



Exhibit Guide

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Amazing Airways

Amazing Airways is a floor-to-ceiling maze of transparent tubes which carry colorful, windborne scarves and balls on a circuitous and entertaining route. It's somewhat akin to the vacuum tubes that drive-up banks use to carry documents from car to bank and back – but much larger and way more fun!

Ways to Engage

- Join in the fun!
- Catch scarves and balls with your child as they make their way out of the tube.
- Help your child guess where object will come out of tube.
- Describe the sounds, colors, and feel of the objects and air coming out of the tubes.

Types of Play

Children plan and explore the different paths that items can take as they travel through the airways. **Natural curiosity is piqued as children engage in the scientific process by predicting, testing,** and analyzing results of their actions on the valves in the airways.

Intellectual and cognitive development is enhanced by engaging and manipulating the environment.

- Inquiry/ Exploratory
- Mastery
- Rules-Based
- Large and Small Motor
- Sensory

Accommodations for Children Living with Special Needs

- Use hand-over-hand play to put balls and scarves into chute. Hand-over-hand can be faded by lightening your touch to a simple touch on the back of a hand or arm to guide the student through the task.
- Use simple action words to describe what is happening.
- Choose to interact at Amazing Airways when there are few or no other children around.
- If your child is easily over-stimulated, choose a time when there are fewer children present. Generally this exhibit is heavily populated at the beginning of a field trip.
- Noise-cancelling headphones are available for children who are sensitive to sound.

Artist's Pad

The **Artist's Pad** exhibit fosters imagination and creativity by **encouraging the artistic process more than the artistic product**. A large acrylic easel allows children to paint, spray with water, and squeegee off their art to make room for a new masterpiece. Bins located on open shelving allow visitors to choose from a variety of materials (many of them recyclable) to create an original work of art.

Ways to Engage

- Make something with your child!
- Use open-ended questions with no right or wrong answer to start a conversation. "Why do you think the cat in your picture is jumping?"
- Use "I wonder statements" – *"I wonder how you could add a steering wheel to your car?"*
- Give a genuine compliment – *"I notice you've worked on your picture a long time. It has a lot of detail."*
- *Help your child clean up when they are finished. This is a great way to model a life lesson – you should always clean up the messes you make.*

Types of Play

The materials in this exhibit encourage creativity and flexible thinking. As children engage in creating works of art they are experimenting, hypothesizing, and solving problems. In the creative process, children learn to communicate about their art as they propose suggestions and critiques. Creating art encourages inquiry, divergent thinking, spontaneity, risk-taking, and experimental manipulation of media.

- Creative
- Inquiry/Exploratory
- Small Motor
- Mastery
- Rules-Based
- Make-Believe
- Sensory

Accommodations for Children Living with Special Needs

- Choose one or two mediums for your child at a time. Play with markers first, then let them explore paint.
- Adaptive scissors and markers are available upon request.
- Use simple action words to describe what is happening. Wait for your child to respond or imitate your language and play.
- The hand dryer is quite loud. Noise-cancelling headphones are available for children who are sensitive to sound.
- Painting at the easel may be a soothing experience for an over-stimulated child.

Discovery Diner

The **Discovery Diner** allows visitors to sit on retro diner stools while interacting with a variety of manipulatives geared to engage all ages. Take-aparts, building kits, and more enable visitors to explore STEM-focused (Science, Technology, Engineering & Mathematics) activities. Through the **process of “doing”** children develop early mathematical and fine motor skills.

Ways to Engage

- Grab a building kit and join in the fun!
- Talk to the child about what they are doing. Use this opportunity to introduce vocabulary such as gravity and balance.
- Help the child solve a problem by asking a leading question.
- Engage children in conversation using both comments and questions such as:
 - *“You’ve spent a long time on this building. Tell me about it.”*
 - *“What would come next in your pattern?”*
 - *“What do you think will happen if…”*
 - *“What do you think will happen if you build your structure higher?”*
 - *“What could be done to keep your structure from falling over?”*

Types of Play

Children make mathematical connections as they explore relationships and build structures while engaging with a variety of manipulatives. The development of problem-solving skills and reasoning strategies emerge as children master skills.

