
- ◆ Have children add to a class list one choice they made when selecting their clothes for school and why they decided on that choice.
- ◆ Provide choice board for center/work time activities.
- ◆ Provide choices throughout the day. Ask children if they would make the same choices, why or why not.
- ◆ Complete a shared writing experience about people working.





Virginia History and Social Science Foundation Block 7

Civics/Citizenship

The child will participate as a member/citizen of a classroom community.

Citizenship

The early years are the ideal time for children to understand democratic norms and values (justice, equality, etc.) in their families, classrooms, and communities. Applying these concepts to the nation and world will be easier if the child has experienced and appreciated them on a smaller scale. Democracies are built on the belief that people should be free, should have choices and opportunities, and should work together to make each other's lives better. To maintain our democratic society, we must teach our children to be good citizens.

- a) Cooperate with others in a joint activity.
- b) Recognize the need for rules to help get along with others.
- c) Participate in creating rules for the classroom.
- d) State personal plans for learning center activities.
- e) Participate in discussing and generating solutions to a class problem.
- f) Share thoughts and opinions in group settings.
- g) Demonstrate responsible behaviors in caring for classroom materials.
- h) Identify the needs of other people by helping them.

Sample Activities

- ◆ Read and discuss stories that show how problems can be solved. Act out or role play these situations.
- ◆ Establish class rules and expectations.
- ◆ Start the day with a share time where each child may contribute to the class discussion.
- ◆ Use dramatic play, interviews, puppets, and other props to talk about behaviors and problems.
- ◆ Select a school project to help address a school problem or issue.
- ◆ Provide toys, books, and materials that encourage sharing, empathy, and cooperation.
- ◆ Plan group activities such as singing, dancing, and celebrations to focus on the class community.
- ◆ Have children work together on one long-term common goal (plant a garden, take care of a class pet, keep a memory book).

Virginia Standards for Health and Physical Development

Introduction

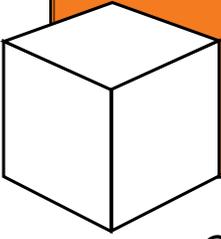
Children have a natural desire to learn about their environment through touch and manipulation. Within the preschool daily schedule there should be strong emphasis on both gross and fine motor development activities. Outdoor and indoor physical activity should be an integral part of the curriculum and should be viewed as an opportunity for learning. In addition to health benefits, creative movement and play bring many advantages to a child's growth and development.

The brain and body's movement and learning systems are interdependent. Gross and fine motor movement experiences provided at the preschool level need to be structured to encourage a child's brain to use the movement experiences as building blocks for future learning.

All children, regardless of physical or mental development, learn by moving through their environment and should be provided with opportunities to participate in preschool motor learning activities with appropriate modifications.

Knowledge and habits of healthy living begin early in life. Children feel a sense of accomplishment when they take an active role in preparing a nutritious snack, distinguishing between healthy and unhealthy foods, following basic safety rules, differentiating between safe and unsafe situations, identifying feelings, cooperating with others, and taking care of personal hygiene tasks such as washing hands and brushing teeth. Engaging in these activities at an early age helps children become aware of their bodies and develop health habits early in life.





Virginia Health and Physical Development Foundation Blocks

Skilled Movement:

The child will demonstrate motor skills and movement patterns needed to perform a variety of physical activities. (locomotor, non-locomotor, and manipulative skills)

Movement Principles and Concepts:

The child will use the movement concepts of directions, levels, pathways, and effort while performing locomotor (move body from one place to another), non-locomotor (move around axis of body), and manipulative (move in conjunction with object) skills.

Personal Fitness:

The child will participate in structured and unstructured physical activity designed to achieve a health-enhancing level of physical fitness.

Responsible Behaviors:

The child will demonstrate the ability to cooperate with others and follow safety rules while participating in physical activities.

Physically Active Lifestyles:

The child will participate in physical activity every day and explain why physical activity is good for health.

Health Knowledge and Skills:

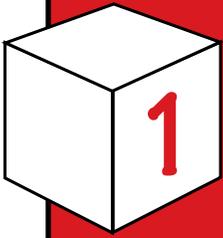
The child will identify healthy and unhealthy foods, and simple practices and habits that promote health and prevent illness.

Health Information Access and Use:

The child will identify trusted adults and begin to learn how to seek reliable health information.

Community Health and Safety:

The child will understand how to make good decisions about simple health issues to promote a safe and healthy community when alone, with family, at school, and in other group settings.



Virginia Health and Physical Development Foundation Block 1

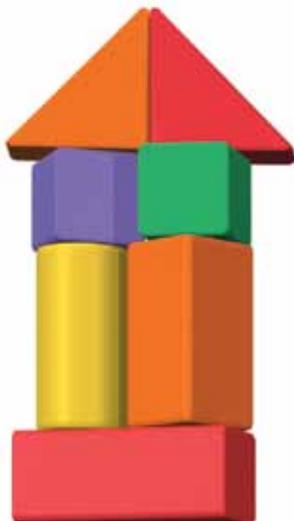
Skilled Movement/Locomotor Skills

The child will demonstrate motor skills and movement patterns needed to perform a variety of physical activities.

Locomotor Skills

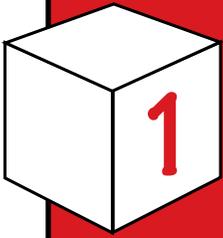
Locomotor movement progressions (walking, running, jumping, leaping, hopping, skipping, sliding, and galloping) are built on patterns. The body prepares the brain for learning by mastering movements that lay the framework for sequencing thoughts and recognizing patterns. Information arranged in patterns is more easily processed, stored, and retrieved. Mathematical and science concepts are built on patterns.

- a) Demonstrate beginning forms of the locomotor skills of jumping, hopping, and galloping.
- b) Perform these locomotor skills in response to teacher-led creative dance.



Sample Activities

- ◆ Practice jumping, hopping, galloping in general space with increasing coordination, balance, and control in a variety of physical activities. Have children use the appropriate vocabulary for each action.
- ◆ Present opportunities for practice of the locomotor skills both indoors and outdoors during structured and active play. Add objects, e.g., jump ropes, hula hoops, for the children to maneuver around safely and also to step/hop/jump into, out of, and over.
- ◆ Create opportunities for patterned activities, e.g., hop twice, jump once.
- ◆ Practice walking and running. Challenge children to begin walking slowly and gradually increasing the pace on the teacher's command. A drum or other percussion instrument will help guide this movement pattern.
- ◆ Using a thick mat on the floor, allow children to lie down on their stomachs and roll stomach to side to back to side to stomach (log roll) for the length of the mat.



Virginia Health and Physical Development Foundation Block 1 (continued)

Skilled Movement/Non-locomotor Skills

The child will demonstrate motor skills and movement patterns needed to perform a variety of physical activities.

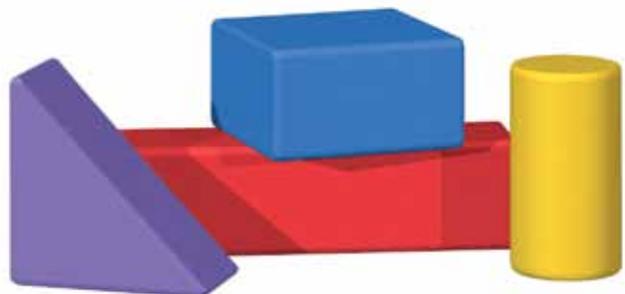
Non-locomotor Skills

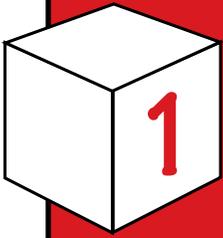
Non-locomotor skills permit the child to move his/her body without changing location. The child can learn to twist, turn, curl, stretch, reach, tuck, and use the spatial components of balance, coordination, spatial awareness, directionality, and vision. These skills are developed as the child rolls, curls, spins, twirls, bounces, stretches, balances, and supports his/her own weight in space. They may be practiced in conjunction with the basic locomotor movements.

