

# Widely-Held Expectations: Developing and Integrating Dispositions, Skills, and Knowledge

Learning experiences in the primary years should lead to the development of dispositions, skills, and knowledge relevant to all curriculum areas. The teacher helps children see the relationships that exist among these learning dimensions (dispositions, skills, and knowledge) and across all curriculum areas. In this way, understanding develops as a meaningful whole rather than in fragmented, isolated pieces. When children recognize the connections, relationships, and commonalities to be found within the learning dimensions of each curriculum area, they are then able to transfer and apply this learning to new situations. In primary classrooms, the integrated nature of learning is emphasized as children participate in meaningful, developmentally appropriate learning experiences related to topics of interest and relevance to young learners.

## Becoming an Independent, Lifelong Learner

In order to deal effectively with our challenging and changing world, children need to develop strategies that will help them find solutions for the increasingly complex problems they will face in the 21st century.

While a rich and varied content base is necessary for young learners, even more critical is the ability to access, evaluate, organize, and use information effectively. The primary program offers opportunities for children to:

- Access, select, and make use of information from a variety of sources
- Assess which information is significant and relevant
- Organize information for effective communication



Successful learners view themselves as successful problem-solvers. They enjoy solving problems, both independently and in collaboration with others. The independent learner can both cooperate and collaborate recognizing that learning is both an individual and a social process.

Activities and experiences which have value and relevance in the classroom and to the world beyond school are fundamental for children to become self-directed, to think divergently, and to apply problem-solving strategies. This increased sense of self-direction and growth in autonomy enables children to approach new learning with enjoyment, confidence, and satisfaction allowing them to embrace all that life has to offer and to see the potential of each new experience.

## Linking to Standards

This is the context in which we must approach reaching for high standards for all children. State or local standards, now the rule rather than the exception in schools across the nation, must never be applied in ways that cause any young child to experience repeated failure. Responsible practitioners ensure that expectations remain high, but that teaching practices adapt to the range of capacities of young learners, so that repeated success leads each one toward higher and higher achievement.

Appropriate practice is about **how** children learn and how highly competent teachers teach. Standards are the target. One does not abandon good practice to lead children toward the achievement of high standards. In fact, to do so would result in the opposite outcome. Failure is the antithesis of achieving high standards. Young primary age children are especially vulnerable to negative long term consequences when they experience repeated failure in the school environment.

Effective programs provide learning activities which extend well above and below the general expectations for children in that chronological age range and provide a range of options in terms of learning styles. Through careful observation and monitoring of children's current developmental levels and through effective criterion assessment, children are encouraged to select/participate in ever more challenging learning materials and intellectually stimulating projects. Indeed, the only way to assure that a group of children will achieve a common set of standards is to employ a wide range of instructional strategies.

*When we teach skills to children too early, too formally and out of context, they will learn them without the desire to ever use them.*

Katz, 1992

## Widely-Held Expectations

### ***What Are Widely-Held Expectations?***

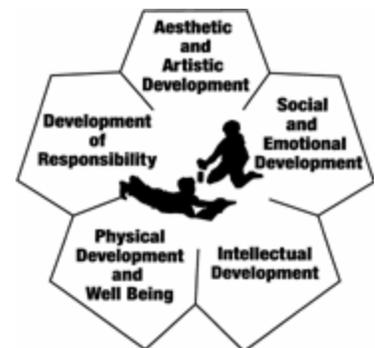
Widely-Held Expectations are generalizations about children's development and learning over time. They are frames of reference that help parents and teachers focus on the development of the individual child. These are not expectations for all children but are general statements that show common patterns of development over time. They are based on expert knowledge, current research, observation of children, and the collective wisdom and common sense of parents and teachers.

Infants around the end of their first year are generally able to smile, sit up, eat solid foods, vocalize, understand and perhaps say a few words, and be on the way to taking that first step. Of course, these expectations are only generalizations—true for some infants, not for others.

Taken individually, none of these Widely-Held Expectations is particularly significant. After all, some infants never crawl before they walk, others don't say a word until one day in their own time and in their own way, they launch their first speech in complete sentences.

Nevertheless, these Widely-Held Expectations are useful generalizations, providing telling snapshots or graphic profiles. Taken together, they may say something important, show a pattern, or raise a question about the developing learner.

The Widely-Held Expectations in this document are divided among the five goals of the primary program, and in the areas of reading, writing, and mathematics. They have been organized for clarity and easy reference according to a time frame of birth through 13 years. However, when using the Widely-Held Expectations, the interest is learner-focused, so we begin where the child is developmentally, no matter what the age.



Widely-Held Expectations...

- Provide the big picture of children's growth and development over time
- Form the basis of the concept of continuous learning
- Help parents and teachers focus on the development of individual children
- Help teachers assess individual learners and plan appropriate learning experiences that ensure continuous progress
- Serve as a reference for parents for reassurance about their child's on-going development
- Can be used for reference by parents in providing developmentally appropriate toys, reading materials, and other opportunities for their children



As parents and teachers use the Widely-Held Expectations, they will begin to develop a picture of a child's progress in relation to the general development of other children of a similar age. When looking at the charts on the following pages, you might want to:

- ✓ Look at all goal areas to gain a balanced view.
- ✓ Look at the age ranges on either side of the child's age to appreciate growth over time.
- ✓ Remember each child is an individual and will shine more brightly in some areas.
- ✓ Use this resource as a starting point and one way of viewing development over time.
- ✓ Consider the experiences that home and school have provided.
- ✓ Be patient—learning is a lifelong process.

**Regardless of whether teachers are thinking in terms of programs, learning goals, planned activities, curriculum areas (subjects), or state standards, the child must always be the first consideration.**

When considering the developing learner, teachers take into account the child's

- Sense of security in social settings
- Family relationships
- Needs
- Previous experiences
- Age
- Health
- Interests
- Feelings
- Learning rates and styles
- Abilities
- Dispositions, skills, knowledge

In planning experiences at the primary level, the teacher thinks about:

- How children learn best
- What learning is appropriate
- When it is best learned

The Primary Program is organized around the five goals so teachers can plan experiences that meet the needs of the whole child. In school, when curriculum, assessment, and evaluation take these factors into consideration, the program is developmentally appropriate.

For the Widely-Held Expectations described on the following pages, the statements and examples of children's development provide only a sample of generally observable behaviors. Parents and teachers will likely think of many other similar examples.

Given that a child has had both home and school opportunities to develop in each goal area, the following Widely-Held Expectations may apply to the child's development.