- Mastery
- Rules-Based
- Construction
- Inquiry/Exploratory
- Small Motor
- Sensory

Accommodations for Children Living with Special Needs

- Demonstrate building with your child on his or her level. Make sure your child can reach and manipulate the objects in this exhibit.
- Use simple action words to describe what is happening. Wait for your child to respond or imitate your language and play.
- Use a stool with back for more support.
- Break down the activity into its parts. Describe the steps in clear terms, "First we do (x) then we do (y).

Forest Playground

The **Forest Playground** is an “outdoors in” exhibit with a tree house which serves as an entrance to the double slide. Children can also “go fishing” from the playground’s boat with magnetic fish you can really “hook.” A horizontal rock climbing wall adds to the fun.

Ways to Engage

- Join in the fun!
- Catch your child as they slide out of the tree house.
- Help bait the hook and fish in the boat with your child.
- Help create an “I can do it” attitude
- Include something about imaginary play: Create a fishing adventure with your child and act it out with them. *“Look out for that huge wave!”*

Types of Play

Children also learn **to take appropriate risks in play and build confidence as they self-regulate their actions** according to their motor abilities. Children exercise their bodies AND brains at this fun exhibit designed to enhance large motor development.

- Large Motor
- Mastery
- Rules-Based
- Make-Believe
- Risk-Taking

Accommodations for Children Living with Special Needs

- Help your child climb over obstacles and practice large motor movements. Your child may become interested in only climbing and sliding repeatedly. Join with them practicing this new skill and then direct them to other play.
- Help your child manipulate the objects in this exhibit, bait hooks, cast fishing pole and celebrate when they catch a fish!
- Use simple action words to describe what is happening. Wait for your child to respond or imitate your language and play.
- Enjoy this activity with your child at a time when the exhibit is not crowded or fewer children are playing.

Generation Station

The **Generation Station Farm and Store** are designed to help visitors understand what life might have been like in the early 20th century, around the time of Oklahoma statehood. The store is stocked with canned foods, vegetables in bins, remnants of fabric, etc. Woven baskets are stacked ready for shopping as well as an old-style cash register. A checkerboard is available for those who want to take a break from shopping. A favorite component of the store is the egg chute which delivers eggs back to the chicken nests in the barnyard. Visitors can also “milk” the life-sized cow, Maggie, and weave at the loom. Generation Station is designed to evoke conversation between generations of what life used to be like!

Ways to Engage

- Play checkers with your child!
- Take time to look at the antique cans and discuss what you see and how that compares to what you might have in your pantry.
- Talk about how this store is different than the store where you purchase your food. Discuss the chores children might have had to do then and what chores they do now.
- Become the cashier or the shopper. Actively create a story with your child to “act out”.
- Encourage your child to re-stock the store. It’s a great pre-reading opportunity for younger ones!
- Discuss the process of milking a cow and how we get milk now.
- Create “then and now” scenarios.

Types of Play

As children pretend play in the Generation Station farm and store, they are using creative problem solving and language skills to develop “stories” for the setting. **This pretend play with peers helps to develop cooperative social skills and self-control** as children try out a range of roles.

- Language
- Make-Believe
- Inquiry/ Exploratory
- Rules-Based
- Sensory

Accommodations for Children Living with Special Needs

- Use hand-over- hand play to put eggs into a chute, milk the cow, or use the cash register. The adult may place her hand over the student's hand. Hand-over-hand can be faded by lightening your touch to a simple touch on the back of a hand or arm to guide the student though the task.
- Use simple action words to describe what is happening.

- Repetitive actions such as “planting vegetables” in the garden may help to soothe an over-stimulated child.

Gravity Wall

This exhibit also demonstrates engineering and gravity. This popular exhibit encourages visitors to **build and experiment** as they direct the path of a ball down the face of a magnetic wall. Visitors learn from hands-on experience about momentum and the force of gravity. Great fun for all ages!