- a) Maintain a stable static position while practicing specific balances on different bases of support, e.g., standing on toes or standing on one foot.
- b) Maintain balance while performing a controlled spin.
- c) Maintain balance while walking on a painted line or a low balance beam that is no more than three inches above the floor.
- d) Maintain balance while climbing up steps and walking on a horizontal ladder placed on the floor.
- e) Perform criss-cross pattern activities.

Sample Activities

- ◆ Provide opportunities for the child to practice balancing on one or more body parts.
- ◆ Provide opportunities for the child to spin with arms extended at shoulder height away from the body at least three revolutions without losing his/her balance.
- ◆ Provide opportunities for the child to walk forward and backward on a painted line or on a low balance beam that is no more than three inches above the floor.
- ◆ Provide opportunities for the child to practice bending, shaking, turning, twisting, swaying, and swinging. Have children use the appropriate vocabulary for each action.
- ◆ Practice simple activities that cross the midline of the body, such as hugging oneself by crossing arms, and tapping the right knee with the left hand and the left knee with the right hand.





Virginia Health and Physical Development Foundation Block 1 (continued)

Manipulative Skills

The child will demonstrate motor skills and movement patterns needed to perform a variety of physical activities.

Manipulative Skills

The manipulative skills of tossing, catching, throwing, aiming, striking, jumping, juggling, kicking, bouncing, and dribbling develop visual tracking of moving objects, eye-hand and eye-foot coordination, visual fields, cross lateralization, sequencing of patterns, and dynamic balance. These skills aid the brain in organizing thoughts in sequence. Tracking exercises strengthen the eye muscles and visual fields used in reading. Eye-hand coordination, manipulation skills, strength, dexterity, and motor control are also essential for physical development of fine motor skills.

- a) Manipulate a variety of objects during structured and unstructured physical activity settings.
- b) Manipulate small objects using one hand independently, the other hand independently, and both hands working on the same task.
- c) Demonstrate increasing ability to coordinate throwing, catching, kicking, bouncing, and juggling movements.
- d) Coordinate eye-hand and eye-foot movements to perform a task.

Sample Activities

- ◆ Provide yarn balls, playground balls (no larger than 8 inches), and bean bags for the child to manipulate. Scarves can be employed to practice non-threatening catching and throwing.
- ◆ Practice throwing, catching, kicking, and striking skills in a safe physical activity setting or environment. Large targets such as a large pail or low hoop, offer an opportunity for the children to try to refine a manipulative skill. Have children use the appropriate vocabulary for each action.
- ◆ Provide large plastic nuts and bolts that screw together at a work station or center. Ask the children to unscrew the nut with one hand and screw the nut back on. Then ask the children to switch hands so that the other hand can be used to unscrew and screw the nut on the bolt.



Virginia Health and Physical Development Foundation Block 2

Movement Principles and Concepts

The child will use the movement concepts of directions, levels, pathways, and effort while performing locomotor (move body from one place to another), non-locomotor (move around axis of body), and manipulative (move in conjunction with object) skills.

Movement Principles and Concepts

Movement in both personal (self space) and general space is navigation in one's environment that allows the child to develop motor skills, self-awareness, self-esteem, and social skills critical to his/her ability to learn. Children gain the knowledge of movement by practicing the concepts regularly during structured or unstructured movement opportunities offered both indoors and outdoors.

- a) Apply knowledge of movement concepts by performing various locomotor movements while changing directions (right, left, up, down, forward, and backward), levels (high, medium, and low), pathways (straight, curved, and zigzag), and effort (fast, slow, hard, and soft).
- b) Identify fundamental movement patterns such as running and jumping.
- c) Begin and expand movement vocabulary.
- d) Perform various locomotor movements demonstrating changes in directions, levels, pathways, effort, and relationships in space while listening to music, or responding to a drum beat, the beat of a tambourine, verbal instruction, or other signals.

Sample Activities

- ◆ Provide opportunities for drama and imagery, allowing the children to create and explore. Examples include, but are not limited to, "Going on a Bear Hunt" or acting out songs such as "Five Little Monkeys."
- ◆ Create opportunities for the children to explore and move at different levels and pathways by crawling through tunnels and large cardboard boxes and climbing over objects and barriers.
- ◆ Use musical activities to explore directions, levels, pathways, effort, and space, focusing on relationships of over/under, behind/in front of/ alongside of, and around/through.
- ◆ Provide opportunities for mirroring and matching with a partner, along with imitation of various animals and their movements.
- ◆ Use music and rhythmical activities to stimulate listening for cues.
- ◆ Provide opportunities for naming movement skills and concepts.



Virginia Health and Physical Development Foundation Block 3

Personal Fitness

The child will participate in structured and unstructured physical activity designed to achieve a health-enhancing level of physical fitness.

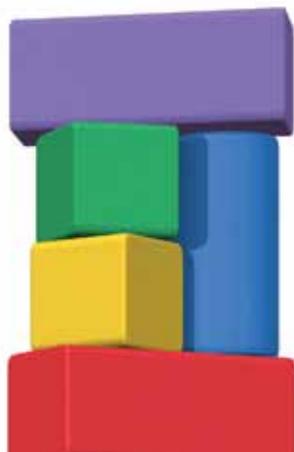
Personal Fitness

Physical fitness helps children get through the day without fatigue and makes them more alert. When children engage in exercise that elevates the heart rate, the brain and body go into a homeostatic state, balancing brain chemicals, hormones, and body systems. Blood traveling to the brain at a greater rate feeds the brain the needed nutrients of oxygen and glucose, increasing the brain's ability to retain or retrieve memory. Engaging in vigorous activity gives the brain the nutrients it needs to function at an optimal state and benefit the learner.

- a) Participate in activities that allow the child to experience and recognize a rise in the heart rate and breathing rate.
- b) Participate in activities designed to strengthen major muscle groups.
- c) Participate in activities that enhance flexibility.

Sample Activities

- ◆ Provide opportunities for the child to climb, hang, and swing on large appropriately-sized indoor and outdoor recreational equipment.
- ◆ Take periodic walks in the neighborhood, to a specific park or walk the perimeter of the outdoor recreational area with brief breaks for gathering information about the environment.
- ◆ Provide opportunities for children to participate in activities that require stretching muscles such as reaching, pulling, or climbing.
- ◆ Check an increase in heart rate by having the child place the right hand on/near the heart and then raising the left hand above the head. The left hand should open and close with each heart beat.
- ◆ Provide opportunities for children to imitate animal movements, especially those that require using the arms to support the body weight (bear crawl/walk, seal walk, crab walk).





Virginia Health and Physical Development Foundation Block 4

Responsible Behaviors

The child will demonstrate the ability to cooperate with others and follow safety rules while participating in physical activities.

Responsible Behaviors

All children must be provided with opportunities to follow directions in group settings, use safe behaviors, follow rules, take turns, and demonstrate an understanding of what cooperation means. These behaviors need to be practiced on a regular/daily basis so that acceptable behaviors are learned and reinforced.

