Unit 07: Tubes and Tunnels

Content Area: **English Language Arts**
Course(s):
Time Period: **Trimester 3**
Length: **4-6 Weeks**
Status: **Published**

Brief Summary of Unit

This unit is designed for children to identify what they already know about tubes and tunnels and to question what they want to find out. Activities include hands-on exploration, discussions, read-alouds, and a walk to observe tubes and tunnels in the school environment. Children will study characteristics of tubes and tunnels, explore how tubes can be rolled, compared in length, and examined for their different forms (e.g., straight, curved, open at one end or both). Children identify where tubes and tunnels can be found and explore examples in everyday objects (like funnels and rain spouts), natural animal habitats (burrows), the human body (veins, arteries), and natural phenomena (barrel waves). This unit explores the practical applications of tubes and tunnels and how children can create and manipulate them. Activities focus on rolling paper to make tubes, using tubes to channel marbles, and redirecting objects with tubes. A site visit to a playground with a tube slide will provide a real-world example of tubes in use. Children will explore the professions that involve tubes and tunnels and learn about different jobs where tubes and tunnels are utilized and observe how people in their own school community use these structures.

Essential Questions

• What do we know about tubes and tunnels? What do we want to find out?

• Which of these is longer? (Show a straw and a paper towel tube.)

• How will you join the group? (Show how to go through or around the tunnel.)

• Did you see a tunnel yesterday?

• What will we see on our walk?

• Would it be easier to go through a long tunnel or a short tunnel?

• "What happens when you roll this paper?”

• "How many short tubes equal one long tube?”

• "Is this a tube? (Show a megaphone.)”

• "Is this a tube? (Show a tube of toothpaste.)”

• "Is this a tube? (Show a curved pipe.)”

• "What is this used for? (Show a funnel.)"

• "Which of these animals lives in the ground? (Show a picture of a worm and an elephant.)”

• "Which pet crawls through this tunnel? (Display the options of a hamster or a dog and show a picture of a hamster tunnel.)"

• "What is this? (Show a piece of wrapping paper.)"

• "Can you add to the pattern? (Create a pattern using short and long tubes.)"

• "What do you like to do on the playground?"

• "Which of these items can you move using a tube? (Show a few things, including a marble.)"

• "How many marbles are in the cup?"

• "What job would you like to have?”

• "What do you want to see on our visit today?”

• "What jobs do you think are in this book? (Show a nonfiction book that features tubes and tunnels.)”

• "Have you seen a tube today?"

Enduring Understandings

Students will begin to understand the basic characteristics of tubes and tunnels, how to interact with them, and their presence in everyday life. They will also start to develop questions about these structures. Students will understand that tubes can be formed by rolling, can be compared by length, and come in various shapes and forms (straight, curved, open/closed ends). Tubes and tunnels are present in a wide variety of contexts, including man-made structures, natural environments, and even within living organisms. Students will understand that tubes can be created from flat materials by rolling, that tubes can be used to direct the movement of objects, and that tube slides are common playground features. Students will understand that various jobs and professions involve the use of tubes and tunnels, highlighting their importance in different industries and daily operations.

Students Will Know

• Vocabulary: tube, tunnel, cylinder, investigate, funnel, rainspout, burrow, words related to pet equipment and habitats, veins, arteries, pulse, barrel wave, rolled, folded, mailing tube, divided, marble run, redirect.

• What they already know about tubes and tunnels, which will be documented on charts titled What We Know About Tubes and What We Know About Tunnels

• That tubes and tunnels can vary in length (e.g., straw vs. paper towel tube)

• Ways to interact with a tunnel (e.g., going through or around it)

• That tubes and tunnels can be found in books and in their immediate environment

• That paper can be rolled to form a tube

• How to compare lengths of tubes

• Different examples of tubes in everyday life (toothpaste tube, curved pipe).

• That tubes can have different types of ends (open at one end, both ends)

• That not all tubes are straight that funnels and rain spouts are types of tubes

• That some animals, like worms and hamsters, create or use tunnels

• That the human body contains tubes and tunnels (e.g., veins, arteries)

• That waves can form "tunnels" (barrel waves)

• That paper can be rolled to form a tube

• How to create patterns using short and long tubes

• That tubes can be used to move small objects like marbles

• The concept of redirecting something using a tube

• That playgrounds often feature tube slides

• Rolling paper into tubes

• Discovering various items that can be rolled into tubes

• Channeling marbles with tubes to create a marble run

• Redirecting objects using tubes

• Creating and adding to patterns with tubes

• Different jobs associated with tubes and tunnels

• How tubes and tunnels are used in places like post offices, shipping facilities, or banks

• That people who work at their school (e.g., plumbers, custodians) might also use tubes and tunnels in their job

Students Will Be Skilled At

• Catching with a scoop and catching balloons (Physical Fun)

• Noticing tubes and tunnels in their surroundings (e.g., on the way home from school)

• Participating in discussions and shared writing about tubes and tunnels

• Exploring tunnels through movement activities like "Step, Hop, Jump

• Identifying tubes and tunnels during a walk around the school

• Charting their knowledge and questions about tubes and tunnels

• Engaging in math activities such as identifying "Secret Numbers," playing "Number Line Hop," demonstrating "Show Me Five," and determining "How Many in the Scoop?"