Ways to Engage

- Join in the fun! The height of the wall requires adult participation.
- Encourage your child to describe what is happening as the ball moves down the wall.
- Discuss what changes they would like to make in their design.
- Allow them to experiment with different designs.
- Help the child solve a problem by asking a leading question.

Types of Play

Children **plan and explore** the different paths the ball takes down the wall. Natural curiosity is piqued as children engage in the scientific process by predicting, testing, and analyzing results of their designs. Intellectual and cognitive development is enhanced by engaging and manipulating the environment.

- Inquiry/Exploration
- Large Motor
- Small Motor
- Construction
- Rules-Based

Accommodations for Children Living with Special Needs

- Use hand –over-hand play to build ramps. The adult may place her hand over the student’s hand. Hand-over-hand can be faded by lightening your touch to a simple touch on the back of a hand or arm to guide the student though the task.
- Use simple action words to describe what is happening.
- Assist child in placing pieces out of reach. Allow the child to “direct” where you put the pieces.

Imagination Playground (Blue Blocks)

The **Big Blue Blocks** are a set of large building blocks that allow children to build creations “their own size!” The blocks encourage **open-ended** and imaginative building.

Ways to Engage

- Join in the fun!
- Encourage your child to explore different ways of building and balancing objects.
- **If something doesn’t “work” try a different way.** Modeling an attitude of “trying again” is a great way to build resilience.
- Describe out loud what is being built. This is a great way to build vocabulary.
- As children get older:
 - Describe the design features of a structure.
 - Use architectural vocabulary to describe what children are building: arches, lintels, windows, enclosures, stacks, stairs, barriers, symmetry, gears...
 - Encourage the planning process of what the goal is and how blocks will be used.

Types of Play

Children make mathematical connections as they explore relationships and build structures during their imaginative play. Symbolic play comes to the forefront as children role-play scenarios and the blocks are converted into props needed in the fantasy.

- Construction
- Make-Believe
- Symbolic
- Rules-Based
- Inquiry/Exploration
- Risk-taking

Accommodations for Children with Special Needs

- Use simple action words to describe what is happening.
- A large amount of blocks may be overwhelming. Hand the pieces to the child one by one. Gradually increase the number of pieces the child has at one time.

Sun, Earth and Universe

This exhibit is designed for families and children. Fun, hands-on and engaging as visitors learn more about our sun, earth and universe through questions about the solar system, the earth and sun. **Natural curiosity is piqued as children engage in the scientific process by predicting, testing**, using tools to detect the invisible and a reading and seating area to play Mars landscape. Put all your space mission-planning knowledge to the test by playing Your Mission to Space board game. Build, design and test engineering activity.

Ways to Engage:

- Design, build and test your own spacecraft model that has key tools needed to complete a NASA mission.
- Ask lots of questions about the Earth, Sun and Universe
- Play the board game and ask questions as you go

Types of play

As children begin to explore. They will begin to learn about our Sun, Earth and Universe through hands-on activities and literacy. Communication and language will develop along with problem-solving, cognitive development, social interaction and math and science skills will also be enhanced.

- Make-Believe
- Language
- Rules-Based
- Small Motor
- Inquiry/Exploratory
- Mastery
- Sensory

Accommodations for Children Living with Special Needs

- Use simple action words to describe what is happening.
- Engage in pretend-play with your child. This may allow you to serve as a bridge between your child and other children.
- Encourage child to play the board game and to build their own spacecraft.
- Encourage child to ask questions.
- Use pictures to help child understand what equipment is needed on their spacecraft.
- Discover the tools to detect the invisible.

Money- Go - Round

Demonstrating Kepler’s “Laws of Planetary Motion,” a coin rolling down a funnel is like a planet, orbiting the sun. As the coin moves closer to the center, it travels faster. Adults and children are intrigued and amazed by this unique, mysterious phenomenon of the universe! The coins seem to defy gravity. Visitors are mesmerized by the spinning coins as they bob & weave, and even collide at times. Two entry points allows for multiple participants. And testing the different circumferences of coins adds another variable of excitement.