Growing  
Learning *and*   
*in the* Heartland



## Widely-Held Expectations in Aesthetic and Artistic Development

Birth–3 years	3–5 years	5–7 years
<p><i>Music and Dance</i></p> <ul style="list-style-type: none"> <li>▪ May look at, talk to (babble), grasp, bang, or drop toys</li> <li>▪ May begin to express pleasure or displeasure (laughing, anxiety) when listening to sounds, voices, and music</li> <li>▪ May make sounds to music without using words (“la, la” or “ba, ba”), may enjoy hearing own sounds</li> <li>▪ May begin to move body to sounds and music</li> </ul>	<p><i>Music and Dance</i></p> <ul style="list-style-type: none"> <li>▪ Use movements that are generally spontaneous, unrehearsed, and inventive</li> <li>▪ May respond to music, art, and nature through body movement that is rhythmic, e.g., rocking, clapping, jumping, or shaking</li> <li>▪ May use both a speaking voice and a singing voice when singing alone, with a tape or with others, and may or may not be able to sing a melody in tune</li> <li>▪ May be relatively uninhibited about singing and playing musical instruments</li> </ul>	<p><i>Music and Dance</i></p> <ul style="list-style-type: none"> <li>▪ Often continue to be relatively uninhibited about singing and playing musical instruments</li> <li>▪ Continue to expand and refine responses to a variety of sounds, voices, and music</li> <li>▪ Are developing a singing voice, but the range will differ; may or may not be able to sing a melody in tune</li> <li>▪ Are increasingly able to initiate and repeat movement patterns (walk like a lion, slither like a snake)</li> <li>▪ May show imaginative and creative ways of moving and dancing</li> </ul>
<p><i>Drawing</i></p> <ul style="list-style-type: none"> <li>▪ May try to grasp writing tools with whole hand</li> <li>▪ May draw randomly and look away while drawing or making marks on paper or board</li> <li>▪ May begin to make scribbles for pleasure of seeing the results of their actions</li> <li>▪ Use scribbles, lines, and circles for expression</li> </ul>	<p><i>Drawing</i></p> <ul style="list-style-type: none"> <li>▪ May learn to hold writing tools between fingers and thumb</li> <li>▪ Gradually try making lines and circles repeatedly and with more control</li> <li>▪ May make marks, draw, paint, and build spontaneously to express self</li> <li>▪ May begin to name a person, place, thing, or an action in a drawing</li> </ul>	<p><i>Drawing</i></p> <ul style="list-style-type: none"> <li>▪ Continue to develop the ability to hold and use large size writing and drawing tools</li> <li>▪ Continue to name what has been drawn, painted, or constructed</li> <li>▪ May show first attempts at drawing, painting, and building “things”</li> <li>▪ Gradually include more detail and add more body parts when drawing people</li> <li>▪ May strive for more detail and realism in artwork</li> </ul>
<p><i>Drama</i></p> <ul style="list-style-type: none"> <li>▪ May enjoy pretend games</li> </ul>	<p><i>Drama</i></p> <ul style="list-style-type: none"> <li>▪ Often engage in pretend play easily and naturally</li> <li>▪ May talk to and play with pretend friends, television characters, stuffed and other toys</li> </ul>	<p><i>Drama</i></p> <ul style="list-style-type: none"> <li>▪ Often continue to show lots of imagination and interest in make-believe</li> <li>▪ Continue to talk to imaginary friends; may greet an imaginary friend or call someone with a striking sense of reality</li> </ul>

## Widely-Held Expectations in Aesthetic and Artistic Development

7–9 years	9–11 years	11–13 years
<p><i>Music and Dance</i></p> <ul style="list-style-type: none"> <li>▪ May begin to sing in tune and contribute to musical activities</li> <li>▪ Like to express ideas and feelings through music and movement</li> <li>▪ Expand and refine responses to and express personal preferences for a variety of sounds, voice, and music</li> <li>▪ May become better at interpreting musical sounds as being low, high, or related to certain instruments</li> <li>▪ Continue to initiate and repeat movement patterns; may like to move or dance in front of a mirror</li> <li>▪ May begin to show more redefined movements as coordination develops</li> </ul>	<p><i>Music and Dance</i></p> <ul style="list-style-type: none"> <li>▪ Continue to expand and refine responses to sounds, voice, and music; are becoming aware of cultural characteristics and of personal preferences of friends</li> <li>▪ May become somewhat inhibited in music and movement; may show interest in own musical activities such as lip-synch, band, and mime</li> <li>▪ Continue to develop their sense of coordination, may continue to increase ability to interpret, produce, and reproduce musical sounds</li> </ul>	<p><i>Music and Dance</i></p> <ul style="list-style-type: none"> <li>▪ May begin to develop particular choices in sounds, voice, and music</li> <li>▪ May continue to interpret and produce musical sounds if encouraged and supported to do so</li> <li>▪ Are developing more control over singing voice and breathing; may show interest in joining a group activity such as band, chorus, or musical production, often with friends</li> <li>▪ May seem self-conscious at efforts to move or dance and may appear somewhat awkward or uncoordinated because of rapid physical growth</li> </ul>
<p><i>Drawing</i></p> <ul style="list-style-type: none"> <li>▪ May continue to develop and refine their ability to use a variety of writing and drawing tools</li> <li>▪ Increasingly develop forms, such as a human form, and repeat them over and over</li> <li>▪ May begin to show interest in making their artwork realistic</li> </ul>	<p><i>Drawing</i></p> <ul style="list-style-type: none"> <li>▪ May begin to show interest in developing a skill; may want to know “how” to use a tool to create a special effect</li> <li>▪ May become very self-critical of own work (may want hair to “look like” hair)</li> <li>▪ May want and need to see the object or scene as they are drawing and want to make artwork an exact copy of reality</li> </ul>	<p><i>Drawing</i></p> <ul style="list-style-type: none"> <li>▪ Continue to explore and refine use of various tools to create special effects in artwork</li> <li>▪ May begin to show an interest in perspective or drawing according to scale or to create similar effects</li> <li>▪ May focus on the whole effect of a picture or on detail work</li> <li>▪ May appear to have little confidence and become self-critical of own artwork</li> </ul>
<p><i>Drama</i></p> <ul style="list-style-type: none"> <li>▪ May play the part of a parent or significant other (when playing house or school) and may show signs of cooperative play</li> <li>▪ Often continue to show their imagination through make-believe or with a variety of props</li> <li>▪ May “act out” stories spontaneously</li> </ul>	<p><i>Drama</i></p> <ul style="list-style-type: none"> <li>▪ Continue to engage in make-believe and often have a vivid imagination</li> <li>▪ Generally like to play and perform, but may prefer playing in groups rather than alone</li> <li>▪ May continue to show an interest in making up and performing their own plays</li> </ul>	<p><i>Drama</i></p> <ul style="list-style-type: none"> <li>▪ May want to play but at times feel this is no longer proper to “grownup”</li> <li>▪ May continue to develop imagination and may be less willing to share ideas publicly</li> </ul>