- a) Demonstrate safe behaviors by participating appropriately during physical activity, accepting feedback, and taking responsibility for behavior when prompted.
- b) Share equipment and space, and take turns with help from the teacher.
- c) Work well with others.
- d) Listen to and follow simple directions.

Sample Activities

- ◆ Provide opportunities for the child to participate in simple, noncompetitive activities to encourage sharing, cooperating, and taking turns.
- ◆ Provide opportunities for the child to explain simple safety rules including knowing where the safe play space is by walking around the safe play space perimeter, or by moving around a hula hoop or designated shape or space.
- ◆ Provide opportunities for a child to demonstrate an understanding of the meaning of “stop” and “start” as well as “listen.”





Virginia Health and Physical Development Foundation Block 5

Physically Active Lifestyle

The child will participate in physical activity every day and explain why physical activity is good for health.

Physically Active Lifestyle

Being physically active for an hour a day helps children stay healthy, do better in school, maintain a healthy weight, feel happy and energized, and get sick less often. Children who experience success in movement activities show higher levels of self-esteem and a greater sense of accomplishment. Engaging in regular physical activity should be encouraged at every opportunity as it prepares the developing brain for learning by providing a healthier body that works more efficiently.

- a) Identify the activities that they like and dislike.
- b) Describe what it means to be physically active and then have the opportunity to actively pursue the activities they have described.
- c) Participate in activities geared toward different levels of proficiency.
- d) Identify places at home, in the neighborhood, and in the community where children can play safely and be physically active.

Sample Activities

- ◆ Walk, run, jump, hop or gallop around the outdoor recreational area. During this time, children should have access to large open spaces and be able to be active on large appropriate recreational equipment, as well as being able to play with balls and other manipulative objects. Have children use the appropriate vocabulary for each action.
- ◆ Provide structured and unstructured physical activity/motor learning movement time each day.
- ◆ Model active behaviors for the child to emulate.
- ◆ Provide active props in different learning centers and encourage dramatic play, dance and other opportunities to move.



Virginia Health and Physical Development Foundation Block 6

Health Knowledge and Skills

The child will identify healthy and unhealthy foods, and simple practices and habits that promote health and prevent illness.

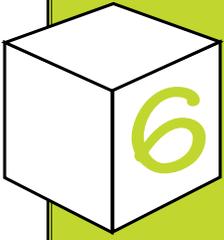
Nutrition

Children start learning about nutrition at an early age, and encouraging them to make healthy food and beverage choices can be incorporated into many learning experiences. Model good eating habits and follow a meal and snack schedule. Teach them to take small amounts at first, and let them know that they can have more if they are still hungry. Nature tends to group similar nutrients in foods that have the same color. Preschoolers can have fun finding foods that they like in as many colors as they can, and learn about the five food groups that are the building blocks for a healthy diet.

- a) Indicate awareness of hunger and fullness.
- b) Identify foods and the food groups to which they belong, e.g., vegetables, fruits, dairy, meats, and grains.
- c) Distinguish food and beverages on a continuum from more healthy to less healthy.
- d) Demonstrate an understanding that eating a variety of fresh fruits and vegetables with lots of different colors helps the body grow and be healthy.

Sample Activities

- ◆ When children are eating, ask if they are “full” or no longer hungry. Emphasize that they should stop eating before they feel full.
- ◆ Send home information to parents about portion control, and explain that a preschooler’s stomach is the size of an adult’s fist.
- ◆ Create a collage about healthy and unhealthy beverages. Water, skim milk, and fruit juices that do not have sugar added should be the beverages of choice.
- ◆ Cut out photos of foods and ask children to identify foods they should eat more often and foods they should eat less often.
- ◆ Explore healthy meal options through a healthy meal-plate activity; for ideas go to www.ChooseMyPlate.gov.
- ◆ Plant a small garden that contains a variety of vegetables, e.g., radishes, cucumbers, carrots.
- ◆ Have a food-tasting party to sample a wide variety of nutritious foods.



Virginia Health and Physical Development Foundation Block 6 (continued)

Health Knowledge and Skills

The child will identify healthy and unhealthy foods, and simple practices and habits that promote health and prevent illness.

Habits that Promote Health and Prevent Illness

Children should develop general health habits early in life such as washing hands, getting rest, and dressing appropriately for the weather. They need to know that germs can be spread through the air when someone sneezes or coughs, or can enter their bodies if they share drinks or eating utensils. They should show growing independence by taking care of restroom needs, disposing of tissues, and putting on and taking off their coats.

- a) Demonstrate how to correctly wash hands.
- b) Demonstrate covering the mouth or nose when coughing or sneezing.
- c) Identify habits that keep us healthy.
- d) Explain the importance of rest.
- e) Be able to communicate when one is not feeling well.

Sample Activities

- ◆ Practice washing hands with soap and water while singing a song.
- ◆ Follow consistent routines on washing hands.
- ◆ Practice coughing into their elbows.
- ◆ Draw a picture of a time when they were not feeling well and include who took care of them.
- ◆ Create learning centers that support healthy habits. Include books that talk about healthy habits. Centers might also include sorting activities about healthy foods or active games where children are engaged in physical exercise.





Virginia Health and Physical Development Foundation Block 7

Information Access and Use

The child will identify trusted adults and begin to learn how to seek reliable health information.

Information Access and Use

During the preschool years, children begin to identify sources of health and safety information. They should know personal information such as their name, street name, and parents' names. They begin to understand that when they take medicine it is given to them from a trusted adult. Preschool children need to be able to recognize important health and safety helpers, such as police, firefighters, doctors and nurses, and begin to understand how they keep them safe. They should be able to identify trusted adults, and know not to talk to or accept rides or treats from strangers.

- a) Understand that health care providers can help them when they are not feeling well.
- b) Identify people they can trust, e.g., police, firefighters, family members, and teachers, and understand they will keep them safe.
- c) Be able to differentiate between safe and unsafe situations.
- d) Begin to share feelings and express how they feel.

Sample Activities

- ◆ Have photos of nurses and doctors and ask children when they have seen these people.
- ◆ Invite police and firefighters to meet the children and talk about safety.
- ◆ Discuss and practice what to do if they smell smoke, hear a fire alarm, a tornado warning, or feel an earthquake.
- ◆ Show pictures of safe and unsafe substances, the poison symbol, and discuss how some medicines may look like candy, but are very dangerous.
- ◆ Role play how to get help if they are hurt or are scared.





Virginia Health and Physical Development Foundation Block 8

Community Health and Safety

The child will understand how to make good decisions about simple health issues to promote a safe and healthy community when alone, with family, at school, and in other group settings.

Community Health and Safety

Children are learning how to cross a street, sit in a booster seat, wear a seatbelt, and play safely on the playground. They need to be able to follow safety rules with adult instruction and prompting, and demonstrate good listening skills and cooperative behaviors. While exploring the outdoor environment, they should be aware of sun safety, stay away from animals that they do not know, and keep the environment clean and safe.

- a) Follow safety rules on the playground with adult assistance and reminders.
- b) Follow emergency protocols after practicing safety drills, e.g., fire, earthquake, and lockdown drills.
- c) Demonstrate pedestrian safety and vehicle awareness.
- d) Understand bicycle/tricycle safety and the importance of wearing a helmet.
- e) Know how to make an emergency phone call.
- f) Act safely around pools, ponds, and other water, e.g., oceans, rivers, creeks, ditches, and swamps.

