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FIVE FUNDAMENTALS FOUND IN EVERY PLAYGROUND FOR ALL

A Miracle Playground for All invites and welcomes everyone of different ages and abilities, not just children. This includes families with children and parents who have sensory-processing disorders, autism, and people of all ages in wheelchairs or other mobility devices. Each Miracle Playground for All is designed to welcome everyone and supports the following five fundamentals:



- ## 1 Provide multi-sensory play experiences
- Vestibular (movement and balance)
 - Proprioceptive (body position)
 - Tactile (touch)
 - Auditory (hearing)
 - Visual



- ## 2 Encourage all children to play
- Providing a graduated range of challenge
 - Grouping similar equipment together
 - Offering equipment for multiple age groups
 - Providing real choices of play for each child



- ## 3 Allow greater accessibility
- Protective, shock-absorbing unitary surfacing
 - Wide movement routes
 - Smooth, even transitions on and off equipment



- ## 4 Ensure kids do not get overwhelmed
- Offering cozy, quiet spaces
 - Establishing perimeter paths and fences
 - Providing a wayfinding system that includes an orientation path



- ## 5 Create welcoming social environments
- Solitary play
 - Onlooker play
 - Parallel play
 - Associative play
 - Cooperative play

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Fundamental 1: Provide Multi-Sensory Play Experiences

PLAYGROUNDS FOR ALL ARE MULTI-SENSORY



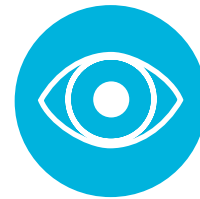
Tactile

The tactile system is our ability to interpret the world through our touch. It allows us to figure out what is hot/cold, rough/smooth, or bumpy through our hands, our feet, our skin, and our entire body. Our Sensory Maze enables children to use their tactile and visual sensory systems through a unique and fascinating play experience.



Vestibular

This system explains the perception of our body in relation to gravity, movement and balance. The Accelerator Swing, Accessible Whirl, Alta-Glide, and other swings provide wonderful vestibular input. Did you know that 15 minutes of vestibular activity can impact the brain for 6–8 hours?



Visual

Sight or vision is the ability of our eyes to focus and detect images of visible light and recognize varying colors, hues, and brightness. Visual perception is how the brain processes these impulses — recognizing, differentiating and interpreting visual stimuli through comparison with experiences made earlier in life.



Sensory Play is crucial to EVERY child's development and growth:

- Builds connections in the brain's pathways, helping a child to complete more complex learning tasks
- Develops language skills, academic growth, fine and gross motor skills, motor-planning skills and other executive function skills
- Enables children to practice social interaction
- Calms an overwhelmed, anxious or frustrated child
- Teaches children about differentiating different sensory cues (hot, cold, loud, soft, rough, smooth)



Proprioceptive

Proprioception is very important as it lets us know exactly where our body parts are, how we are positioned in space and how to plan our movements. Our wide range of climbers and overhead events enable all children, regardless of their gross motor abilities, to experience proprioceptive input.



Olfactory

The sense of smell can be stimulated at a playground by adding a sensory garden, which can also engage the senses of touch and vision, sometimes even taste.