• Building with large tubes and connectors on the playground

• Using garden hoses

• "Nature Painting" (Physical Fun)

• Comparing tubes and tunnels

• "Growing" tubes using connectors

• Comparing the ends of tubes

• Determining if all tubes are straight or if they can be curved/flexible

Using funnels, containers, and watering cans outdoors

• Participating in physical activities like "Kick High," "Box Dribble," and "Punting"

• Exploring rainspouts and discussing their function

• Identifying animals that make tunnels

• Observing and discussing tubes and tunnels used by pets during a site visit to a pet store

• Discussing tubes and tunnels within the human body

• Understanding and discussing tunnels formed by waves

• Engaging in math activities such as "Guessing Jar" (M17), "Which Has More" (M19), "Tiny Tube Patterns" (M85), and "Patterns Under Cover" (M38)

• Participating in language and literacy activities like "Coupon Match" (LL22), "Fruit Salad" (LL35), "Making a Birdfeeder" (LL73), "Funnel Filling" (LL73), "Color Hunt" (LL61), and "Sticky Tables" (LL75)

• Participating in physical activities like "Throw Hard, Throw Far," "Up and Away," and "Bounce & Catch"

• Graphing jobs related to tubes and tunnels

• Discussing observations from a site visit to a place where tubes or tunnels are used

• Identifying jobs in nonfiction books related to tubes and tunnels

• Identifying and discussing who uses tubes and tunnels at school

Evidence/Performance Tasks

Shared Writing: Creating charts on "What Do We Know About Tubes?" "Exploring the Tunnel" "Tunnels You Can Drive Through" "Taking a Walk to Look for Tubes and Tunnels" and "Charting Tunnels"

• Observations during outdoor experiences (e.g., using tubes in the sandbox, play tunnel)

• Participation in "Question of the Day" discussions

• Site Walk: Observing and documenting tubes and tunnels during a walk around the school

• Family Contributions: Families contributing photos, books, or materials related to tubes and tunnels.

• Small Group Activities: Engagement and demonstration of skills in specific intentional teaching games.

Week Two

• Shared Writing: "Comparing Tubes and Tunnels"

• Observations during outdoor play with tubes and hoses

• Participation in "Question of the Day" discussions

• Small Group activities

Week Three

• Shared Writing: "Exploring Rain Spouts" "Tunnels That Animals Make" "Site Visit to the Pet Store" "Tubes and Tunnels in Our Bodies" "Tunnels in Waves"

• Observations during outdoor play with funnels and water

• Participation in "Question of the Day" discussions

• Site Visit: Engaging in and discussing observations from the visit to a pet store

• Small Group Activities: Demonstration of skills in Intentional Teaching Cards listed above

Week Four

• Shared Writing: "Rolled Paper" "Discovering What Can Be Rolled Into Tubes", "Site Visit to a Playground with a Tube Slide", "Channeling Marbles with Tubes", "Redirecting with Tubes"

• Observations during physical activities.

• Participation in "Question of the Day" discussions.

• Site Visit: Engaging in and discussing observations from the visit to a playground with a tube slide.

• Family Contributions: Families contributing cardboard tubes (e.g., paper towel rolls).

Week Five

• Shared Writing: "Jobs Graph", "Site Visit to See How Tubes or Tunnels Are Used" "Tubes and Tunnels Nonfiction Books" "Who Uses Tubes and Tunnels at School?"

• Observations during physical activities

• Participation in "Question of the Day" discussions

• Small Group Activities: Demonstration of skills in Intentional Teaching Cards listed above

Learning Plan

Day 1:

Interest Areas: Toys and Games (collection of tubes), Music and Movement (play tunnel), Library (books featuring tunnels), Sand and Water (collection of tubes)

Outdoor Experiences: Add tubes to the sandbox or sand table

Family Partnerships: Send home a letter introducing the study and inviting contributions/observations.

Question of the Day: "Which of these is longer? (Show a straw and a paper towel tube.)