Sample Activities

- ◆ Discuss playground safety rules such as keeping hands and feet to self, keeping three points of contact while climbing, sharing equipment with others, taking turns, and remaining upright on all equipment.
- ◆ Evacuation and safety drills should be taught and practiced without the alarm first. Practice drills regularly and role play what 9-1-1 can and cannot be used for.
- ◆ Role play looking both ways to cross a street, staying away from unfamiliar animals, and acting safely around pools, ponds, and other water.
- ◆ Show children how to wear a helmet correctly, and explain that the helmet protects the brain.

Virginia Standards for Personal and Social Development

Introduction

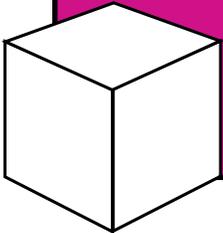
Research has established a compelling link between personal and social development and school success. The personal, social, and behavioral competence of young children is a strong predictor of academic performance in the early grades and contributes to development of executive functions. Executive functions include planning, monitoring, task switching, and focusing attention. Appropriate and supportive learning experiences provide an important foundation for executive function skills and personal and social growth.

Personal and social development is an ongoing process of skill acquisition and mastery involving

cognition, language, emotions, and perception. It is demonstrated by how a child interacts with others both verbally and nonverbally in social situations.

During the preschool years, children are learning about themselves and others. Young children want to be liked, belong to groups, and be active participants. They need support as their emotional and perceptual abilities develop beyond their egocentric barriers.

A child's sense of self-worth and social competence is facilitated by social experiences. Early childhood education provides preschoolers with supportive social contexts to foster children's personal and social development.



Virginia Personal and Social Development Foundation Blocks

Self-Concept:

The child will demonstrate self-confidence and self-reflection.

Self-Regulation:

The child will show self-direction and responsibility.

Approaches to Learning:

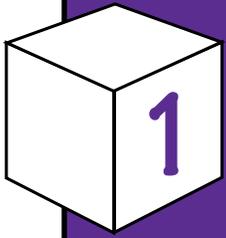
The child will show eagerness and persistence as a learner.

Interaction with Others:

The child will interact easily with other children and with familiar adults.

Social Problem Solving:

The child will learn and use appropriate verbal skills to resolve conflicts with peers, and to ask for help when needed.



Virginia Personal and Social Development Foundation Block 1

Self-Concept

The child will demonstrate self-confidence and self-reflection.

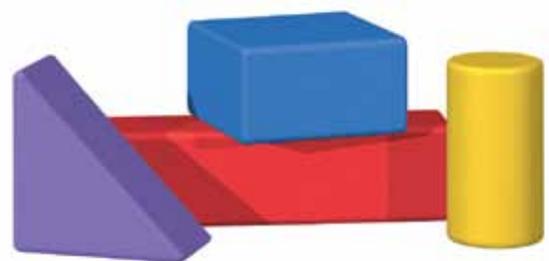
Self-Concept

The essence of early personal and social development is a child's self-concept. A growing sense of self-worth enables a confident child to participate in most classroom activities, express emotions, explore toys and materials, and interact with others in the classroom. To develop this confidence, preschool children need many opportunities to engage in activities with others. At times, young children need support to try new classroom activities.

- a) Demonstrate knowledge of personal information including first and last name, gender, age, birthday, parents' names, teacher's name, school name, town or city where they live, and street name.
- b) Begin to recognize and express own emotions using words rather than actions.
- c) Recognize self as a unique individual and respect differences of others.
- d) Develop personal preferences regarding activities and materials.
- e) Demonstrate self-direction in use of materials.
- f) Develop increasing independence in school activities throughout the day.

Sample Activities

- ◆ Provide opportunities for children to choose an activity, make a plan, and carry out the plan.
- ◆ Encourage active engagement with peers through shared activities such as playing a game, reading a book, and exploring dramatic play themes.
- ◆ Teach/model for children how to put on a jacket, hat, and other outdoor clothing. Provide plenty of time for children to get ready so they have time to practice these skills.
- ◆ Make sure classroom materials are accessible and labeled so children can use them independently and return them to a designated location.
- ◆ Reassure children that making mistakes helps with learning. Discuss mistakes and encourage them to ask questions.





Virginia Personal and Social Development Foundation Block 2

Self-Regulation

The child will show self-direction and responsibility.

Self-Regulation

Self-regulation is the ability to control and direct one's own feelings, thoughts, and actions. Research shows that children's self-regulation behaviors in the early years predict their school achievement in reading and mathematics more accurately than their IQ scores (Blair, C., & R.P. Razza, 2007). Young children benefit from routines and structure. They find comfort and feel secure when they can predict the flow of events and people each day. Learning to manage change is an important skill for preschoolers. Young children are most successful handling transitions when they are told what to expect in advance. Prior knowledge enables young children to feel in control and participate with confidence. Children increase self-regulation through movement, not by sitting still.

- a) Contribute ideas for classroom rules and routines.
- b) Follow rules and routines within the learning environment.
- c) Use classroom materials purposefully and respectfully.
- d) Manage transitions and adapt to changes in routine.
- e) Develop positive responses to challenges.

Sample Activities

- ◆ Have child-size cleaning materials available and teach children how to use them. For example, children can sweep the sand around the sand table or use a sponge and bucket to clean up spilled paint.
- ◆ Teach the children a simple song to sing when it is time to transition from one activity to another.
- ◆ Support children in developing socio-dramatic play scenarios.
- ◆ Prepare children ahead of time by talking through expectations. Ask them to tell you what comes next.
- ◆ Play "Head, Shoulders, Knees and Toes" and other learning games that ask children to follow directions, listen, and demonstrate self-control.



Virginia Personal and Social Development Foundation Block 3

Approaches to Learning

The child will show eagerness and persistence as a learner.

Approaches to Learning

As young children develop more awareness perceptually, they are naturally curious and ask questions about everything they encounter. As children gain experience with asking questions, they ask for clarification or additional information. Preschoolers should be able to attend to tasks for 10-20 minutes. They may need frequent assistance and support to work until tasks are finished or problems are solved. A sensitive and responsive adult can model approaches and provide support as children develop increasing competence.

- a) Show interest and curiosity in learning new concepts and trying new activities and experiences.
- b) Demonstrate ability to learn from experiences by applying prior knowledge to new situations.
- c) Increase attention to a task or activity over time.
- d) Seek and accept help when needed.
- e) Attempt to complete a task in more than one way before asking for help.

Sample Activities

- ◆ Draw pictures about people or events and retell these experiences.
- ◆ Participate in small group planning discussions by asking questions and offering ideas.
- ◆ Select and complete a puzzle independently.
- ◆ Encourage a child to solve a mathematics or science problem in more than one way and explain their thinking.
- ◆ Teach large concepts in multiple smaller lessons. Teach the basic idea first. Then, review the concept with the children and teach another portion.





Virginia Personal and Social Development Foundation Block 4

Interaction with Others

The child will interact easily with one or more children and with familiar adults.

Interaction with Others

Young children are learning to communicate with others. The ability to relate well with others requires physical, social, linguistic, cognitive, emotional, and interpersonal skills. To accomplish competence in social interaction, children need coaching and sensitive adult guidance. As children learn appropriate skills for communication with others, the adult can continue to offer support and encouragement when needed.

- a) Initiate and sustain interactions with other children.
- b) Demonstrate verbal strategies for making a new friend.
- c) Interact appropriately with other children and familiar adults by cooperating, helping, sharing, and expressing interest.
- d) Participate successfully in group settings.
- e) Demonstrate respectful and polite vocabulary.
- f) Begin to recognize and respond to the needs, rights, and emotions of others.