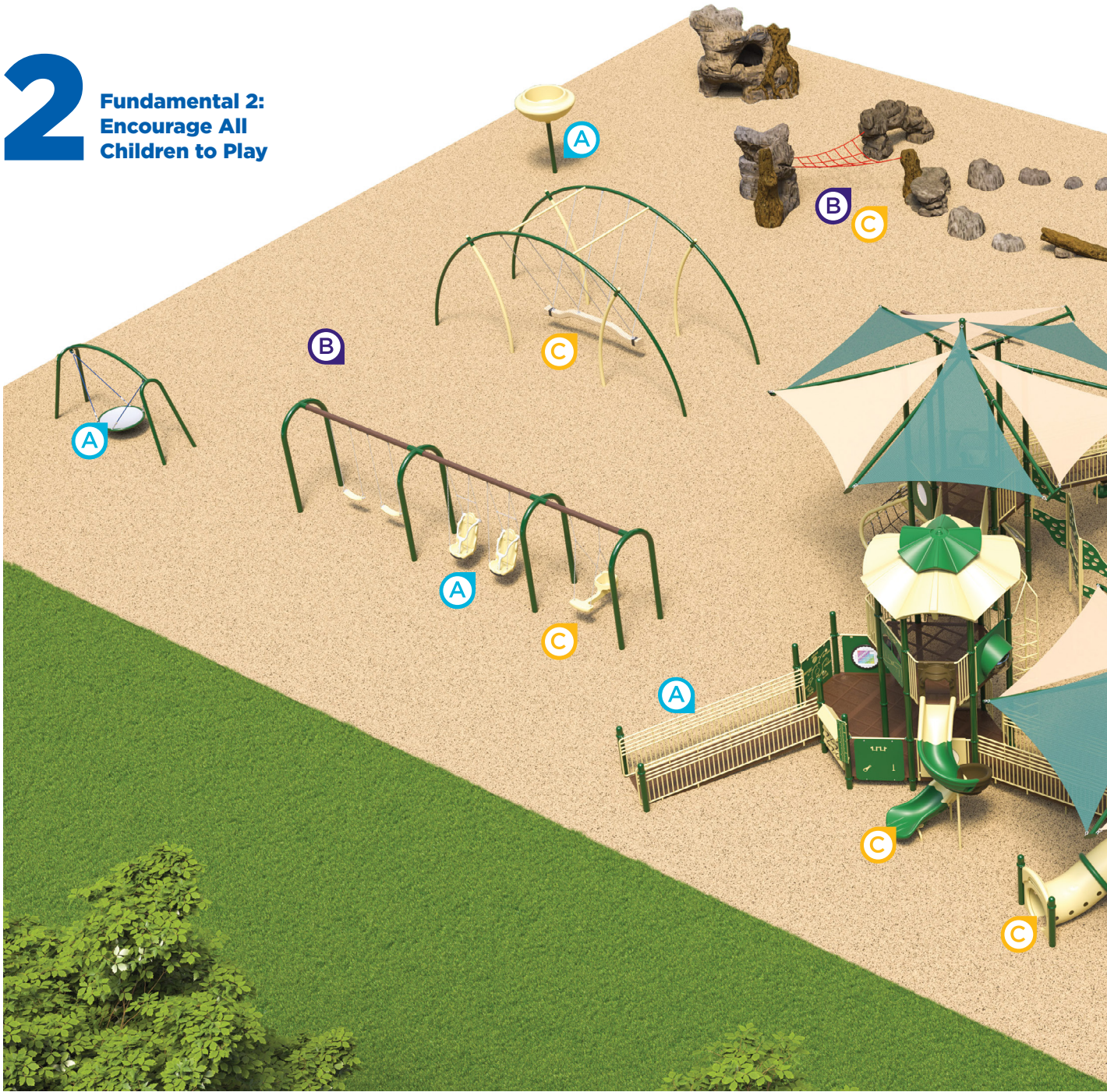
Auditory

Hearing is the ability to perceive sound by detecting vibrations and changes in the pressure in the ear. Our musical instruments, auditory play panels and Fun Fones help children to recognize and differentiate sound stimuli. And they are FUN!



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**Fundamental 2:
Encourage All
Children to Play**



PLAYGROUND DESIGNS THAT BRING KIDS CLOSER TOGETHER

A key fundamental of a Playground for All is to encourage children of all ages and abilities to play, to be challenged, and to have fun. We use the following three strategies to choose and lay out equipment in ways that encourage social interaction:



Real Play Choices

We ensure that everyone gets to play by providing real play choices for people who use mobility devices. There are always multiple places for children who use wheelchairs to play on Playgrounds for All. These high-value play choices can be accessed by a simple transfer or by rolling up to or onto the equipment. **Accelerator Swing, Inclusive Swing Seat, Inclusive Whirl, Concerto, Accessible Ramp, Fun Tunnel**



Grouping Similar Play

We encourage all children to play together by grouping similar types of play — we put all the swings together, all the spinners together, all the climbers together, etc. Each play grouping provides three graduated levels of challenge — one easy, one very challenging and one in between. These groupings enable everyone to participate in the same type of play together, which allows for peer learning. In this design, there are three play groupings — one for swinging, one for climbing, and one for balancing/spinning. **Swings, Spinners, Reflex, Rocks**