Large Group: Discussion and Shared Writing: "What Do We Know About Tubes?"

Read-Aloud: Nonfiction book choice

Day 2:

Interest Areas: Sand and Water (tubes)

Question of the Day: "How will you join the group? (Show how to go through or around the tunnel.)"

Large Group: Movement: "Step, Hop, Jump", Discussion and Shared Writing: "Exploring the Tunnel"

Read-Aloud: Fiction book from "Children's Books" list ("Harry the Dirty Dog").

Small Group: Option 1: "Show Me Five" Option 2: "How Many in the Scoop?"

Day 3:

Question of the Day: "Did you see a tunnel yesterday?"

Large Group: Game: "Tunnel Train" Discussion and Shared Writing: "Tunnels You Can Drive Through"

Read-Aloud: Reread book from Day 1

Small Group: Option 1: "Can You Find It?" Option 2: "Adventure Through a Tunnel"

Day 4:

Wow! Experiences: Walk around the school to look for tubes and tunnels.

Question of the Day: "What will we see on our walk?"

Large Group: Movement: "Ten Wiggly Steps" Discussion and Shared Writing: "Taking a Walk to Look for Tubes and Tunnels"

Read-Aloud: "Harry the Dirty Dog"

Day 5:

Question of the Day: "Would it be easier to go through a long tunnel or a short tunnel?"

Large Group: Discussion and Shared Writing: "Charting Tunnels" Provide a play tunnel outdoors

Week Two

Day 1:

Interest Areas: Library (books featuring tubes and tunnels), Toys and Games (tubes, connectors, paper, pencils/crayons), Music and Movement (megaphones), Sand and Water (variety of tubes, some open at one end and some at both ends)

Outdoor Experiences: Provide large tubes and connectors for building; offer garden hoses

Physical Fun: Review Intentional Teaching Card P40, "Nature Painting"

Wow! Experiences: Day 3 site visit to hardware store, Research local pet stores

Question of the Day: "What happens when you roll this paper?"

Large Group: Game: "Bridge & Tunnel" (Mighty Minutes 172), Discussion and Shared Writing: "Comparing Tubes and Tunnels"

Read-Aloud: "Harry the Dirty Dog"

Small Group: Option 1: "What's for Snack?" (LL25); Option 2: "Roll-Ups" (LL37)

Day 2:

Question of the Day: "How many short tubes equal one long tube?"

Large Group: Movement: "The Name Dance" (Mighty Minutes 60), Discussion and Shared Writing:

"Growing Tubes"

Read-Aloud: "Tubes and Tunnels Through and Through"

Small Group: Option 1: "Number Cards" (M04); Option 2: "Ping-Pong Pick-Up" (M79)

Day 3:

Wow! Experiences: Site visit to a hardware store to look for tubes and tunnels

Question of the Day: "Is this a tube? (Show a megaphone.)"

Large Group: Song: "Away I Go" (Mighty Minutes 138), Discussion and Shared Writing: "Site Visit to the Hardware Store"

Read-Aloud: Selection from the “Children’s Books” list that features friendship

Small Group: Option 1: "Same Sound Sort" (LL12); Option 2: "Tongue Twisters" (LL16)

Day 4:

Question of the Day: "Is this a tube? (Show a tube of toothpaste.)"

Large Group: Song: "The Feelings in Your Face" (Mighty Minutes 143), Discussion and Shared Writing: "Comparing Ends of Tubes"

Read-Aloud: "Harry the Dirty Dog" (third read-aloud with Book Discussion Card 48)

Small Group: Option 1: "Putting Puzzles Together" (M23); Option 2: "Tube Shapes" (M42)

Day 5:

Question of the Day: "Is this a tube? (Show a curved pipe.)"

Large Group: Song: "Clap a Friend’s Name" (Mighty Minutes 40), Discussion and Shared Writing: "Are All Tubes Straight?"

Read-Aloud: Reread book from Day 3

Small Group: Option 1: "Action Patterns" (M35); Option 2: "Pipe Patterns" (M14)

Ongoing (Throughout the week): Mighty Minutes 37, “Little Ball”; 122, “What Could This Be?” 160, “Tell It Again”; 101, “I’m Sticky”; 64, “Paper Towel Rap” Interest Areas: Sand and Water (pipes, tubes, hoses, connectors)

Week Three

Day 1:

Interest Areas: Sand and Water (funnels and containers), Technology (pictures of tunnels that animals make; videos of animals making tunnels)

Outdoor Experiences: Offer children funnels, containers, and watering cans to collect water

Physical Fun: Review Intentional Teaching Card P04, “Kick High”; P43, “Box Dribble”; and P13, “Punting”

Family Partnerships: Invite families to accompany the class on the site visit to a local pet store (Day 3)

Wow! Experiences: Day 3 site visit to a pet store, Research nearby playgrounds with tube slides

Question of the Day: "What is this used for? (Show a funnel.)"