## Widely-Held Expectations in Social and Emotional Development

Birth–3 years	3–5 years	5–7 years
<ul style="list-style-type: none"> <li>▪ May demonstrate visible expressions of emotion (temper tantrums)</li> <li>▪ Actively show affection for familiar people</li> <li>▪ May show anxiety when separated from familiar people and places</li> <li>▪ Are naturally very curious about other children and may watch and imitate others</li> <li>▪ Generally play alone; may or may not attempt to interact with others</li> <li>▪ Strive toward independence with support and affection (sitting up, crawling, walking, dressing, feeding, toileting)</li> <li>▪ Begin to see themselves as people and appear self-centered</li> <li>▪ Begin to see themselves as strong through directing others: “sit down”</li> <li>▪ May become possessive of belongings (special people, toys, special times)</li> </ul>	<ul style="list-style-type: none"> <li>▪ May display their emotions easily and appear very sensitive and impulsive (crying fits, “No!”)</li> <li>▪ Begin to feel more comfortable when separated from familiar people, places, and things (visiting a neighbor, nursery school, baby-sitter)</li> <li>▪ May play alone or beside others but are becoming more aware of the feelings of others. May be frustrated at attempts to socialize but hold no grudges.</li> <li>▪ Begin to assert independence by saying “No” or “I can do it myself!” May dump a cupful of water onto the floor while looking directly at you</li> <li>▪ See selves as family members and as boy or girl in the family</li> <li>▪ See themselves as powerful and creative doers. (If the child can’t reach something, he or she will get a stool)</li> <li>▪ May continue to appear possessive</li> <li>▪ May feel if something is shared for a brief period, it is gone forever</li> </ul>	<ul style="list-style-type: none"> <li>▪ May continue to show intense emotions (one moment will say, “I love you” and the next “You are mean.”)</li> <li>▪ May appear anxious once again when separated from familiar people and places (beginning school, sleep-overs)</li> <li>▪ Are learning to cooperate with others for longer periods of time; friendships may change frequently</li> <li>▪ Continue to develop feelings of independence by becoming able to do certain things (making a simple breakfast or riding a bicycle)</li> <li>▪ May begin to talk about self and to define self in terms of what they have or own</li> <li>▪ May feel they are being treated unfairly if other get something they do not</li> <li>▪ Begin to see themselves as bad, good, clever, and may seem very hard on themselves</li> <li>▪ Begin to develop the ability to share possessions and take turns</li> </ul>

## Widely-Held Expectations in Social and Emotional Development

7–9 years	9–11 years	11–13 years
<ul style="list-style-type: none"> <li>▪ May continue to show bursts of emotion and impatience less frequently</li> <li>▪ May show emotions that are both judgmental and critical of themselves and others</li> <li>▪ Continue to feel some anxiety within the larger community when separated from familiar people, places, things (going to camp, sleep-overs, shopping malls)</li> <li>▪ Are becoming more outgoing</li> <li>▪ Are developing closer friendships with others; may begin to play mainly with children of the same sex</li> <li>▪ Show a generally increased sense of self-confidence</li> <li>▪ Will eagerly take on tasks and activities likely to be successful but usually will not take risks</li> <li>▪ May define self as a particular name, age, size, hair color, or other characteristic (“I’m Elizabeth Anne, and I’m seven years old!”)</li> <li>▪ Are sensitive to criticism and display feelings of success or failure depending on how adults respond to them</li> <li>▪ Continue to develop the ability to share possessions and to take turns if they understand something is not always “lost” by doing so</li> </ul>	<ul style="list-style-type: none"> <li>▪ May appear relatively calm and at peace with themselves and occasionally become angry, sad, or depressed, but these moments are usually short-lived</li> <li>▪ Often hide feelings of anxiety when introduced to new experiences by appearing overconfident</li> <li>▪ Continue to be very sociable and spend time with parents, friends or the same sex, and often have a “special” friend</li> <li>▪ Are generally positive about themselves and begin to understand what they are good at doing; may comment easily, “I can do that” or “I can’t do that”</li> <li>▪ Often define self by physical characteristics and possessions as well as likes and dislikes</li> <li>▪ Often vary between the sexes in their view of what is important in dress and physical appearance</li> <li>▪ Are sensitive to criticism and display feelings of success or failure, depending on how adults and peers respond to them</li> <li>▪ Continue to develop the ability to work and play with others</li> <li>▪ May not want to be disturbed when involved in an activity or game</li> </ul>	<ul style="list-style-type: none"> <li>▪ May begin to show intense emotions, bouts of anxiety, moodiness. Emotions may come close to the surface (cry and anger easily)</li> <li>▪ Continue to hide feelings of anxiety with friends and family, often appearing overconfident with a know-it-all attitude</li> <li>▪ Generally get along well with their friends and continue to show an interest in having a “best” friend; fights and arguments may occur from time to time</li> <li>▪ Start to question adult authority</li> <li>▪ Sometimes engage in self put-downs; in conversations with others may say, “I can’t do anything right!”</li> <li>▪ May begin to define self in terms of opinions, beliefs, values, and expand sense of self by attempting to copy the culture of current fads (clothes, music, sports)</li> <li>▪ Gradually gaining independence from parental influence</li> <li>▪ Are sensitive to criticism and display feelings of success or failure</li> <li>▪ May become self-critical</li> <li>▪ May appear to become possessive with own belongings, especially with younger brothers and sisters</li> <li>▪ May view younger siblings as nuisances when involved with peers and feel discriminated against in family situations</li> </ul>

