

P.Cert: Balls Study

Content Area: **Pre-School**
Course(s):
Time Period: **March**
Length: **5-6 weeks**
Status: **Published**

Unit Overview

This study has 5 week long explorations of balls.

This study shows how to use children's interests in balls to help them explore social studies and science concepts related to the features and nature of balls.

Enduring Understandings

Balls come in all sizes and they can bounce and roll.

There are different kinds of balls that are used for different things.

People like to use balls to play.

Essential Questions

Do all balls bounce?

Do all balls roll?

What makes balls move?

Who uses balls?

What are balls made of?

Instructional Strategies & Learning Activities

Week of:

Teacher:

Study: Balls
to find out?

Exploring the Topic: What do we know about balls? What do we want

	Monday	Tuesday	Wednesday	Thursday	Friday
Interest Areas	Library: books about balls Computer: ebook version of <i>The Little Red Hen</i>	Toys and Games: ball collection Computer: ebook version of <i>Have a Ball</i>	Toys and Games: containers to organize the ball collection	Toys and Games: containers to organize the ball collection Computer: ebook version of <i>Have a Ball</i>	Toys and Games: box with lid; interesting collection of small balls Computer: ebook version of <i>The Little Red Hen</i>
Large Group	Game: What's Inside the Box? Discussion and Shared Writing: Types of Balls	Song: "She Brought a Football" Discussion and Shared Writing: Share a Ball	Game: What's Inside the Box? Discussion and Shared Writing: What Can We Do With Balls?	Song: "Clap a Friend's Name" Discussion and Shared Writing: What Do We Know About Balls?	Movement: Bouncing a Ball Discussion and Shared Writing: What Do We Want to Find Out About Balls?
Read-Aloud	<i>The Little Red Hen</i>	<i>Have a Ball</i>	<i>The Little Red Hen</i>	<i>Have a Ball</i>	<i>The Little Red Hen</i>
Small Group	Option 1: Busy Bs Option 2: Sorting B	Option 1: Comparing and Describing Balls Option 2: Features of the Ball Collection in Words and Pictures	Option 1: Laughing Leo Option 2: Laughing Leo and Dancing Daphne	Option 1: Can You Guess? Option 2: What's More?	Option 1: Counting the Collection Option 2: Bounce & Count

Outdoor Experiences: Variety of Balls

Family Partnerships: We'd like to invite family members to come and play ball with the children outdoors on Friday of this week. Also, please access the ebooks, *The Little Red Hen* and *Have a Ball*.

Wow! Experiences: Friday—Visit from family members to play ball with the children outdoors

Week of:

Teacher:

Study: Balls

Investigation: 1. Do all balls bounce? (Monday–Wednesday)

2. Do all balls roll? (Thursday–Friday)

	Monday	Tuesday	Wednesday	Thursday	Friday
Interest Areas	<p>Toys and Games: sorting trays; a variety of small balls</p> <p>Computer: ebook version of <i>The Three Billy Goats Gruff</i></p>	<p>Toys and Games: sorting trays; a variety of small balls</p>	<p>Toys and Games: add spheres and circles to sort</p> <p>Computer: ebook version of <i>The Three Billy Goats Gruff</i></p>	<p>Discovery: basket of 10–20 of the same kind of small ball, e.g., golf balls; a small scale</p>	<p>Blocks: ramps and balls</p> <p>Computer: ebook version of <i>The Three Billy Goats Gruff</i></p>
Large Group	<p>Movement: The Imaginary Ball</p> <p>Discussion and Shared Writing: Which Balls Will Bounce?</p>	<p>Movement: The Imaginary Ball</p> <p>Discussion and Shared Writing: Height and Bounciness</p>	<p>Song: “Clap a Friend’s Name”</p> <p>Discussion and Shared Writing: Weight and Bounciness</p>	<p>Poem: “Little Ball”</p> <p>Discussion and Shared Writing: Do All Balls Roll?</p>	<p>Poem: “Come Play With Me”</p> <p>Discussion and Shared Writing: Round Like a Pancake or Round Like a Ball (Sphere)?</p>

Read-Aloud	<i>The Three Billy Goats Gruff</i>	<i>Bounce</i>	<i>The Three Billy Goats Gruff</i>	<i>Bounce</i>	<i>The Three Billy Goats Gruff</i>
Small Group	Option 1: Rhymes With Ball Option 2: Rhyming Zoo	Option 1: The Long and Short of It Option 2: How Big Around?	Option 1: Letters, Letters, Letters Option 2: Buried Treasures	Option 1: On a Roll Option 2: Rolling Ramp	Option 1: I'm Thinking of a Shape Option 2: Straw Shapes
Outdoor Experiences: Bouncing Balls; Throw Hard, Throw Far; Rolling Our Bodies; Balloon Catch					
Family Partnerships: Please talk with your children this week about ball games that you enjoyed playing as a child. We'd like to invite a family member who plays a sport to visit the class next Tuesday. Please let us know if you can join us. Also, please access the ebooks, <i>The Three Billy Goats Gruff</i> and <i>The Three Little Pigs</i> .					
Wow! Experiences: None.					