Large Group: Movement: "Traffic Jam" (Mighty Minutes 114), Discussion and Shared Writing: "Exploring Rainspouts"

Read-Aloud: Highlights High Five Bilingüe™, ¡Vamos!/Let’s Go! (with Book Conversation Card 03)

Small Group: Option 1: "Coupon Match" (LL22); Option 2: "Fruit Salad" (LL35)

Day 2:

Interest Areas: Library (photos from the site visit), Sand and Water (straws; tape; unused nasal aspirator), Technology (pictures and videos of barrel waves)

Question of the Day: "Which of these animals lives in the ground? (Show a picture of a worm and an elephant.)"

Large Group: Song: "Abby Had an Anteater" (Mighty Minutes 103), Discussion and Shared Writing: "Tunnels That Animals Make"

Read-Aloud: "Ruby’s Baby Brother" (with Book Discussion Card 47)

Small Group: Option 1: "Making a Birdfeeder" (LL73); Option 2: "Funnel Filling" (LL73)

Day 3:

Wow! Experiences: Site visit to a pet store to look for tubes and tunnels that pets use

Question of the Day: "Which pet crawls through this tunnel? (Display the options of a hamster or a dog and show a picture of a hamster tunnel.)"

Large Group: Game: "The Animal I’d Be" (Mighty Minutes 123), Discussion and Shared Writing: "Site Visit to the Pet Store"

Read-Aloud: Selection of a nonfiction book from the “Children’s Books” list that features tunnels that animals make

Small Group: Option 1: "Guessing Jar" (M17); Option 2: "Which Has More" (M19)

Day 4:

Question of the Day: "How high can you jump?"

Large Group: Movement: "High Knees" (Mighty Minutes 180), Discussion and Shared Writing: "Tubes and Tunnels in Our Bodies"

Read-Aloud: Selection from the “Children’s Books” list that features numbers and counting

Small Group: Option 1: "Color Hunt" (LL61); Option 2: "Sticky Tables" (LL75)

Day 5:

Question of the Day: "Do you know what this is? (Show a picture of a surfboard.)"

Large Group: Game: "Syllable Stroll" (Mighty Minutes 155), Discussion and Shared Writing: "Tunnels in Waves"

Read-Aloud: "Ruby’s Baby Brother" (second read-aloud with Book Discussion Card 47)

Small Group: Option 1: "Tiny Tube Patterns" (M85); Option 2: "Patterns Under Cover" (M38)

Ongoing (Throughout the week): Mighty Minutes 84, “Let’s Make Letters”; 126, “This Way or That Way?”; 104, “Alphabet Stew”; 188, “Swim, Bike, Run”; 189, “Windy Boat Ride”

Week Four

Day 1:

Interest Areas: Art (different types of paper), Dramatic Play (mailing tubes; items that can be rolled), Music and Movement (tubes; tube connectors), Toys and Games (cardboard tubes; duct tape; scissors; marbles; pictures of marble runs)

Physical Fun: Review Intentional Teaching Card P41, “The Tortoise & the Hare”

Family Partnerships: Invite families to contribute cardboard tubes; invite families to accompany the class on the site visit to a local playground (Day 3)

Wow! Experiences: Day 3 site visit to a local playground with a tube slide, Research local places where tubes or tunnels are used (e.g., post offices, plumbing offices, shipping facilities, banks) Question of the Day: "What is this? (Show a piece of wrapping paper.)"

Large Group: Movement: "The Name Dance" (Mighty Minutes 60), Discussion and Shared Writing: "Rolled Paper"

Read-Aloud: Selection of a nonfiction book from the “Children’s Books” list

Small Group: Option 1: "I’m Thinking of a Shape" (M20); Option 2: "The Farmer Builds a Fence" (M50)

Day 2:

Question of the Day: "Can you add to the pattern? (Create a pattern using short and long tubes.)"

Large Group: Game: "Where’s the Pair?" (Mighty Minutes 117), Discussion and Shared Writing: "Discovering What Can Be Rolled Into Tubes"

Read-Aloud: "Ruby’s Baby Brother" (with Book Discussion Card 47)

Small Group: Option 1: "Rolled Pie Crust" (LL65); Option 2: "Rolled Pizza Dough" (LL51)

Day 3:

Wow! Experiences: Site visit to a local playground with a tube slide

Question of the Day: "What do you like to do on the playground?"