## Widely-Held Expectations in Intellectual Development

Birth–3 years	3–5 years	5–7 years
<ul style="list-style-type: none"> <li>▪ Make direct contact with their environment to the best of their ability—doing, seeing, hearing, tasting, touching, and smelling (Put objects in their mouth)</li> <li>▪ Are beginning to develop an understanding of language and how it works (imitating sounds, saying words, putting words together)</li> <li>▪ Are learning to name objects and may use the same word for two or more objects (all vehicles called “cars”)</li> <li>▪ Express themselves through scribbles, lines, and circles</li> <li>▪ “Read” pictures for meaning; begin to recognize that writing has meaning (writing is intended for communication)</li> <li>▪ Are likely to think about time in the “here and now”</li> <li>▪ Are increasingly able to identify familiar faces, toys, places, and activities</li> <li>▪ Are developing personal choice (a favorite blanket or toy)</li> <li>▪ May be interested in grouping objects (putting all the large animals to bed and leaving the small ones to play)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to explore the world around them by object manipulation and direct experience (playing)</li> <li>▪ Begin to understand cause and effect (“I fell, I cried, I hurt”)</li> <li>▪ Begin to use language to name objects and their own direct experience of them (“stove-hot”)</li> <li>▪ Name objects and may find two objects are alike in some way (cats and dogs are animals)</li> <li>▪ Are developing a sense of how writing and reading work</li> <li>▪ Combine drawing and “writing”—drawing conveys most of meaning</li> <li>▪ Play at reading—“read” pictures (telling story from pictures)</li> <li>▪ Begin to read commercial and traffic signs (STOP)</li> <li>▪ Continue to develop an understanding that writing conveys a message</li> <li>▪ May think of tomorrow as “after my sleep” and use words like “tomorrow” and “yesterday” though not always correctly</li> <li>▪ May learn nursery rhymes, songs, and addresses, but without really trying to remember</li> <li>▪ Begin to assert personal choice in decision-making (“No broccoli!”)</li> <li>▪ Are developing an interest in the number of things</li> <li>▪ Are increasingly interested in counting although the number may not match the number of objects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to learn from direct experience (playing)</li> <li>▪ Expand and refine knowledge with increasing understanding of cause and effect (“I can go to my friend’s house if I call home when I get there.”)</li> <li>▪ Continue to expand their understanding and use of language to clarify thinking and learning</li> <li>▪ Are continuing to develop a sense of how writing and reading work</li> <li>▪ Combine drawing and writing to convey ideas</li> <li>▪ Understand that print “tells” the story</li> <li>▪ Develop a basic vocabulary of personal words</li> <li>▪ Read slowly and deliberately</li> <li>▪ Will substitute words that make sense when reading</li> <li>▪ Developing an understanding of words like “tomorrow;” may still be unsure about length of time (“Is it ready?” or “Are we there yet?”)</li> <li>▪ May begin to organize information to remember it (own telephone number, sound-symbol relations)</li> <li>▪ Continue to assert personal choice in decision-making (what to wear to school)</li> <li>▪ Begin to understand that the number of objects does not change when grouped in different ways</li> <li>▪ Are developing the ability to match counting 1, 2, 3 with number of objects</li> </ul>

## Widely-Held Expectations in Intellectual Development

7–9 years	9–11 years	11–13 years
<ul style="list-style-type: none"> <li>▪ May begin to do multi-step problems using objects to manipulate and count (blocks, fingers, buttons)</li> <li>▪ Continue to deepen understanding of cause and effect (“If I don’t go right home after school, my parents will worry.”)</li> <li>▪ Continue to expand their understanding and use of language to clarify thinking and learning</li> <li>▪ May work with simple metaphors (“My horse runs like the wind.”)</li> <li>▪ Begin using writing and reading for specific purposes</li> <li>▪ Combine drawing and writing; writing can stand alone to convey meaning</li> <li>▪ Develop a rapidly increasing vocabulary of sight words</li> <li>▪ Begin to self-correct errors</li> <li>▪ Develop the ability to read silently</li> <li>▪ Increase ability to read aloud fluently with expression</li> <li>▪ May be learning to tell time and becoming more adept at understanding the meaning of “before,” “soon,” “later”</li> <li>▪ Are increasingly able to organize and rehearse information in order to remember, but may still forget</li> <li>▪ Continue to develop a need for increased ownership in decision-making (games, projects)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to use direct experience, objects, and visual aids to help understanding</li> <li>▪ Continue to expand and deepen understanding of cause and effect (“I can have a pet, if I take care of it.”)</li> <li>▪ Continue to broaden understanding of language and its use to clarify thinking and learning</li> <li>▪ May begin to use puns (“A cow is a lawn mooer.”)</li> <li>▪ Can expand thinking more readily through writing and reading</li> <li>▪ Increase reading vocabulary</li> <li>▪ Continue to self-correct errors</li> <li>▪ Read silently with increased speed and comprehension (Silent reading speed greater than oral speed may result in oral reading difficulties)</li> <li>▪ Adjust reading rate to suit purpose (scanning)</li> <li>▪ Expand reading skills to gather information from a variety of sources</li> <li>▪ Make personal choices in reading for pleasure</li> <li>▪ Continue to develop understanding of time-year in terms of important events—but may forget dates and responsibilities</li> <li>▪ Continue to develop the ability to purposefully organize and remember information</li> <li>▪ Continue to need increased ownership in decision-making (clothing, friends, activities)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Begin to develop ability to “manipulate” thoughts and ideas but still need hands-on experiences</li> <li>▪ Do some abstract reasoning</li> <li>▪ Refine understanding of cause and effect (“If I do, I can’t go outside.”)</li> <li>▪ Continue to broaden knowledge, understanding, and use of language to clarify thinking and learning</li> <li>▪ Often like jokes and words with double meanings</li> <li>▪ Continue to expand thinking more readily through writing and reading</li> <li>▪ Continue to increase silent reading rate and time spent at reading</li> <li>▪ Continue to increase ability to adjust rate and reading to suit purpose (skim, scan, select, study)</li> <li>▪ Continue to broaden their interests in a variety of fiction and non-fiction</li> <li>▪ Begin to understand people may interpret same material in different ways</li> <li>▪ May be able to talk about recent events, plan for the future and career aspirations</li> <li>▪ May begin to develop more complex schemes to aid memory</li> <li>▪ Need ownership in decision-making with the continued guidance of a responsible person</li> <li>▪ Develop ideas about real objects and their properties—length, area, mass, capacity, and volume—through direct experiences and by thinking about those experiences</li> </ul>