Ways to Engage

- Observe this phenomenon with your child.
- Make the coins race.
- Observe if the size of the coins affects their speed.
- An explanation of this Law of Planetary Motion is posted above the exhibit.

Types of Play

Natural curiosity is piqued as children engage in the scientific process by predicting, testing, and analyzing results of their actions as the coins move into the funnel.

- Inquiry/Exploratory
- Small Motor
- Sensory

Accommodations for Children Living with Special Needs

- Use hand -over -hand help put coins into slots. Hand- over -hand can be faded by lightening your touch to a simple touch on the back of a hand or arm to guide the student through the task.
- Use simple action words to describe what is happening.
- This can be a very soothing activity for children. It may serve as a good “calming” activity for an over-stimulated child.

My Medical Center

The My Medical Center exhibit consists of a reception area, doctor's office, neonatal unit, surgery center, and ambulance. The areas in this exhibit provide opportunities for rich pretend-play experiences in a hospital setting. Not only can children take on various roles, from receptionist to EMT, they are also developing social skills and learning about the human body.

Ways to Engage

- Allow your child to assign you a role and actively play the part!
- Express your feelings and thoughts as you are playing and encourage your child to do the same.
- Encourage them to pull on real life experiences to expand their play. *"What happens when they go to the doctor?"*
- Introduce appropriate vocabulary.
- Relate their play to real-life experiences or things they might have seen on television
- Discuss the uses all of various equipment in " My Medical Center".
- Talk about various medical careers.

Types of Play

Children **expand on their abilities to solve problems creatively and build social skills as they role-play scenarios** in the My Medical Center. Their imaginations and language abilities expand as they act out and agree on various roles to play with family members and friends.

- Make-Believe
- Rules-Based
- Language
- Risk-Taking
- Inquiry/Exploratory
- Small Motor
- Mastery

Accommodations for Children Living with Special Needs

- Use simple action words to describe what is going on and what the equipment is used for.
- Allow yourself to be the patient. Your child may have lots of experience in doctor's offices. Use this time to let them explore and become familiar with items and activities that may otherwise be scary for them.

Ramona Paul's Block Party (Unit Blocks)

Through block play children learn how to make a building steady, how to balance weight equally, about 3-dimensional objects, self-in-space, problem-solving, and much, much more. This exhibit was named in honor of **Dr. Ramona Paul** and her lifelong commitment to early childhood education.

Ways to Engage

- Join in the fun!
- Encourage your child to explore different ways of building and balancing objects.
- **If something doesn't "work" try a different way.** Modeling an attitude of "trying again" is a great way to build resilience.
- Describe out loud what is being built. This is a great way to build vocabulary.
- As children get older:
 - Describe the design features of a structure.
 - Use architectural vocabulary to describe what children are building: arches, lintels, windows, enclosures, stacks, stairs, barriers, symmetry, gears...
 - Encourage the planning process of what the goal is and how blocks will be used.

Types of Play

Children make mathematical connections as they explore relationships and build structures. Symbolic play comes to the forefront as children use the blocks to role play scenarios.

- Construction
- Make-Believe
- Symbolic
- Inquiry/Exploration
- Small Motor
- Mastery
- Rules-Based

Accommodations for Children with Special Needs

- Use simple action words to describe what is happening.
- A large amount of blocks may be overwhelming. Hand the pieces to the child one by one. Gradually increase the number of pieces the child has at one time.

Water Works

The **Water Works** exhibit gives kids an opportunity to splash and experiment with the wonders of water. Children begin to experiment with concepts such as buoyancy, volume, greater than and less than, empty and full, and even fractions. In this interactive water exhibit, children's senses are heightened as they explore the properties of water and its interactions with the various materials. Through exploratory play, which is the basis of scientific inquiry, children learn to experiment and test out their predictions through playful activities.

Ways to Engage

- Join in the fun! And don't be afraid to get wet.
- Fill and dump water with your child.
- Use words to describe what your child is doing, describe the textures, temperature, sounds, and other properties of water and tools.