Large Group: Song: "Baxter the Black Dog" (Mighty Minutes 161), Discussion and Shared Writing: "Site Visit to a Playground with a Tube Slide"

Read-Aloud: Off We Go to Mexico Highlights High Five Bilingüe™, ¡Vamos!/Let's Go! (with Book Conversation Card 08)

Small Group: Option 1: "Shape Bingo" (M88); Option 2: "Buried Shapes" (M30)

Day 4:

Question of the Day: "Which of these items can you move using a tube? (Show a few things, including a marble.)"

Large Group: Game: "Stop & Go Colors" (Mighty Minutes 186), Discussion and Shared Writing: "Channeling Marbles with Tubes"

Read-Aloud: Reread book from Day 1

Small Group: Option 1: "Measure & Compare" (M12); Option 2: "Ramp & Tube Slides" (M84)

Day 5:

Question of the Day: "How many marbles are in the cup?"

Large Group: Game: "Redirection" (Mighty Minutes 126), Discussion and Shared Writing: "Redirecting with Tubes"

Read-Aloud: "Ruby's Baby Brother" (third read-aloud with Book Discussion Card 47)

Small Group: Option 1: "Tube and Tunnel Riddles" (LL11); Option 2: "Rhyming Tubs" (LL44)

Ongoing (Throughout the week): Mighty Minutes 162, "Sally the Slow Cyclone"; 128, "Blowing Out the Candles"; 134, "Time's Up!"; 198, "Crazy Compounds"; 156, "This Long Road"

Week Five

Day 1:

Interest Areas: Blocks (pictures of different jobs), Dramatic Play (materials from site visit), Library (nonfiction books), Art (bookmaking materials; photos of school workers and their job materials)

Outdoor Experiences: Review Intentional Teaching Card P05, "Throw Hard, Throw Far"; P09, "Up and Away"; and P19, "Bounce & Catch"

Family Partnerships: Invite families to accompany children on the site visit (Day 2)

Wow! Experiences: Day 2 site visit to a place where tunnels are used (e.g., post office, shipping facility, or bank)

Question of the Day: "What job would you like to have?"

Large Group: Game: "Popping Popcorn" (Mighty Minutes 105), Discussion and Shared Writing: "Jobs Graph"

Read-Aloud: Fiction book from the “Children’s Books” list ("The Real Princess: A Mathemagical Tale")

Small Group: Option 1: "Busy Beads" (P42); Option 2: "Let’s Sew" (P01)

Day 2:

Wow! Experiences: Site visit to a place where tunnels are used

Question of the Day: "What do you want to see on our visit today?"

Large Group: Song: "Willy’s Week" (Mighty Minutes 149), Discussion and Shared Writing: "Site Visit to See How Tubes or Tunnels Are Used"

Read-Aloud: If I Could/Si Yo Pudiera The Real Princess: A Mathemagical Tale (with Book Discussion Card 49, second read-aloud)

Small Group: Option 1: "Blowing Through a Tube" (M26); Option 2: "Lining Up Tubes" (M31)

Day 3:

Question of the Day: "What jobs do you think are in this book? (Show a nonfiction book that features tubes and tunnels.)"

Large Group: Song: "We Like Clapping" (Mighty Minutes 89), Discussion and Shared Writing: "Tubes and Tunnels Nonfiction Books"

Read-Aloud: The Real Princess: A Mathemagical Tale (with Book Discussion Card 49)

Small Group: Option 1: "Jumping Beans" (LL05); Option 2: "Walk the Letter" (LL17)

Day 4:

Question of the Day: "Have you seen a tube today?”

Large Group: Movement: "Silly Dance" (Mighty Minutes 106), Discussion and Shared Writing: "Who Uses Tubes and Tunnels at School?"

Small Group: Option 1: "My Shadow and I" (M47); Option 2: "Geoboards" (M21)

Ongoing (Throughout the week): Mighty Minutes 04, “Riddle Dee Dee”; 171, “Blowing Big Bubbles”; 151, “Syllable Surprise”; 196, “Howling at the Moon”

Materials

Week One

• Collection of tubes

• Play tunnel

• Books and magazines featuring tunnels you drive through, or tubes and tunnels

• Sandbox or sand table

• Letter to send home to families

• Clipboards, paper, pencils

• Nonfiction book selected from “Children’s Books” list that features tubes

• Fiction book from “Children’s Books” list (“Harry the Dirty Dog”)

• Tubes of varying lengths; straight and angled tube connectors; large paper; pencils or crayons; a variety of tubes, some open at one end and some at both ends (for Sand and Water).