## Widely-Held Expectations in Physical Development

Birth–3 years	3–5 years	5–7 years
<ul style="list-style-type: none"> <li>▪ May experience a period of extremely rapid growth</li> <li>▪ Develop the ability to move about and to manipulate objects to the best of their ability</li> <li>▪ Begin to develop vision following slowly moving objects with their eyes</li> <li>▪ Begin to develop hand-eye coordination—reaching, grasping, objects, feeding, dressing</li> <li>▪ Begin to recognize concepts of place and direction—up, down, in</li> <li>▪ Begin to move about—sit, stand, crawl, walk, climb stairs, walk backwards—to the best of their ability</li> <li>▪ Are beginning to identify their own body parts, often through nursery rhymes and games</li> <li>▪ Are unaware of physical strength and limitations so may attempt activities that could be difficult or dangerous</li> <li>▪ May often change activities</li> <li>▪ Will move about at own pace, always near a trusted adult</li> <li>▪ Are likely to play alone or beside another</li> <li>▪ Begin to play games like peek-a-boo and hide-and-seek</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are experiencing a period of rapid growth</li> <li>▪ Have a slower rate of small muscle development (hands) than growth and coordination of large muscles (legs)</li> <li>▪ Are usually naturally far-sighted</li> <li>▪ Continue to develop hand-eye coordination and a preference for left or right handedness</li> <li>▪ Begin to understand and use concepts of place and direction—up, down, under, beside</li> <li>▪ Are developing the ability to climb, balance, run, gallop, jump, push and pull, and take stairs one at a time</li> <li>▪ Are beginning to identify body parts and words used in movement—jump, save, hop</li> <li>▪ Seem unaware of their own physical strengths and limitations and may try potentially difficult or dangerous activities</li> <li>▪ May change activities often, although sometimes concentrate on one thing for a long time if interested</li> <li>▪ Are beginning to take part in group situations, but still play side-by-side rather than “with” others</li> </ul>	<ul style="list-style-type: none"> <li>▪ May or may not experience a slower rate of physical growth. Large muscles (legs and arms) may be more developed than small muscles (hands and feet)</li> <li>▪ May increase fine motor skills (handling writing tools, using scissors)</li> <li>▪ Usually continue to show far-sightedness</li> <li>▪ Continue to develop hand-eye coordination. A preference for left or right-handedness may still be developing.</li> <li>▪ Continue to develop an understanding of direction and place although may confuse right and left, up and down when playing games</li> <li>▪ Continue to develop climbing, balancing, running, galloping, and jumping abilities. May have trouble skipping.</li> <li>▪ Are growing in their ability to know what and where their body parts are, and how they can be moved and coordinated</li> <li>▪ Continue vigorous activity, tiring easily, recovering quickly</li> <li>▪ Tire from sitting rather than running</li> <li>▪ Develop an awareness of safety with guidance</li> <li>▪ Usually show enthusiasm for most physical activities and are sometimes called noisy or aggressive</li> <li>▪ Are developing the ability to take part in small group games, and usually begin to play in groups of children of the same sex</li> </ul>

## Widely-Held Expectations in Physical Development

7–9 years	9–11 years	11–13 years
<ul style="list-style-type: none"> <li>▪ Continue to refine fine motor development and may have slower rate of physical growth</li> <li>▪ May experience some visual difficulties (eye testing and corrective lenses)</li> <li>▪ Are continuing to develop hand-eye coordination, and may accomplish more complex tasks</li> <li>▪ Are developing ability to coordinate left and right sides by showing a preference for batting, kicking, or throwing with one side or the other</li> <li>▪ Are gradually increasing in speed and accuracy during running, climbing, throwing, kicking, and catching activities</li> <li>▪ Are continuing to understand body parts and uses</li> <li>▪ Are beginning to understand basic ideas of nutrition</li> <li>▪ May show more daring, exploring behavior that could lead to accidents</li> <li>▪ Show times of high energy; become easily tired</li> <li>▪ Continue to develop awareness of safety with guidance</li> <li>▪ Continue to show enthusiasm for most physical activities</li> <li>▪ May be interested in playing in groups although the group and the activity probably change often</li> </ul>	<ul style="list-style-type: none"> <li>▪ May experience a spurt of growth before puberty</li> <li>▪ May experience some visual difficulties (eye testing and corrective lenses)</li> <li>▪ Are continuing to develop hand-eye coordination, and skill level for physical activities may depend on this increase in coordination</li> <li>▪ Are continuing to develop ability to use either the right side or left side for batting, kicking, or throwing</li> <li>▪ Show increased coordination, but growth spurts may begin to interfere</li> <li>▪ Develop the ability to hit a ball (softball bat, tennis racquet, golf club)</li> <li>▪ Are developing a more sophisticated understanding of body parts and function as well as basic ideas of nutrition and growth</li> <li>▪ Are beginning to develop the ability to pace themselves during high energy activities</li> <li>▪ Understand safety rules but sometimes take risks</li> <li>▪ May begin to show a preference for some physical activities over others</li> <li>▪ May appear to enjoy more complex group games and simple sports</li> <li>▪ May show a strong sense of loyalty to a group or team</li> </ul>	<ul style="list-style-type: none"> <li>▪ May experience rapid and uneven growth but this occurs at different rates for individual children; arms and legs may grow rapidly.</li> <li>▪ May continue to experience changes to eyesight</li> <li>▪ Continue to develop and refine hand-eye skills and integrate them with whole body efforts in sports and games</li> <li>▪ Continue to refine right/left preference, and may show increasing strength with one hand/arm/foot</li> <li>▪ May show periods of relatively poor coordination and awkwardness; may show some poor posture because of rapid growth</li> <li>▪ May continue to develop more sophisticated understanding of body parts and functions and begin to get the idea of a simple body system</li> <li>▪ Continue to enjoy sports and group games</li> <li>▪ Learn more complex body movements</li> <li>▪ Continue to develop the ability to pace themselves during high energy activities</li> <li>▪ Understand safety rules but sometimes takes risks</li> <li>▪ Often vary between the sexes in their interest in physical activities</li> <li>▪ Continue to play in same-sex groups, often engage in more formal team activities, and continue to show great loyalty to group or team</li> </ul>

## Widely-Held Expectations in Development of Responsibility

Birth–3 years	3–5 years	5–7 years
<ul style="list-style-type: none"> <li>▪ Appear insensitive to the views of others, yet show interest in them</li> <li>▪ Are generally self-centered in their views</li> <li>▪ Look at the world mostly from their own viewpoint (may think the sun sets because they go to bed)</li> <li>▪ May cry when they see or hear another child crying</li> <li>▪ Physically explore the environment to the best of their abilities using their senses (seeing, hearing, tasting, smelling, and feeling)</li> <li>▪ Are natural explorers, eager for new experiences</li> <li>▪ Are beginning to distinguish between familiar and unfamiliar faces</li> <li>▪ Are becoming aware of their own feelings and respond to others' expressions (become upset if caregiver is also upset)</li> <li>▪ Begin to recognize consequences follow actions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are becoming aware of others and beginning to take part in social play groups</li> <li>▪ May play “beside” rather than “with” others</li> <li>▪ Are beginning to see that their views differ from those of others but remain self-centered</li> <li>▪ May show aggressive feelings toward others when something does not go their way</li> <li>▪ Are beginning to sense when another person is sad, angry, happy</li> <li>▪ Become interested in exploring the environment outside the immediate home; may be interested in growing seeds, weather, seasons, the moon, and sun</li> <li>▪ Continue to eagerly explore the world around them</li> <li>▪ Are becoming more aware of family and social relationships</li> <li>▪ May sense another person's unhappiness (such as another child crying) and now know how to help</li> <li>▪ Become aware of consequences of own behavior</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are developing the ability to take part in social groups, and for longer periods of time, increasing awareness of others</li> <li>▪ May prefer to play alone at times or with others</li> <li>▪ Are developing the ability to see that others have feelings and different views than their own</li> <li>▪ May begin to respond to others in times of distress if they are supported and encouraged to do so</li> <li>▪ Are developing an interest in the community and the world outside their own</li> <li>▪ May begin to show an awareness of basic necessities (food, clothing, shelter)</li> <li>▪ Are beginning to develop an interest in specific issues pertaining to their world (recycling)</li> <li>▪ May begin to notice how people are similar and different from one another</li> <li>▪ Are developing the ability to respond sympathetically to others if they are hurt, upset, or crying</li> <li>▪ Begin to understand consequences of own and others' behavior</li> </ul>