Play for Children of All Ages

On Playgrounds for All, we want to make sure that children of all ages will enjoy playing at the playground. This isn't a playground for just one age group. We have found that older children love playing on the Viper and Accelerator Swing and are challenged by the boulders. Younger children love to play with their parent on the Generation Swing and challenge themselves to go up the ramp and down a slide. Everyone, including adults, loves creating music with the Concerto instruments. **Viper, Accelerator Swing, Rocks, Concerto, Generation Swing, Slides**

3 Fundamental 3: Allow Greater Accessibility

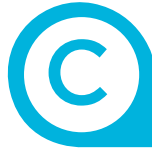
Playgrounds for All go far beyond the Americans with Disabilities Act regulations by providing: wide routes (A), flush transitions (B), and unitary surfacing (C). The travel routes around and through the playground and surrounding areas are wide enough for people and wheelchairs to pass, transfer onto and off of equipment, and get close to activities. Protective surfacing forms a unitary shock-absorbing surface. The pour-in-place rubber surfacing here makes it easier for wheelchairs and strollers to enter and navigate in the playspace, unlike Engineered Wood Fiber or other loose materials.



Wide Routes



Flush Transitions



Unitary Surfacing



4 Fundamental 4: Ensure Kids Do Not Get Overwhelmed

Playgrounds can overload the sensory systems of children, including many with autism and sensory processing disorders. An orientation path (D) around the play area lets children decide how much sensory input they can handle. Cozy, quiet spaces (E) give children overwhelmed by playground noise and stimulation comforting places to rest and recover. Site amenities (F) like benches and tables allow caregivers to watch from a safe distance, while providing opportunities for social interaction and onlooker play. Shade (G) also provides important protection against harmful UV rays — some medications make those with epilepsy, cerebral palsy and autism extremely sensitive to sunlight.



Orientation Path



Cozy/Quit Spaces



Site Amenities



Shade



Some children on the autism spectrum run suddenly when overstimulated by activity or noise. Perimeter fences around the playgrounds allow parents and caregivers to relax while keeping children safe.

5 Fundamental 5: Create Welcoming Social Environments

TYPES OF SOCIAL PLAY

Solitary Play

At the Solitary Play stage, children are very busy exploring and discovering their new world. They tend to play alone regardless of whether other children are in the same area. Children can engage in Solitary Play in many areas of the playground.

Cooperative Play

This stage becomes quite apparent when children have acquired the skills to interact together for the purpose of play. Speaking and listening skills are more developed, so children can communicate with each other. Children can share ideas and tell each other what to do. Communication about play is the critical skill of Cooperative Play. We see Cooperative Play on see saws, group spinners, and game play.

Parallel Play

The two kids are playing next to each other, so this is Parallel Play. Children play next to each other simply because they are in the same area but they are engaged in their own activities. They play side-by-side, watch and listen to each other. Parallel Play often occurs on climbers, swings, and slides.

Onlooker Play

Onlooker Play is when the child watches others at play but does not engage in it. The child may engage in forms of social interaction, such as conversation about the play, without actually joining in the activity. We place equipment into groups to encourage Onlooker Play. Children can watch how more experienced children play on the equipment and when they are ready can try it themselves.

Associative Play

In Associative Play, children are still playing independently but often do the same thing as other children. For example, if one child puts on a dress-up outfit, another child will put one on also. The children will begin to interact through talking, borrowing and taking turns with toys, but each child acts alone. We see a lot of Associative Play with sand and water play and around pretend play pieces of equipment.



Solitary Play





Onlooker Play



Associative Play



Cooperative Play



Parallel Play 13

OUR TOP INCLUSIVE PRODUCTS

The inclusive products found in Playgrounds for All are designed to support the five fundamentals and engage children by challenging them to solve problems, practice social skills, boost self-confidence and explore spatial awareness. Following are several of our top inclusive products, which are designed to help captivate every child's imagination and help them develop their abilities in any playground environment.

Five Fundamentals of Playgrounds for All

Look for the Fundamental number on each product.