Week Two

• Mighty Minutes 172, “Bridge & Tunnel”; 60, “The Name Dance”; 138, “Away I Go”; 143, “The Feelings in Your Face”; 40, “Clap a Friend’s Name”

• Chart paper; photos of tubes and tunnels

• Tubes and tube connectors

• Example of hardware store tubes and tunnels; camera

• Tubes open at one end; Venn diagram

• Curved tube; flexible tube

• Harry the Dirty Dog; Tubes and Tunnels Through and Through; selection from “Children’s Books” list (friendship)

• Book Discussion Card 48

• Intentional Teaching Card LL25, “What’s for Snack?”; food product labels, large paper or tagboard, marker, recipe cards or charts

• Intentional Teaching Card LL37, “Roll-Ups”; ingredients; chart paper and marker; plastic knives

• Intentional Teaching Card M04, “Number Cards”; set of cards with a numeral and its number word; buttons or other small manipulatives

• Intentional Teaching Card M79, “Ping-Pong Pick-Up”; ping pong balls with numerals; tongs; small net; ladle; water for water table

• Intentional Teaching Card LL12, “Same Sound Sort”; a variety of objects from the study; cardboard box or

bag

• Intentional Teaching Card LL16, “Tongue Twisters”; chart paper, markers

• Intentional Teaching Card M23, “Putting Puzzles Together”; puzzles or puzzle cards

• Intentional Teaching Card M42, “Straw Shapes”; geometric shapes; drinking straws cut to different lengths; pipe cleaners; paper; pencil or crayons

• Intentional Teaching Card M35, “Action Patterns”; action cards; pocket chart

• Intentional Teaching Card M14, “Patterns”; group of objects for pattern; examples of tube patterns; construction paper; crayons or markers

• Mighty Minutes 37, “Little Ball”; 122, “What Could This Be?”; 160, “Tell It Again”; 101, “I’m Sticky”; 64, “Paper Towel Rap”

• Pipes, tubes, hoses, and connectors (for Sand and Water)

Week Three

• Mighty Minutes 114, “Traffic Jam”; 103, “Abby Had an Anteater”; 123, “The Animal I’d Be”; 180, “High Knees”; 155, “Syllable Stroll”

• Funnels; picture of a rainspout; “Where Can We Find Tubes and Tunnels?” chart

• Pictures of animals in tunnels; container of fabric scraps

• Clipboards; paper; pencils; camera

• Ball of yarn; scissors

• Pictures or videos of tunnel waves

• Ruby’s Baby Brother (with Book Discussion Card 47)

• Nonfiction book from “Children’s Books” list that features tunnels that animals make

• Selection from the “Children’s Books” list that features numbers and counting

• Intentional Teaching Card LL22, “Coupon Match”; empty food and other commercial product containers or brand-name labels; laminated coupons; grocery bag; envelopes

• Intentional Teaching Card LL35, “Fruit Salad”; ingredients; chart paper and marker; bowl; plastic knives

• Intentional Teaching Card LL73, “Making a Birdfeeder”; birdseed; materials to make a birdfeeder; string; ceramic or clay saucer; tape

• Intentional Teaching Card LL73, “Making a Birdfeeder” (Funnel Filling option); birdseed; materials to make a birdfeeder including tubes and funnels; string; ceramic or clay saucer; tape

• Intentional Teaching Card M17, “Guessing Jar”; large plastic jar; collection of objects to put in the jar; chart

and chart paper

• Intentional Teaching Card M19, “Which Has More?”; ice cube trays or egg cartons; resealable bags; collection of objects that are similar in size

• Intentional Teaching Card LL61, “Color Hunt”; small cards that show and name a color; color paddle

• Intentional Teaching Card LL75, “Sticky Tables”; rolls of plain or colored masking tape or first-aid adhesive cloth tape; child-size table; chart paper; markers

• Intentional Teaching Card M85, “Perler Patterns”; large perler beads; square or rectangle pegboards; parchment or iron paper; iron

• Intentional Teaching Card M38, “Patterns Under Cover”; counters in a variety of colors; paper cup; cardboard divider

• Mighty Minutes 84, “Let’s Make Letters”; 126, “This Way or That Way?”; 104, “Alphabet Stew”; 188, “Swim, Bike, Run”; 189, “Windy Boat Ride”

• Straws; tape; unused nasal aspirator (for Sand and Water)

Week Four

• Vocabulary materials: rolled, folded, mailing tube, divided, marble run, redirect

• Wrapping paper

• Mighty Minutes 60, “The Name Dance”; 117, “Where’s the Pair?”; 161, “Baxter the Black Dog”; 186, “Stop & Go Colors”; 126, “This Way or That Way?