Sample Activities

- ◆ Model appropriate styles of communication with children and adults.
- ◆ Read books that focus on the emotional situations children face, such as a move, a family separation, or going to the doctor. Discuss the feelings presented by the characters. Learning to identify feelings of self and others encourages empathy.
- ◆ Take on a classroom project that helps others in the community, like drawing pictures for children in the hospital or making thank you cards. Taking on other perspectives encourages pride in helping others.
- ◆ Encourage peer relationships through dramatic play, as children take on the role of animals, families, or workers. Teachers can suggest themes and provide props that facilitate successful social interaction.
- ◆ Use photographs of classroom activities as an opportunity for children to share their thoughts and ideas. Make a class record or graph of their thoughts and ideas.
- ◆ When a child has been excluded from play, encourage others to show concern and invite the child to play.
- ◆ Introduce new materials to children by showing them how to use them and how to put them away.



Virginia Personal and Social Development Foundation Block 5

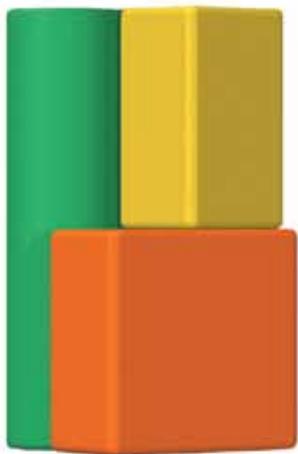
Social Problem Solving

The child will learn and use appropriate verbal skills to resolve conflicts with peers and to ask for help when needed.

Social Problem Solving

Young children are developing increasing self-regulation and need positive guidance to teach and reinforce important social skills. They rely on sensitive adults to step in when frustrations develop, to teach them appropriate ways to express their needs, and to help them share with others. When children face conflicts with their peers, adults can coach and model appropriate ways to communicate needs and feelings, by getting help and using effective verbal skills.

- a) Express feelings through appropriate gestures, actions, and words.
- b) Recognize conflicts and seek possible solutions.
- c) Allow others to take turns.
- d) Increase the ability to share materials and toys with others over time.
- e) Include others in play activities.



Sample Activities

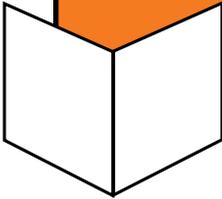
- ◆ Talk about common challenges children experience within the classroom and ask them to brainstorm good solutions.
- ◆ Demonstrate healthy interaction strategies through role play by using puppets, dolls, or stuffed animals to act out situations the children experience.
- ◆ Write a story with the children using a social situation and read it with the class.
- ◆ Use simple negotiation skills to solve conflicts. For example, "You can have a turn after I finish."
- ◆ Model positive ways for young children to make friends. For example, have children practice pleasant ways they can ask to join others in play and take turns in games.

Virginia Standards for Music

Introduction

The performing arts are expressions of the joy of the human experience. Children especially show their joy through music since it is a natural and integral part of a young child's life. Music educates and enriches the lives of young children, who naturally are eager to explore and engage in music activities with others. In

addition, music can be used to teach and reinforce the development of literacy, mathematics, and science concepts. These foundation blocks give young children the basic knowledge of music theory and performance, and the encouragement necessary for future pursuit of musical endeavors.



Virginia Music Foundation Blocks

Music Theory/Literacy:

The child will develop an awareness of the mechanics of music.

Performance:

The child will participate in musical performance on a regular basis.

Music History and Cultural Context:

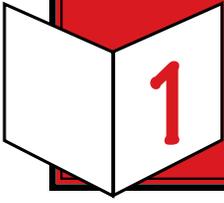
The child will develop an appreciation of different styles of music.

Analysis, Evaluation, and Critique:

The child will investigate how music is used formally and informally, and engage in multiple visual, aural, and hands-on musical experiences by singing, dancing, and using a variety of materials and instruments.

Aesthetics:

The child will listen and respond to recorded and live music performances.



Virginia Music Foundation Block 1

Music Theory/Literacy

The child will develop an awareness of the mechanics of music.

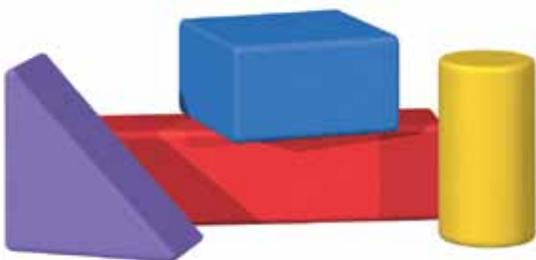
Music Theory/Literacy

Young children should have exposure to music in various forms. They enjoy learning about music concepts and vocabulary and connecting music to their personal experiences. This block provides the tools for young children to gain knowledge and participate in meaningful experiences with music.

- a) Understand the vocabulary of music.
- b) Understand that written music represents sounds by using notes.
- c) Understand that composers write music, musicians sing or play instruments, and dancers utilize music elements in expressing dance.
- d) Identify common musical instruments.

Sample Activities

- ◆ Provide children with copies of music that are appropriate for preschool students. Point out lines and notes on the staff. Explain that composers use notes to show if the sounds go up or down, fast or slow, and rests to show when to be quiet and wait.
- ◆ Provide experiences with music during group and circle time. Include songs with finger plays, high and low tones, singing games and action songs, music with different tempos and styles, and songs from other cultures and languages.
- ◆ Enhance literacy, mathematics, and science concepts through songs and finger plays. The *Little Red Ant and the Great Big Crumb* is an example of children's literature that teaches the process of scientific inquiry, facts and information about ants, and mathematics concepts through songs, chants, and gestures.
- ◆ Teach and reinforce a steady beat in fast and slow tempo.
- ◆ Listen to instruments of the orchestra and imitate the way each is played, e.g., trombone, flute, violin, guitar, piano, and drum.





Virginia Music Foundation Block 2

Performance

The child will participate in musical performance on a regular basis.

Performance

Young children are natural performers. They enjoy sharing music with other children and adults. This block provides the opportunities for young children to understand the fundamentals of performance and to participate in music experiences.

- a) Demonstrate the difference between singing and speaking.
- b) Develop the understanding that the child's body and voice are musical instruments.
- c) Participate in opportunities to use singing voice and musical instruments.
- d) Practice good manners when participating in musical performance.
- e) Repeat simple musical patterns using voice, body, and instruments.

Sample Activities

- ◆ Provide opportunities throughout the day for children to sing when lining up, preparing to clean up, beginning the day, and ending the day. For example, sing or chant directions throughout the day such as "toys away, toys away, it's time to put your toys away."
- ◆ Include poems with rhythm/chants and songs with repetition and actions so that children use whole body movement or hand signs while singing.
- ◆ Children can explore the sounds in a story and determine which instruments can be used for those sounds as the story is read.
- ◆ Children can explore which instruments most effectively depict thunder, lightning, and rain progressions from light to heavy.
- ◆ Explore ways that children's bodies make sounds including clapping, snapping, stomping feet, making noises with mouth, clicking, or tapping.
- ◆ Use body sounds to respond to prompts such as "Clap your hands if this is the letter B," "Stomp your feet if bat rhymes with cat."
- ◆ Have children share original music performances with other children by using self-made or commercial instruments, the voice, and body sounds.