## Widely-Held Expectations in Development of Responsibility

7–9 years	9–11 years	11–13 years
<ul style="list-style-type: none"> <li>▪ Are learning to work in groups and are developing the ability to get along with others</li> <li>▪ Can lead sometimes, and can follow others</li> <li>▪ Are developing the ability to see how others act and what they expect in certain situations</li> <li>▪ May be developing close friendships that are helping them learn to understand how others think and feel</li> <li>▪ Continue to develop the ability to respond sympathetically to others if they are supported and encouraged to do so</li> <li>▪ Continue to be curious about the world around them and may show interest in learning about other people (food, clothing, shelter)</li> <li>▪ Are developing an interest in an enthusiasm for specific issues pertaining to their world and can define simple actions to help (returning aluminum cans for recycling)</li> <li>▪ Are developing an appreciation of their own and other cultural heritages through special events, festivals, foods, folk songs, and other concrete experiences</li> <li>▪ Continue to develop the ability to respond sympathetically to others if this is supported</li> <li>▪ Continue to understand consequences of own and other's behaviors</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to learn to work in groups if this activity is supported</li> <li>▪ May become upset or distressed if they have problems with friends</li> <li>▪ Begin to understand the idea of the differing contributions of group members to a common goal</li> <li>▪ Are developing the ability to take a third-person view, in which they see situations, themselves and others as if they were spectators, but still do not coordinate these views</li> <li>▪ May be developing the ability to see others have different viewpoints but still do not coordinate these views with their own</li> <li>▪ Continue to try to develop the ability to respond sympathetically to others but still have difficulty in taking any point of view but their own</li> <li>▪ Continue to develop an awareness of how own family meets basic needs</li> <li>▪ Are developing personal views of important issues and values pertaining to their world and act upon their beliefs (making posters)</li> <li>▪ Are continuing to develop an appreciation of their own and other cultural heritages; can talk about similarities and differences</li> <li>▪ Continue to develop the ability to respond sympathetically to others and may try to help them</li> <li>▪ Begin to “weigh” consequences of own actions</li> </ul>	<ul style="list-style-type: none"> <li>▪ May show that their relations with friends are increasingly important</li> <li>▪ Continue to develop the ability to work cooperatively and collaboratively with others</li> <li>▪ Are developing the ability to understand that there are several sides to an issue but are just beginning to show evidence of being able to take other views into account; still consider own point of view the right one</li> <li>▪ Continue to develop the ability to see the worth of others' viewpoints if this is supported</li> <li>▪ Continue to develop the ability to respond sympathetically to others and may begin to consider other points of view</li> <li>▪ Continue to develop an awareness of how family needs affect others</li> <li>▪ Are becoming more committed to their belief and personal views of the world around them (writing letters to newspapers)</li> <li>▪ May begin to appreciate the rich multicultural heritage of their own country while cherishing family culture in relation to the whole</li> <li>▪ May begin developing the ability to empathize with another's feelings in understandable situations</li> <li>▪ Begin to “test” consequences of own and others' actions</li> </ul>

## Widely-Held Expectations in Reading Development

3–5 years	5–7 years
<ul style="list-style-type: none"> <li>▪ Are curious about print in own environment—names of letters, sign, labels, and logos</li> <li>▪ Play at reading: “read pictures” rather than print</li> <li>▪ Begin with naming and commenting on the pictures, then telling stories from the pictures</li> <li>▪ “Read” print in own familiar environment (restaurant signs, familiar places, traffic signs)</li> <li>▪ Know that print is a source of information and enjoyment</li> <li>▪ Begin to develop a “sense of story”</li> <li>▪ Focus on the whole story rather than on individual words</li> <li>▪ Begin to develop knowledge of some conventions of print, front-to-back directionality of books</li> <li>▪ Rely on an adult or older child to read text</li> <li>▪ Like books with illustrations, repetition, and rhyme</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are curious about print—word forms and spellings</li> <li>▪ Role play themselves as readers, relying heavily on memory at first</li> <li>▪ Begin to focus on print, but use pictures to predict and confirm meaning</li> <li>▪ Attempt to match voice to print</li> <li>▪ Are increasingly able to recognize environmental print away from its familiar context</li> <li>▪ Begin to develop a basic vocabulary of functional and personal words recognized on sight</li> <li>▪ Understand that print “tells the story”</li> <li>▪ Continue to develop a “sense of story”</li> <li>▪ Are increasingly able to deal with the parts of print (letters and words)</li> <li>▪ Increase awareness of print conventions (top-to-bottom left-to-right directionality, punctuation)</li> <li>▪ Develop knowledge of common letter-sound relationships</li> <li>▪ Begin to develop an ability to try reading print, including ways to figure out unknown words (common letter sound associations, picture clues)</li> <li>▪ Choose short books with simple stories and illustrations</li> <li>▪ Enjoy reading favorite books</li> </ul>