• Mailing tubes; classroom items; large mailing envelopes

• Pictures of the site visit playground

• Masking tape; marbles; small container; cardboard; cardboard tubes; tape

• Selection of a nonfiction book from the “Children’s Books” list

• Ruby’s Baby Brother (with Book Discussion Card 47)

• Intentional Teaching Card M20, “I’m Thinking of a Shape”; geometric solids; empty containers of different sizes

• Intentional Teaching Card M50, “The Farmer Builds a Fence”; elastic band or rope (about 8 feet long) with ends attached; two-dimensional shapes

• Intentional Teaching Card LL65, “Pumpkin Pie” (Rolled Pie Crust option); ingredients; recipe chart with words and pictures; bowl; baking sheet; large spoons; pie plate

• Intentional Teaching Card LL51, “Pizza” (Rolled Pizza Dough option); recipe chart; materials to make pizza

• Intentional Teaching Card M88, “Shape Bingo”; tangram shapes; cardstock or construction paper; bag or box

• Intentional Teaching Card M30, “Buried Shapes”; card stock or heavy paper; attribute blocks; three containers; glue; sandbox or tub of sand; small brushes

• Intentional Teaching Card M12, “Measure & Compare”; nonstandard measuring tools

• Intentional Teaching Card M84, “Ramp Experiments”; tubes for making ramps; objects to roll down the ramps; non-standard measuring tools

• Intentional Teaching Card LL11, “Rhyming Riddles”; chart paper and markers; pictures of objects from the study; props that rhyme with chosen words

• Intentional Teaching Card LL44, “Rhyming Tubs”; plastic tub; bag or small box; pairs of small toys or other objects with names that rhyme

• Mighty Minutes 162, “Sally the Slow Cyclone”; 128, “Blowing Out the Candles”; 134, “Time’s Up!”; 198, “Crazy Compounds”; 156, “This Long Road”

• Cardboard tubes; duct tape; scissors; marbles; pictures of marble runs (for Toys and Games)

Week Five

• Mighty Minutes 105, “Popping Popcorn”; 149, “Willy’s Week”; 89, “We Like Clapping”; 106, “Silly Dance”

• Chart paper; pictures of people who work with tubes and tunnels

• Chart from yesterday’s large-group roundup; clipboards; paper; pencils; camera

• Nonfiction books that feature tubes and tunnels

• Mighty Minutes 154, “People Count”

• Photos of people who work at the school; photos of materials they use for their jobs

• Fiction book from the “Children’s Books” list (“The Real Princess: A Mathemagical Tale”)

• Book Discussion Card 49

• If I Could/Si Yo Pudiera The Real Princess: A Mathemagical Tale

• Intentional Teaching Card P42, “Busy Beads”; various sized beads for stringing; string or pipe cleaners

• Intentional Teaching Card P01, “Let’s Sew”; heavy paper or card stock; hole punch; yarn; toothpicks; tape; shoelaces

• Intentional Teaching Card M26, “Huff & Puff” (Blowing Through a Tube option); small, lightweight balls; tubes; standard and nonstandard measuring tools to measure distance; straws; masking tape

• Intentional Teaching Card M31, “Lining It Up” (Lining Up Tubes option); collection of tubes to be arranged by size; dry erase board and marker or pen and pencil

• Intentional Teaching Card LL05, “Jumping Beans”; construction paper; marker; scissors; lamination supplies

or clear contact paper; coffee can

• Intentional Teaching Card LL17, “Walk the Letter”; masking tape, alphabet cards or an alphabet chart, chart paper, marker

• Intentional Teaching Card M47, “My Shadow and I”; overhead projector or flashlights; construction paper or colored transparencies; shapes

• Intentional Teaching Card M21, “Geoboards”; geoboards; geobands; shape cards with one shape on each card

• Mighty Minutes 04, “Riddle Dee Dee”; 171, “Blowing Big Bubbles”; 151, “Syllable Surprise”; 196, “Howling at the Moon”

• Pictures of different jobs related to tubes or tunnels; materials from the site visit; nonfiction books; bookmaking materials (for Interest Areas)

Standards

Social/Emotional Development

- Standard 0.1: Children demonstrate self-confidence.

0.1.1 Express individuality by making independent decisions.

0.1.2 Express ideas for activities and initiate discussions.

0.1.3 Actively engage in activities and interactions with teachers and peers.

- Standard 0.2: Children demonstrate self-direction.

0.2.1 Make independent choices and plans from a broad range of diverse interest centers.

0.2.2 Demonstrate self-help skills.

0.2.3 Move through classroom routines and activities with minimal teacher direction and transition easily from one activity to the next.