Virginia Music Foundation Block 3

3

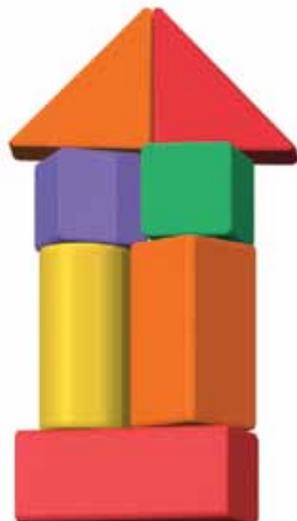
Music History and Cultural Context

The child will develop an appreciation of different styles of music.

Music History and Cultural Context

Young children need to develop an appreciation and understanding of the many different types of music created throughout the history of the world. This block focuses on helping young children understand many different types of music and how music reflects history. It tells the story of people and their experiences, feelings, and cultures.

- a) Understand that music comes from many different places in the world.
- b) Understand that music sounds differently depending on who created it and when it was written.
- c) Develop an appreciation for different types of music.



Sample Activities

- ◆ Host an international music fair for your class. Invite parents/caregivers to share different types of music that has significance to the family. Ask musicians to demonstrate instruments, dancing, and singing.
- ◆ Listen to different styles of music. Discuss the unique aspects of each style. Include classical, jazz, folk, ethnic, instrumental, children's choral music, and songs from different eras, e.g., big band, country/western, music from other countries.
- ◆ When discussing historical events, e.g., Fourth of July, Presidents' Day, include a discussion of the music and instruments of the specific time period.
- ◆ Introduce songs that represent the native language and culture of children in the classroom.
- ◆ Listen to famous works by composers, e.g., Beethoven's "Joyful, Joyful," Bach's "Brandenburg Concertos," Vivaldi's "Four Seasons," Tchaikovsky's "Nutcracker," and Prokofiev's "Peter and the Wolf."

Virginia Music Foundation Block 4

4

Analysis, Evaluation, and Critique

The child will investigate how music is used formally and informally, and engage in multiple visual, aural, and hands-on musical experiences by singing, dancing, and using a variety of materials and instruments.

Analysis, Evaluation, and Critique

Young children benefit from the use of music in daily activities as it boosts memory and encourages engagement. Music participation supports active learning skills. When children listen to and respond to music, they can talk about and compare different instrumental and vocal music patterns. This block helps children discover similarities and differences between music, movement, and sounds.

- a) The child will talk about and compare musical patterns and sounds.
- b) The child will recognize differences and similarities among music styles.
- c) The child will explore the creation and purpose of music in personal and social life.
- d) The child will participate in music activities that involve sharing, taking turns, and cooperation.
- e) The child will identify types of music he/she prefers.

Sample Activities

- ◆ Describe the differences in music sounds including fast/slow, high/low, loud/soft, and same/different.
- ◆ Play musical games, circle dances, musical chairs, and other music listening games where children listen and follow simple directions including skipping, gliding, tiptoeing, jumping, swaying, waving scarves, or freezing when the music stops.
- ◆ Talk about where and how we sing and enjoy music. We use music in school to help us learn the alphabet and days of the week. We use music to celebrate holidays and birthdays. We enjoy music informally on the radio and formally at concerts.
- ◆ Identify popular instruments by sight using pictures, photographs, or real instruments. Play some instruments or music for children to discuss the similarities and differences in style and sound.
- ◆ Read books about children and adults who are musicians and composers.
- ◆ Create a circle dance where the children choose the movement for a specified number of counts; different styles and tempos can be used, as well as different movements. Patterns, sequencing, and counting are practiced during a circle dance.



Virginia Music Foundation Block 5

Aesthetics

The child will listen and respond to recorded and live music performances.

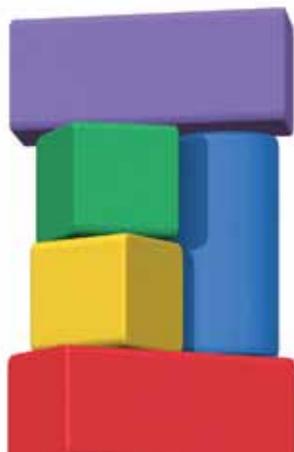
Aesthetics

Young children need to have the opportunity to respond to music in ways that allow them to openly express their feelings about a specific musical selection. Music activates sensory enjoyment, cognitive engagement, and emotional expression. This block provides guidance to support healthy responses in the classroom.

- a) Use the body and motion to express a response to a musical selection.
- b) Express a response to a musical selection by using available visual arts supplies.
- c) Use words to describe how a musical selection makes the child feel.

Sample Activities

- ◆ Encourage children to clap, nod, snap, sway, and use other body movements when singing favorite songs.
- ◆ Provide scarves, ribbon sticks, and other movement materials for children to use when listening to a musical selection. They can use dance and motion to respond to smooth and slow or fast and short sounds, or “paint” music in the air with scarves to express the mood of the music.
- ◆ Have children use available materials to create two- and three-dimensional works of art, e.g., drawing collage or sculpture, to express their feelings about a music selection.
- ◆ Provide musical selections in the listening center for children to respond to either physically or artistically during center time.
- ◆ Compose a class book entitled, “Music Feels” after listening to a musical selection as a class.
- ◆ Have children share their favorite song and how it makes them feel. Compose a class book with children’s favorite songs.

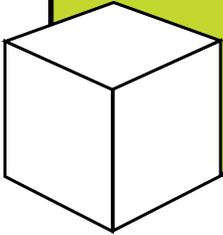


Virginia Standards for the Visual Arts

Introduction

Young children are exposed to the visual arts almost from birth. Their first experiences with the world around them often revolve around the pictures of storybooks and other visual art forms found in their environment. Participation in visual arts experiences are the gateway to formal reading, writing, and

communicating. The visual arts provide an opportunity for children to express their thoughts, ideas, and opinions. These foundation blocks work to provide the vocabulary, experiences, and fundamental concepts for further exploration of the visual arts.



Virginia Visual Arts Foundation Blocks

Visual Communication and Production:

The child will develop an awareness of the mechanics of the visual arts and produce various forms on a regular basis.

Art History and Cultural Context:

The child will develop an understanding of the cultural importance of the visual arts.

Analysis, Evaluation, and Critique:

The child will respond to the visual arts in a variety of ways using the body and multiple materials.

Aesthetics:

The child will examine and express different feelings and experiences through the visual arts.



Virginia Visual Arts Foundation Block 1

Visual Communication and Production

The child will develop an awareness of the mechanics of the visual arts and produce various forms on a regular basis.

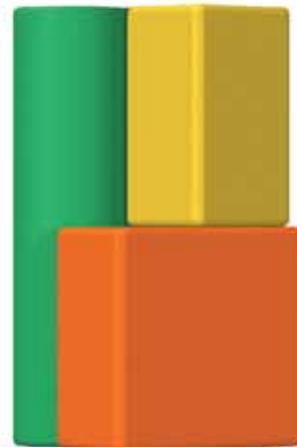
Visual Communication and Production

Young children are curious and eager to explore sensory experiences through the visual arts. They are ready to learn the vocabulary and fundamental understandings of the visual arts so that they can more effectively communicate about the visual arts world. This foundation block fosters the natural creative spirit of young children, as well as provides opportunities for young children to experiment with different forms of the visual arts.

- a) Understand that artists create visual arts using many different tools.
- b) Understand that the visual arts take many forms.
- c) Use a variety of materials, textures, and tools for producing visual art.
- d) Develop and use fine motor skills necessary to produce two- and three-dimensional works of art.