## Widely-Held Expectations in Reading Development

7–9 years	9–11 years	11–13 years
<ul style="list-style-type: none"> <li>▪ Are interested in print (spellings, word meanings)</li> <li>▪ Show interest in topics, characters, and events</li> <li>▪ See themselves as readers</li> <li>▪ Read for a variety of purposes</li> <li>▪ Make greater use of context to predict and confirm meaning of words</li> <li>▪ Begin to self-correct own miscues (“errors”)</li> <li>▪ Are rapidly increasing knowledge of words recognized on sight</li> <li>▪ Developing ability to read silently</li> <li>▪ Are increasingly able to read orally with fluency and expression</li> <li>▪ Are developing knowledge of a variety of forms that communicate ideas (graphs, maps, charts)</li> <li>▪ Have a “sense of story” and can identify the parts</li> <li>▪ Are increasingly able to focus on details keeping main ideas in mind</li> <li>▪ Understand the main conventions of print (directionality, punctuation)</li> <li>▪ Develop increasing knowledge of letter-sound relationships and common spelling patterns</li> <li>▪ Develop increasing independence in reading</li> <li>▪ Show ability to make inferences (understand intent, draw conclusions)</li> <li>▪ Are beginning to read novels; use books to find information</li> </ul>	<ul style="list-style-type: none"> <li>▪ May broaden their interests in fiction and non-fiction</li> <li>▪ Are increasingly able to set own purposes for reading (read for interest, by topic, or favorite author)</li> <li>▪ Self-correct own miscues confidently and independently</li> <li>▪ Are increasing the length of time concentrating on reading</li> <li>▪ Are increasing an ability to adjust reading rate to suit purpose (scanning to locate information)</li> <li>▪ Begin to try reading material in various forms (graphs, maps)</li> <li>▪ Are aware of different genres of reading materials and can identify some elements (the moral of a fable)</li> <li>▪ Are increasingly able to deal with detail in content and form, while keeping main ideas in mind</li> <li>▪ Understand the main conventions of print (directionality, capitalization, punctuation) and are developing an increasing knowledge of standard spelling</li> <li>▪ Are able to read independently</li> <li>▪ Show increasing ability to make inferences and to read critically</li> <li>▪ Are able to organize information from reading</li> <li>▪ May read longer and more demanding texts</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to broaden their interests in fiction and non-fiction</li> <li>▪ Read for an increasing variety of purposes and choose from a wide range of reading material</li> <li>▪ Understand that different readers may interpret the same material in different ways</li> <li>▪ Increase reading vocabulary, silent reading rate, length of time for concentration, and ability to adjust rate of reading to suit purpose (skim, scan, select, study)</li> <li>▪ Increase ability to read various forms of text (graphs, maps, charts)</li> <li>▪ Increase knowledge of an ability to identify and discuss the elements (characters, plot) of a variety of reading materials</li> <li>▪ Are able to deal with detail in content and form while keeping main ideas in mind</li> <li>▪ Understand the main conventions of print (directionality, capitalization, punctuation, and spelling)</li> <li>▪ Are able to read independently</li> <li>▪ Are increasing in ability to read critically and to detect inconsistencies in argument</li> <li>▪ Are increasingly able to understand and discuss aspects of literature such as theme, conflict, and author’s style</li> <li>▪ Are increasing in the ability to persist with longer and more complex texts (more difficult novels, school textbooks)</li> </ul>

## Widely-Held Expectations in Writing Development

3–5 years	5–7 years
<ul style="list-style-type: none"> <li>▪ View writing as something that people do and like to play at writing; are curious about letters and words</li> <li>▪ Combine drawing and writing but drawing conveys most of the meaning</li> <li>▪ May not intend to convey a particular message and may ask “What does this say?” of own writing</li> <li>▪ Play at writing and may produce:               <ul style="list-style-type: none"> <li>– Scribble writing (imitative cursive writing)</li> <li>– Random symbols (strings of forms that resemble letters)</li> <li>– Random letters (strings of letters)</li> <li>– Single letters that represent a sound (s for “snake) or a syllable (dd for “daddy”)</li> </ul> </li> <li>▪ May produce some conventional words (own name, mom, dad) as well as play writing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are interested in the names of letters and how to represent specific speech sounds; write mainly for personal interest</li> <li>▪ Combine drawing and writing to convey ideas</li> <li>▪ Demonstrate increasing knowledge of letter names, common letter-sound associations—especially consonants and some forms of writing (labels, stories, letters)</li> <li>▪ Produce increasingly conventional writing by:               <ul style="list-style-type: none"> <li>– Writing in capitals and moving toward the use of lower case letters</li> <li>– Spelling with consonants and moving toward phonetic spellings that include vowels</li> <li>– Spelling some common words conventionally</li> <li>– Showing some sense of directionality but may reverse some letters (b and d) or right to left at times</li> <li>– Starting to use some punctuation marks (periods)</li> </ul> </li> <li>▪ May produce:               <ul style="list-style-type: none"> <li>– Writing usually related to their own experiences</li> <li>– A label or caption to accompany a drawing</li> <li>– Single words or phrases</li> <li>– Short, simple sentences</li> <li>– A series of simple sentences</li> <li>– Simple stories with one or two characters</li> </ul> </li> </ul>

## Widely-Held Expectations in Writing Development

7–9 years	9–11 years	11–13 years
<ul style="list-style-type: none"> <li>▪ Enjoy writing and sharing own writing with others</li> <li>▪ Begin to develop a sense of audience</li> <li>▪ May combine drawing and writing, but writing can stand alone to convey meaning</li> <li>▪ Demonstrate increasing knowledge of letter-sound relationships, including vowels, common spelling patterns, terms used with writing (letter, word, sentence); and forms of writing (poem, report)</li> <li>▪ Produce increasingly conventional writing by:               <ul style="list-style-type: none"> <li>– Spelling an increasing number of words</li> <li>– Using upper and lower case letters and spacing between words</li> <li>– Conventionally using functional spelling when drafting</li> <li>– Understanding directionality (left-to-right, top-to-bottom of a page, front-to-back in a book) but still may reverse letters (b and d)</li> <li>– Developing the ability to punctuate (periods, question marks)</li> </ul> </li> <li>▪ May produce a series of connected ideas that make sense, stories with two or more characters, stories of a full page or more, and reports, letters, poems, and other forms of writing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Enjoy receiving feedback from others about own writing</li> <li>▪ Show an increasing awareness of audience</li> <li>▪ Understand writing as “ideas written down”</li> <li>▪ Can convey more complex ideas through writing</li> <li>▪ Are able to write for an increasing number of purposes</li> <li>▪ Demonstrate increasing knowledge of most spelling patterns, terms used with writing (paragraph, punctuation) and a variety of forms of writing (fables, fairy tales)</li> <li>▪ Spell a considerable number of words conventionally</li> <li>▪ Use functional spelling while drafting, but search for standard spelling before the final draft</li> <li>▪ Use many punctuation marks conventionally (periods, questions marks) but may still confuse others (commas, quotation marks)</li> <li>▪ May produce stories with two or more characters, topics of ideas supported by relevant details, a series of ideas connected smoothly and logically, a variety of sentence structures and varied sentence length, and more complex reports, letters, poems and so on</li> </ul>	<ul style="list-style-type: none"> <li>▪ Enjoy playing with words and ideas and can write from different points of view</li> <li>▪ Value and seek out feedback on own writing and write for a wider audience</li> <li>▪ Show increasing awareness of differences between speaking and writing</li> <li>▪ Write for a broad range of purposes and can convey increasingly complex and abstract ideas through writing</li> <li>▪ Demonstrate increasing knowledge of spelling patterns, terms used with writing, a wider range of forms and parts of speech, but are not yet able to grasp many of the formal aspects of grammar</li> <li>▪ Produce increasingly conventional writing by using standard spelling and most punctuation marks (but still may confuse marks such as commas and semi-colons)</li> <li>▪ May produce writing that               <ul style="list-style-type: none"> <li>– Is easily understood, fluent, logically organized, unified, and elaborated</li> <li>– Is more complex in grammatical structure than speech</li> <li>– Contains more complex narratives with complex settings and characters</li> <li>– Has more complex non-narrative forms</li> </ul> </li> </ul>