Types of Play:

Children plan and explore the different properties of water. Natural curiosity is piqued as children engage in the scientific process by predicting, testing, and analyzing results of their actions during water play. **Children use senses to inquire about the world** and these senses develop as children play with materials consisting of different smells, sounds, and textures.

- Sensory
- Inquiry/Exploratory
- Make-Believe
- Rules-Based
- Mastery
- Small Motor

Accommodations for Children Living with Special Needs:

- Use hand-over-hand play to fill and dump water. The adult may place her hand over the student's hand. Hand-over-hand can be faded by lightening your touch to a simple touch on the back of a hand or arm to guide the student through the task.
- Prepare your child before joining in the fun for the possibility of getting wet. Have a paper towel handy to dry hands if needed.
- Use simple action words to describe what is happening.
- This may serve as calming activity for an over-stimulated child.
- The hand dryer is quite loud. Noise-cancelling headphones are available for children who are sensitive to sound.

WONDER Theater

Put on a show in our theatrical exhibit and take on each role in creating a production. Buy/sell tickets, write scripts, dress the part, work the pretend soundboard, and be a part of the audience. With a stage, costumes, make-up mirror, and storyboard, there is plenty to do in our WONDER Theater. Playing in this literacy-rich exhibit encourages cooperative play, problem-solving, creative thinking, turn-taking, imaginative play, and so much more.

Ways to Engage:

- Join your child in a production!
- Discuss the story you are acting out. Help to identify the beginning, middle and end.
- Allow your child to be the director...follow his lead.
- Encourage your child to assume the various roles in the theater (ticket-taker, light crew, story writer...)
- Encourage your child to create a playbill for their production.

Types of Play

As children pretend play in the theater, they are **using creative problem-solving and language skills** to develop “stories” for the setting. This pretend play with peers helps to develop cooperative social skills and self-control as children try out a range of roles.

- Make-Believe
- Language
- Rules-Based
- Mastery
- Inquiry/Exploratory
- Small Motor

Accommodations for Children Living with Special Needs:

- Use simple action words to describe what is happening.
- Use magnetic pictures on the storyboard to help develop stories.
- Assist in putting on costumes.

Emory Station

Emory Station, our train exhibit, brings imagination to life. Children come across vehicles frequently in their daily lives, so they like to incorporate these in small world play, too. Imaginative play allows children to exercise their creativity and helps them make sense of the world around them.

Ways to Engage:

- Encourage your child to make their own sound effects when playing.
- Encourage your child to build a town with a railway around it.
- Describe out loud what is being built. This is a great way to build vocabulary.
- Relate their play to real-life experiences or things they might have seen on television

Types of Play

This pretend play with peers helps to develop **cooperative social skills** and **self-control** as children try out a range of roles. They also develop fine motor skills that deal with **small muscles control**, use **hand-eye coordination**, show persistence to a task, see physics in action as trains role down ramps. As children pretend play at the train station, they use **creative problem solving and language skills** to develop stories for the setting.

- Make-Believe
- Language
- Rules-Based
- Mastery
- Inquiry/Exploratory
- Small Motor

Accommodations for Children Living with Special Needs:

- Use simple action words to describe what is happening.
- This may serve as calming activity for an over-stimulated child.
- A large amount of track pieces or train pieces may be overwhelming. Hand the pieces to the child one by one. Gradually increase the number of pieces the child has at one time.

Adaptations for Children Living with Special Needs

Every child is a passionate learner but many children have special needs when it comes to abstract thinking, sensory overloads, transitions, and social communications. The Oklahoma WONDERtorium strives to help children optimize their museum experience as well as their own potential by offering a variety of adaptive equipment.

Adaptive Equipment is available for check-out at the front desk:

Noise-cancelling headphones are available for children who are sensitive to sound. The headphones reduce surrounding sounds, creating a less disruptive and disturbing environment.

Weighted vests create a calming sensation of pressure. These vests are designed to help children with sensory processing challenges.