- Standard 0.3: Children identify and express feelings.

0.3.1 Recognize and describe a wide range of feelings, including sadness, anger, fear, and happiness.

- Standard 0.4: Children exhibit positive interactions with other children and adults.

0.4.1 Engage appropriately with peers and teachers in classroom activities.

0.4.2 Demonstrate socially acceptable behavior for teachers and peers.

0.4.6 Demonstrate verbal or nonverbal problem-solving skills without being aggressive.

II. Language Arts Literacy

- Standard 1.1: Children participate in conversations and discussions.

1.1.1 Engage in conversations about familiar topics.

1.1.2 Ask and answer questions related to the topic.

- Standard 1.2: Children comprehend and use new vocabulary.

1.2.1 Use new vocabulary related to the topic.

1.2.2 Understand and follow multi-step directions.

- Standard 1.3: Children express themselves through and develop an appreciation of dramatic play and storytelling.

1.3.1 Play roles observed through life experiences.

1.3.3 Participate with others in dramatic play, negotiating roles and setting up scenarios using costumes and props.

- Standard 1.4: Children demonstrate emergent reading skills.

1.4.1 Show interest in books and print materials.

- Standard 1.5: Children demonstrate emergent writing skills.

1.5.1 Use drawing and writing to express ideas.

III. Mathematics

- Standard 3.1: Children use numbers and counting.

3.1.1 Count with understanding and recognize how many are in a set.

- Standard 3.2: Children identify and describe shapes.

3.2.1 Identify and describe two- and three-dimensional shapes.

3.2.2 Understand and use positional words.

- Standard 3.3: Children compare and measure.

3.3.1 Compare and order objects by length, size, weight.

3.3.2 Use non-standard units to measure.

- Standard 3.4: Children sort and classify objects.

3.4.1 Sort and classify objects based on one or more attributes.

- Standard 3.5: Children recognize and create patterns.

3.5.1 Recognize and extend simple patterns.

IV. Science

- Standard 4.1: Children explore and investigate the natural and physical world.

4.1.1 Observe and describe objects and events.

4.1.2 Ask questions about observations.

4.1.3 Conduct simple investigations to answer questions.

4.1.4 Make predictions and test them.

- Standard 4.2: Children understand properties of objects and materials.

4.2.1 Identify and describe properties of objects.

4.2.2 Explore how objects can be changed.

- Standard 4.3: Children understand basic concepts of force and motion.

4.3.1 Explore different ways objects move.

4.3.2 Understand that forces cause changes in motion.

- Standard 4.4: Children understand concepts related to structures and engineering.

4.4.1 Explore how structures are built and designed.

4.4.2 Use tools and materials to design and build.

V. Health, Safety, and Physical Education

- Standard 2.2: Children demonstrate large motor skills.

2.2.1 Demonstrate locomotor skills.

2.2.2 Demonstrate non-locomotor skills.

2.2.3 Demonstrate manipulative skills.

- Standard 2.3: Children demonstrate small motor skills.

2.3.1 Develop eye-hand coordination.

2.3.2 Demonstrate fine motor skills.

VI. Visual and Performing Arts

- Standard 5.1: Children express themselves through and develop an appreciation of dramatic play and storytelling.

5.1.3 Participate with others in dramatic play, negotiating roles and setting up scenarios using costumes and props.

- Standard 5.2: Children express themselves through and develop an appreciation of the visual arts.

5.2.1 Create two- and three-dimensional works of art while exploring color, line, shape, form, texture, and space.

VII. Social Studies, Family, and Life Skills

- Standard 6.1: Children understand themselves and their families.

6.1.1 Share information about themselves and their families.

- Standard 6.3: Children understand their community.

6.3.1 Explore and identify places and people in their community.

6.3.2 Understand the roles of community helpers.

- Standard 6.4: Children demonstrate problem-solving skills.

6.4.1 Identify a problem and generate possible solutions.

6.4.2 Use materials and resources to solve problems.

VIII. Technology

- Standard 8.1: Children use technology tools for learning and communication.

8.1.1 Explore and use various technological tools.

Suggested Strategies for Modifications

Using a variety of hands-on activities, movement, small group options, visual activities, along with discussions to support diverse learners and learning styles. Students experience hands-on exploration of technology and materials that provide multiple entry points for learners.

This link includes content specific accommodations and modification for all populations:

https://docs.google.com/spreadsheets/d/1fmQ5llgX1HZdIPa7duX33pfmonGDoVFag9eE2DpbLfM/edit?usp=sharing