Sample Activities

- ◆ Encourage the correct vocabulary to describe a piece of art, including design, color, and shape.
- ◆ Demonstrate how the material or tool is used before adding it to the art center.
- ◆ Provide examples of various forms of the visual arts, e.g., sculpture, painting, photographs, portraits, mobiles, collages, pottery, and talk about/show the materials used to make them.
- ◆ Provide many opportunities throughout the school day for children to explore art materials. Allow children to draw, sculpt, and paint.
- ◆ Provide a rich variety of materials for children to choose when creating works of art. Be sure to include recycled and three-dimensional materials, and alternative painting tools, such as sponges, sticks, feathers, combs, brushes, cotton balls, and straws.





Virginia Visual Arts Foundation Block 2

Art History and Cultural Context

The child will develop an understanding of the cultural importance of the visual arts.

Art History and Cultural Context

Young children need to begin to draw connections between the present and the past, as well as between different cultures. Exploring the works of art of different cultures and time periods will help strengthen the young child's ability to see the similarities and differences of cultures and time periods. This foundation block provides guidance in creating experiences that foster the development of such connections.

- a) Understand that all cultures have art that reflects their experiences and identity.
- b) Understand that works of art can be a historical record of a certain time period in history.
- c) Develop an appreciation for the various forms of visual arts.

Sample Activities

- ◆ Create self- and family portraits using a mirror to draw self and photographs of families and family members.
- ◆ Compare paintings, photographs, and other artifacts, e.g., pottery, weaving, quilts, that represent the various cultures in the community.
- ◆ Have an "Art Minute" several times a week. During this time, share with children a selected work of art. In addition to discussing the mechanics of the work, share with the children a cultural significance of the piece.
- ◆ When discussing historical events, e.g., Thanksgiving, Presidents' Day, be sure to display works of art from the historical time period. Help children understand that before cameras or computers were invented, paintings and sketches were the only visual record of the time.
- ◆ Create a timeline. Children can bring photographs or draw pictures to represent important events in their lives since they were born, e.g., birth, first steps, visit to the doctor, first day of school, sibling born.
- ◆ Visit a children's art museum.



Virginia Visual Arts Foundation Block 3

Analysis, Evaluation, and Critique

The child will respond to the visual arts in a variety of ways using the body and multiple materials.

Analysis, Evaluation, and Critique

Young children form and express their opinions on concepts from birth. The visual arts help young children to use nonverbal cues and sensory materials to share their unique ideas and opinions. This foundation block provides experiences to foster creative and appropriate responses to works of art.

- a) Use the body to express a response to a work of art.
- b) Understand that each person responds to and creates works of art in unique ways.
- c) Use available art supplies to express an individual response to an art form.
- d) Use words to describe a response or reaction to a visual arts selection.
- e) The child will identify types of works of art that he/she prefers.

Sample Activities

- ◆ Pretend to be the subjects in selected works of art. Have them pose as the subjects in the work of art. Discuss with the children what the subject may be thinking or feeling.
- ◆ Use available art supplies to create an original work in the style of a given work. For example, if a painting uses mainly one color, encourage children to use that color in their creations.
- ◆ Create a class response log. For each work of art shared, record each child's verbal description of the work. A quick "thumbs-up, thumbs-down" survey could also be recorded for the whole class reaction to the selected work.





Virginia Visual Arts Foundation Block 4

Aesthetics

The child will examine and express different views and experiences through the visual arts.

Aesthetics

Young children are natural communicators and want to share their ideas and opinions. They have a growing appreciation for their own and others' creativity. Preschoolers are able to see themselves as young artists while coming to understand that others also use art to show and express experiences. This foundation block will help children enjoy personal experiences with the visual arts and discuss the ways they appreciate art created by others.

- a) Understand that the visual arts express feelings, experiences, and cultures.
- b) Talk about different kinds of art and recognize the idea, theme, or purpose.
- c) Create specific works of art based on a common theme, concept, or emotion.
- d) Collect, compare, and use natural objects and objects made by people.
- e) Understand the purpose of an art museum.

Sample Activities:

- ◆ Using recycled materials, have children build three-dimensional models that represent a theme, concept, experience, or feeling.
- ◆ Take children on a walk around the school or outside. When returning to the classroom, allow children the opportunity to create a design that represents something they saw while on the walk by using natural materials collected, such as leaves, feathers, or pine cones.
- ◆ Create class murals that express a particular concept or theme being studied. Allow each child the opportunity to contribute to the mural throughout the week or longer.
- ◆ Add a museum or gallery space to centers. Discuss with children the importance of both spaces. Begin with prints of a known work of art and incorporate the children's original creations over time.
- ◆ Read books about artists and their art, such as Claude Monet's "Water Lilies," van Rijn Rembrandt's "Mona Lisa," Edgar Dega's "Ballerina," and Vincent Van Gogh's "Starry Night" or "Sunflower."

Terms and Definitions

Listed below are some terms one may encounter in reading more about early childhood education.

Alliteration

The same consonant sounds at the beginning of words in a sentence, group of words, or a line of poetry. For example, the sound of "P" in Peter Piper picked a peck of pickled peppers.

Alphabetic principle

The use of letters and letter combinations to systematically represent sounds/phonemes. For example, the word ship has four letters, but only three sounds/phonemes (sh-i-p).

Attributes

The defining characteristics of an object.

Classify

The description of how a student sorts objects by attribute (size, shape, color).

Cognitive development

Children's development of knowledge and skills, which helps them to think about and understand the world around them.

Concept of word

The ability to match spoken words to print.

Decoding

Translating written letters in words into recognizable sounds and combining these sounds into meaningful words.

Emergent literacy

The view that literacy learning begins at birth and is encouraged through participation with adults in meaningful literacy-related activities.

Environmental print

Printed materials that are part of everyday life, including signs, billboards, labels, and business logos.

Executive function

Children's development of conscious control of their thoughts and actions, including understanding the rules involved in tasks and how to use rules to solve problems. Examples include deciding what to do or how to act.

Experimental writing

Young children's writing characterized by creating pretend and real letters and by organizing scribbles and marks on paper.

Explicit instruction

Teaching children in a direct, systematic, and sequential manner.

Expressive language

The ability to produce speech and communicate.

Graphing

The picturing of information in an organized manner, resulting in a graph. There are several types of graphs, including bar graphs and pictographs.

Invented spelling

Phonemic-based, nonconventional spelling.

Letter knowledge

The ability to identify the names and shapes of the letters of the alphabet.

Literacy

Includes all the activities involved in speaking, listening, reading, writing, and appreciating both spoken and written language.

Model

Hands-on materials, such as pictures, blocks, counters, and flash cards, which are used to demonstrate a concept. When these materials are used to represent a concept, the concept is being "modeled."

Nonstandard units of measure

Units of measure with values that vary, such as a person's foot length, a handful, or paces. These are unlike standard units of measure, such as inches and pounds, with values that do not vary.

Number

An abstract concept involving a quantity. For example, if you see ***, you think of the number three.

Numeral

The written symbols that represent a number. For example, "12" and "XII" are numerals for the number twelve.

One-to-one matching

Matching one set of objects with another set of objects. For example, in a group of cups and saucers, you might match one cup with each saucer.

Terms and Definitions (continued)

Oral language

The components of receptive (listening and understanding) and expressive (speaking and communicating) language skills.

Ordering

Placing a collection of items from largest to smallest or smallest to largest.