Museum maps are available to help with transitions from one exhibit to the next. Families are encouraged to plan their visits to ease exhibit transitions as well as entering and exiting the museum.

Social Stories can be a written or visual guide describing various social interactions, situations, behaviors, skills or concepts. Social stories have been created for the WONDERtorium to help children feel in control of their behavior as well as understand how to interact with an exhibit.

A **Privacy Cube** is located near the WONDER Theater. This provides a calming space for children when they become over-stimulated.

Definitions of Types of Play

Oklahoma WONDERtorium purposefully provides play opportunities which engage children and adults in an environment where the process of learning is valued over the final product. By engaging in an open-ended play environment a child actively poses problems, explores solutions, and develops an understanding of the real world.

Artistic Play	As children engage in creating art they are experimenting, creating, hypothesizing, and solving problems. Through the creation of their own works of art, children learn to express themselves verbally as well as emotionally. <i>Critical Skills: problem solving, creativity, risk-taking, small motor</i>
Construction Play	Any activity in which children build and make things, constructing larger objects out of smaller ones, and creating something that remains after the child has finished playing. Construction play provides opportunity for physical development, problem solving, social interaction, and development of math and science skills. <i>Critical Skills: problem solving, reasoning strategies, mathematical concepts</i>
Inquiry/ Exploratory Play	A cyclical process allowing the learner to ask questions, create hypotheses, investigate, construct new knowledge, and apply knowledge to solve problems. <i>Critical Skills: curiosity, predicting, hypothesizing, analyzing, experimentation</i>
Language Play	Promotes the use of speaking and listening skills. When children take part in this type of play, they practice words they have heard others say, and realize that they must listen to what other “players” say in order to be able to respond in an appropriate fashion. It also teaches them to choose their words wisely so that others will understand exactly what it is they are trying to communicate. <i>Critical Skills: vocabulary growth, self-expression, communication</i>
Large Play	Motor Gross motor skills are the bigger movements — such as rolling over and sitting — that use the large muscles in the arms, legs, torso, and feet. <i>Critical Skills: coordination and balance, strength and muscle development, enhances early brain development</i>

Make-Believe Play	Children accept and assign roles, and then act them out. It is a time when they break through the walls of reality, pretend to be someone or something different from themselves, and dramatize situations and actions to go along with the roles they have chosen to play. <i>Critical Skills: creativity and imagination, problem solving, social interaction, language, self-regulation</i>
Mastery Play	A form of play in which a child persistently repeats an action or activity until it has been mastered, such as throwing or catching a ball. <i>Critical Skills: motivation, persistence, resilience</i>
Play	Play is an active, child-initiated process that supports children’s learning throughout the domains of physical, social/emotional, creative, science, math, language, and literacy. Play is also the primary means by which children explore the world, investigate its properties, and build an understanding about how the world works.
Risk-Taking Play	Real play means taking risks whether it is physical, social, or intellectual. Children who are confident about taking chances rebound well when things don't work out at first. They are resilient and will try again and again until they master a situation that challenges them—or wisely avoid it, if that seems best. <i>Critical Skills: “I can do” attitude, confidence, resilience, negotiation</i>
Rules-Based Play	Play is freely chosen activity, but not freeform activity. There is a structure derived from rules in the players’ minds. In social play, the rules must be shared, or at least partially shared, by all of the players. <i>Critical Skills: social negotiation, cooperation, language development</i>
Sensory Play	Helps develop and refine the use of the senses. Sensory play can be divided into five classifications: touch, sight, sound, smell, and taste. <i>Critical skills: develop knowledge of the physical world, understand how things work</i>

Small Motor Play

Fine motor skills are small movements — such as picking up small objects or holding a spoon — that use the small muscles of the fingers, toes, wrists, lips, and tongue.

Critical Skills: eye/hand coordination, early mathematical concepts, muscular strength and dexterity

Symbolic Play

The ability of children to use objects, actions or ideas to represent other objects, action, or ideas as play. Ex. A child may push a block around the floor as a car or put it to his ear as a cell phone.

Critical Skills: flexibility of thought, creativity, language