## Widely-Held Expectations in Mathematics Development

Birth–3 years	3–5 years	5–7 years
<ul style="list-style-type: none"> <li>▪ Begin to recognize “one” and “more than one”</li> <li>▪ Count to nursery rhymes or the alphabet song</li> <li>▪ Begin to pick out one thing from a group; sometimes find two or three that are the “same”</li> <li>▪ Begin to identify simple qualities of things like “soft” and “hard” or “hot” and “cold”</li> <li>▪ Begin to get some ideas of how things are alike and how they are different</li> <li>▪ May follow the “path” of an object</li> <li>▪ May use simple quantity words such as “one more cookie” or “more milk”</li> </ul>	<ul style="list-style-type: none"> <li>▪ Recognize and count up to five</li> <li>▪ Identify portions when sharing</li> <li>▪ Recognize and name simple shapes (squares, circles, triangles)</li> <li>▪ Match pictures to actual shapes</li> <li>▪ Sort using a single attribute</li> <li>▪ Recognize simple patterns</li> <li>▪ Learn more qualities of objects (“thick” and “thin”)</li> <li>▪ Line up two or three objects using size or some other category</li> <li>▪ Use language to begin to get ideas about space and time (“next to,” “on top of,” “before,” “after”)</li> <li>▪ Compare objects</li> <li>▪ Use measurement words (“big and small,” “short and tall,” “near and far”)</li> <li>▪ May recognize that two is always two and three is always three but does not apply this concept beyond five</li> </ul>	<ul style="list-style-type: none"> <li>▪ Count first by starting back at 1 each time something is added</li> <li>▪ Begin to pick up counting where they left off, starting with 7 and counting on to 8 and 9</li> <li>▪ Count all types of things; play with counting forward or backward</li> <li>▪ Enjoy counting to 10 and idea of big numbers</li> <li>▪ Use pattern block and other materials to make and extend patterns</li> <li>▪ Match objects in one set to objects in a second set</li> <li>▪ Sequence things from the biggest to the smallest by size or other variable</li> <li>▪ May insert items into a sequence at the appropriate place</li> <li>▪ Enjoy lining up according to size</li> <li>▪ May enjoy card games that help consolidate concepts</li> <li>▪ Classify objects in a variety of ways</li> <li>▪ May isolate a set from a collection</li> <li>▪ May realize that a collection can be sorted in more than one way</li> <li>▪ Begin to develop a stable idea of a straight line</li> <li>▪ Try measuring all sorts of things but with non-standard units</li> <li>▪ Begin to recognize that 10 is 10 or 20 is 20, no matter how objects are arranged in a group</li> <li>▪ Work with simple number facts showing different sums with many types of materials</li> </ul>

## Widely-Held Expectations in Mathematics Development

7–9 years	9–11 years	11–13 years
<ul style="list-style-type: none"> <li>▪ Begin to enjoy counting puzzles and games where they need to find a number between 10 and 99</li> <li>▪ Are able to identify sets of objects with 2 or 3 attributes in common (separate triangles by color, size, and thickness)</li> <li>▪ May order things in a sequence in one set in relation to a sequence in a second set</li> <li>▪ Use rulers and yard sticks to measure length</li> <li>▪ Order numbers from 0–10, and then 10–100 and much higher</li> <li>▪ Group numbers by two, threes, fives, tens, and so on</li> <li>▪ Begin to classify things in more complex ways and use general categories and sub-categories</li> <li>▪ Begin to develop the idea of vertical and horizontal lines</li> <li>▪ Begin to estimate and measure and to use standard units to communicate similarities and differences</li> <li>▪ Begin to develop part and whole relationships and understand subtraction by separating a whole into parts</li> <li>▪ Make simple explorations with the concept of place value (combining groups of 100s, 10s and 1s to make different numbers)</li> <li>▪ Represent more addition and subtraction “facts” in a variety of ways</li> </ul>	<ul style="list-style-type: none"> <li>▪ Begin to understand the number system as a system built on tens particularly when working with base 10 block and other activities</li> <li>▪ Begin to extend number sequences to take in large numbers from 1,000 to 10,000 and beyond</li> <li>▪ May work on practical problems involving length, capacity, time, and large numbers; explore patterns in number systems; explore size relationships; build models of numbers 100, 1,000, 10,000; and refine abilities to estimate</li> <li>▪ Begin to see the need for a special measure</li> <li>▪ Continue to work on everyday problems involving length and may extend this to area, perimeter problems, using a variety of units</li> <li>▪ Have a better coordination of parts and whole as related to both time and fractional concepts</li> <li>▪ Work on many whole number problems</li> <li>▪ Begin to coordinate vertical and horizontal lines to help with ideas of area</li> <li>▪ Become comfortable using simple graphs to show relationships</li> </ul>	<ul style="list-style-type: none"> <li>▪ Begin to explore other ways to build number systems—for example, to think about numbers being represented by 0s and 1s</li> <li>▪ Begin to explore three-dimensional objects</li> <li>▪ May be curious about making drawings to scale</li> <li>▪ Begin to explore different simple number sequences which require more than simple addition and subtraction for their extension (2, 4, 8, 16 ... or 1, 3, 6, 10 ...)</li> <li>▪ Begin to experience the ideas of mass and volume</li> <li>▪ Begin to use line and pie graphs to represent information and explore relationships</li> <li>▪ Begin to explore more complex number relationships and represent ideas in a greater number of ways</li> <li>▪ Begin to use standard units for finding mass and volume based on many concrete activities</li> <li>▪ Use a variety of measurement tools</li> <li>▪ May begin to see the relationships between fractions and decimals</li> <li>▪ May develop the idea that the whole is equal to the sum of its parts as a basis for the idea of percent (interest rates in savings accounts, cost of sale items 25%)</li> <li>▪ May have some early experiences with the idea of variable</li> </ul>