- 1 Provides multi-sensory play experiences
- 2 Encourages all children to play
- 3 Allows greater accessibility
- 4 Ensures kids do not get overwhelmed
- 5 Creates welcoming social environments



Concerto

Concerto instruments help us meet the fundamental of “encourage all children to play,” as they are enjoyed by everyone including older adults, people with disabilities and very young children. This unique play experience connects people in outdoor environments in new and interesting ways. Concerto creates accurate musical tones with musical instruments that enable you to perform real songs. An angled design also allows all children to join in on the music making.

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Sensory Maze



Designed by a child development expert, the Miracle Sensory Maze combines the challenge of a traditional maze with imaginative play that enriches and thrills the senses. Children and adults of all ages and abilities, including those with sensory disabilities, can explore the distinctive textures, shapes and translucent colors of these reconfigurable panels by look and by feel, as a group or individually in their own, unique way. Those easily overstimulated by noise or activity can also find comfort in cozy, quiet spaces located throughout the maze.



Dr. Tina Stanton is Associate Director of the Early Childhood Education and Human Development program at the University of Cincinnati and is on the Fulbright Specialist Roster for the US Department of Defense in the area of Education. She earned her PhD in Education and Human Development with a concentration in Special Education from Vanderbilt University. Dr. Stanton is also Associate Editor of the Journal of Early Intervention and the Journal of Remedial and Special Education and has authored articles in more than 50 top early childhood and special education journals.



Alta Glide Inclusive Glider

This swaying, bouncing, wheelchair-accessible glider makes play exciting for all kids. The push-pull motion helps kids develop balance, coordination, eye tracking and muscle tone. Wheelchair access ensures that all children have the chance to feel the exhilaration of moving through space in fun, enriching ways.

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Inclusive Whirl

Now children of all abilities can enjoy the thrills of spinning together. This inclusive spinner is built level with the ground, making it easy to board with space for up to two wheelchairs at once. An additional single seat provides extra physical support for kids or caregivers, while kids of different heights can hold on securely to sloping handrails.

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Ten Spin

This popular, freestanding event allows children of all abilities to join in the fun by either sitting, kneeling, or standing. In addition to the benefits of the rotary motion to support balance, the shaped, deep seats offer postural support, providing helpful boundaries for children who need help recognizing and adjusting the position of their bodies.

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Viper

The Viper is a giant in-line rope swing designed for a single or multi-user experience. It combines balancing, swinging and rocking movements with play interaction. Unlike traditional swings, Viper promotes cooperative play requiring teamwork and balance. Enjoyed by people of all ages, the open design enables a parent or caregiver to easily supervise and provide additional support as needed.

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Inclusive Swing Seat

This snug, supportive seat offers all children a high-flying ride while helping them coordinate head and eye movements, stay upright against gravity, develop balance and equilibrium and coordinate actions on the right and left sides of the body.

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Accelerator Swing

Built with a large disc and protective rubber bumper, this group swing incorporates the motion of a traditional swing with the added fun of interactivity. The Accelerator Swing helps activate and integrate the important sense of movement and gravity — the vestibular sense. Children can sit or lay on the swing and adults can join in the fun and provide additional support for a child.

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Roller Slide

The Roller Slide lets kids experience a new tactile way to slide with the added movement and texture of rollers beneath them. The Roller Slide offers a tactile component combined with both movement — activating the vestibular sense — and sensation to muscles and joints, providing proprioceptive input.

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Reflex

Children can ride the waves and enjoy the up-and-down motion of the Reflex. Multiple children can work together to achieve a smooth, swaying movement. The up-and-down movement that is hard to find on most playground equipment not only provides crucial vestibular sensation but also supports the development of balance, postural control and core strength and position awareness.

1 2 5



GlideAlong

Part swing, part track ride, the GlideAlong provides a swift, smooth glide back and forth suspended along an overhead rail. Each bay seats one rider on either a standard disc-style or an Inclusive Swing Seat. The accessible seat features an over-the-shoulder restraint with a high-angled back and contoured sides for added support. The GlideAlong helps activate and integrate the important sense of movement and gravity in new and interesting ways. Connect the multiple bays so riders can enjoy a thrilling parallel play experience.

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