Ordinal numbers

A number that tells the relative position of people or things in order.

Phonics

The relationships between the sounds of spoken language and the individual letters or groups of letters that represent those sounds/phonemes in written language.

Phonological awareness

The ability to identify and manipulate the sounds in language. Phonological awareness activities can involve work with alliteration, rhymes, and separating individual syllables into sounds.

Picture Graph

A type of graph that displays information in pictures on a chart.

Print awareness

The knowledge that printed words carry meaning, and reading and writing are ways to obtain ideas and information. A young child's awareness of print is one of the first steps toward reading.

Print-rich environment

A home or school environment that provides a variety of materials for reading, writing, and drawing. Print is displayed in signs, labels, and drawings or pictures.

Receptive language

The ability to understand what is heard.

Rhyme

Repetition of the ending sound in two or more words. For example, dot, hot, got.

Rote counting

Reciting the names of the numbers starting with one: one, two, three, and so on.

Scaffolded instruction

Instruction built upon what children already know that provides support that allows children to perform more complex tasks.

Set

A collection of things belonging together according to a rule, e.g., things that are all squares, red, or round.

Set counting

Counting the number of objects together because they belong together for some reason.

Sight vocabulary

Words a reader recognizes automatically without having to sound them out.

Sort

Grouping objects together based on attributes.

Spatial reasoning

A sense of shapes and how they relate to each other.

Statistics

The science of assembling, classifying, and analyzing facts or data.

Syllable

A word part that contains a vowel or a vowel sound (e-vent; news-pa-per; ver-y).

Unit measure

A consistent quantity used for measuring (cube, block).

Vocabulary

The words we know to communicate effectively. Oral vocabulary refers to words we use in speaking or recognize in listening. Reading vocabulary refers to words we recognize or use in print.

Volume

The amount of space inside an object; the number of unit measures that it will take to fill the object. For example, the number of cups it will take to fill a gallon container is the volume of that container as measured in cups.

Word recognition

The ability to identify printed words using strategies, such as recognition by sight or decoding, to determine meaning.

Resources

Listed below are additional resources that provide more information about early childhood education. An * denotes a reference used for development of this document.

Adams, M. J., Foorman, B.R., Lundberg, I., and Beeler, T. (2001). **Phonemic Awareness in Young Children: A Classroom Curriculum**. Baltimore, MD: Paul H. Brookes Publishing Co.

Albert Shanker Institute. (2009). **Preschool Curriculum: What's in it for Children and Teachers**. Washington, DC: The Albert Shanker Institute.*

Armbuster, B., Lehr, F., and Osborn, J. (2011). **Put Reading First: The Research Building Blocks for Teaching Children to Read**. Washington, D.C.: National Institute for Literacy, National Institute of Child Health and Human Development, and U.S. Department of Education.*

Beauchat, K., Blamey, K. and Walpole, S. (2010). **The Building Blocks of Preschool Success**. New York, NY: Guilford Press.

Blair, C. and Razza R.P. (2007). "Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kinder-garten." **Child Development** 78 (2): 647:63.*

Burns, S., Johnson, R., and Assaf, M. (2012). **Preschool in Today's World: Teaching Children With Diverse Backgrounds and Abilities**. Baltimore, MD: Paul H. Brookes Publishing Company.*

Burton, S. (2011). **Learning From Young Children: Research in Early Childhood Music**. Lanham MD: Rowman & Littlefield Publishing.*

Clements, D.H. and J. Sarama (2009). **Learning and Teaching Early Math: The Learning Trajectories Approach**. New York, NY: Routledge.

Clements, D. H., Sarama, J. and DiBiase A.M. (Eds.). (2004). **Engaging Young Children in Mathematics: Findings of the 2000 National Conference on Standards for Preschool and Kindergarten Mathematics Education**. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.*

Copley, Juanita V. (2010). **The Young Child and Mathematics, 2nd Edition**. A Co-Publication of the National Association for the Education of Young Children and the National Council of Teachers of Mathematics.*

Espinosa, L. M. (2002). **High-Quality Preschool: Why We Need It and What It Looks Like**. National Institute for Early Education Research (NIEER). New Brunswick, NJ: NIEER.

Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, DHHS. (2010). **Developing Early Literacy: Report of the National Early Literacy Panel**. Washington, DC: U.S. Government Printing Office.

Gelman R., Brenneman K., Macdonald G., and Roman, M. (2010). **Preschool Pathways to Science**. Baltimore, MD: Paul H. Brookes Publishing Company, Inc.*

Hannaford, C. (2007). **Smart Moves: Why Learning Is Not All in Your Head, 2nd Edition**. Arlington, VA: Great River Books.

Jenson, E. (2005). **Teaching with the Brain in Mind, 2nd Edition**. Alexandria, VA: Association for Supervision and Curriculum Development.*

Resources (continued)

- Kersey K.C. and Masterson M.L. (2013). **101 Principles for Positive Guidance with Young Children: Creating Responsive Teachers**. Upper Saddle, NJ: Pearson.*
- MyTeachingPartner. (2013). **Building Language, Literacy, and Social Relationships. Math Science-Curricula**. University of Virginia, Charlottesville, VA. Available online at www.myteachingpartner.com*
- National Association for Sport and Physical Education. (2009). **Appropriate Practices in Movement for Young Children Ages Three - Five**. Washington, DC: American Alliance for Health, Physical Education, Recreation and Dance.*
- National Council for the Social Studies. (2010). **National Curriculum Standards for Social Studies: A Framework for Teaching, Learning, and Assessment**. Silver Spring, MD: National Council for the Social Studies.*
- National Council of Teachers of Mathematics. (2006). **Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics: A Quest for Coherence**. Reston VA: National Council of Teachers of Mathematics.*
- National Council of Teachers of Mathematics. (2000). **Principles and Standards for School Mathematics**. Reston, VA: National Council of Teachers of Mathematics.*
- National Research Council. (2012). **Getting the Science Right**. Washington, DC: National Academy Press.*
- National Research Council. (2009). **Mathematics Learning in Early Childhood: Paths Toward Excellence and Equity**. Washington, DC: National Academy Press.*
- National Science Teacher Association. (2009). **NSTA Pathways to the Science Standards: Guidelines for Moving the Vision Into Practice. Elementary Edition**. Arlington, VA: National Science Teacher Association.*
- National Visual Arts Standards. (2013). **Moving Forward in 2013**. Washington, DC: National Art Education Association.*
- Pianta, R.C., Barnett, S.W., Justice, L.M., and Sheridan, S.M. (Eds.). (2012). **Handbook of Early Childhood Education**. New York, NY: The Guilford Press.
- Ratey, J. and Hagerman E. (2013). **Spark: The Revolutionary New Science of Exercise and the Brain**. New York, NY: Little, Brown and Company.
- Schickedanz, J.A. (2008). **Increasing the Power of Instruction: Integration of Language, Literacy, and Math Across the Preschool Day**. Washington, DC: National Association for the Education of Young Children.
- Schickedanz, J.A., and Collins M.F. (2013). **So Much More than the ABCs: The Early Phases of Reading and Writing**. Washington, DC: National Association for the Education of Young Children.
- U.S. Department of Education. (2008). **Foundations for Success: The Final Report of the National Mathematics Advisory Panel**. Washington, DC: U.S. Department of Education.*
- Zins, J. (2004). **Building Academic Success on Social and Emotional Learning: What Does the Research Say?** New York, NY: Teachers College Press, Columbia University.*

NOTES

NOTES