Week of:

Teacher:

Study: Balls

Investigation: 2. Do all balls roll? (Monday)

3. What makes balls move? (Tuesday–Wednesday)

4. Who uses balls? (Thursday–Friday)

	Monday	Tuesday	Wednesday	Thursday	Friday
Interest Areas	Blocks: ramps and balls	Toys and Games: tools to measure height and circumference	Sand and Water: balls in the water table	Toys and Games: three-dimensional	Blocks: wrecking ball (beach ball tied to a long piece of yarn);

	Computer: ebook version of <i>The Three Little Pigs</i>	Computer: ebook version of <i>The Three Little Pigs</i>		shape sort	cardboard blocks Computer: ebook versions of <i>Have a Ball</i> and <i>Play Ball!</i>
Large Group	Game: I Spy... (sphere-circle hunt) Discussion and Shared Writing: Height and Rolling Balls	Song: "We Like Clapping" Discussion and Shared Writing: Sports	Movement: Move Like Water Discussion and Shared Writing: The Force of Water	Song: "I Can Make a Circle" Discussion and Shared Writing: Preparing for the Site Visit	Book: <i>Have a Ball</i> Discussion and Shared Writing: Questions for the Site Visit
Read-Aloud	<i>The Three Little Pigs</i>	<i>The Three Little Pigs</i>	<i>Bounce</i>	<i>Just Like Josh Gibson</i>	<i>Play Ball!</i>
Small Group	Option 1: Environmental Print Option 2: Baggie Books	Option 1: Blow a Ball Option 2: Forced Air	Option 1: Letters, Letters, Letters Option 2: Buried Treasures	Option 1: What's Missing? Option 2: I'm Thinking of a Shape	Option 1: Geoboards Option 2: I'm Thinking of a Shape

Outdoor Experiences: Rolling Our Bodies; Balloon Catch; Move a Ball; Balloon Catch; Sphere Hunt; Catching With a Scoop

Family Partnerships: Do you use an exercise ball? If so, we'd like to invite you to visit our class next Monday to show the children how to use it. Also, we are looking for a grandparent or other older family or community member who can tell us a story next Tuesday about a ball game that he or she played as a child. Finally, we are looking for a family member who has a pet that plays with a ball to visit the class next Wednesday. If you (or someone you know) is able to join us for any of these activities, please let us know.

Finally, please take some time this week to access the ebook, *The Three Little Pigs*.

Wow! Experiences: Tuesday—Visit from a family member who plays a sport

Friday—Site visit to a sporting goods store

Week of:

Teacher:

Study: Balls

Investigation: 4. Who uses balls? (Monday–Wednesday)

5. What are balls made of? (Thursday–Friday)

	Monday	Tuesday	Wednesday	Thursday	Friday
Interest Areas	Dramatic Play: materials from Large-Group Roundup last Friday	Toys and Games: beads; laces Computer: ebook version of <i>Play Ball!</i>	Discovery: natural spherical items; magnifying glasses Art: materials for thank-you notes	Art: thin strips (1–2 inches wide) of newspaper or paper towels; glue; water; balloons	Art: thin strips (1–2 inches wide) of newspaper or paper towels; glue; water; balloons Discovery: balls that can and cannot be opened
Large Group	Game: Body Patterns Discussion and Shared Writing: Exercise Ball	Song: “Clap a Friend’s Name” Discussion and Shared Writing: Visiting Grandparent	Game: Animal Movement Discussion and Shared Writing: Pets That Play Ball	Movement: Move Like a Balloon Discussion and Shared Writing: Using Our Senses to Explore Balls	Song: “We Like Clapping” Discussion and Shared Writing: What Do You Think Is Inside a Ball?

Read-Aloud	<i>Just Like Josh Gibson</i>	<i>Play Ball!</i>	<i>Just Like Josh Gibson</i>	<i>The Doorbell Rang</i>	<i>A Birthday Basket for Tia</i>
Small Group	Option 1: Bead Patterns	Option 1: Sphere Hunt Book	Option 1: Sphere Hunt Book	Option 1: Walk a Letter	Option 1: Rhyming Riddles
	Option 2: Jewelry Making	Option 2: Sphere Hunt Computer Book	Option 2: Sphere Hunt Computer Book	Option 2: Jumping Beans	Option 2: Rhyming Names

Outdoor Experiences: Sphere Hunt; Catching With a Scoop; Exploring Bubbles; Kick Hard

Family Partnerships: Your children will be interviewing you about games you played with balls when you were children. Please take some time to share your experiences with them! Also, it's time to access the ebook, *Play Ball!* Finally, we'd like to invite families to participate in our end-of-study celebration on Friday next week.

Wow! Experiences: Monday—Visitor with an exercise ball
 Tuesday—Visit from a grandparent or older community member
 Wednesday—Visitor with a ball-playing pet

Week of:

Teacher:

Study: Balls

Investigation: 5. What are balls made of? (Monday–Wednesday)

Celebrating Learning (Thursday–Friday)

	Monday	Tuesday	Wednesday	Thursday	Friday
Interest Areas	Art: thin strips (1–2 inches wide) of newspaper or paper towels; glue; water; balloons Discovery: balls that can and cannot be opened	Art: completed papier mâché balls; collection of spheres and circles Discovery: deflated balls; pumps Computer: ebook version of <i>Have a Ball</i>	Art: completed papier mâché balls; collection of spheres and circles Computers: Web sites that answer questions about what’s inside balls	All: displays of children’s investigations Computer: ebook version of <i>The Little Red Hen</i>	All: displays of children’s investigations Computer: ebook version of <i>Play Ball!</i>
Large Group	Game: My Name, Too! Discussion and Shared Writing: Hollow and Solid	Song: “We Like Clapping” Discussion and Shared Writing: Ball-Shaped Foods	Game: I Spy... Discussion and Shared Writing: Finding Answers	Movement: The Imaginary Ball Discussion and Shared Writing: Preparing for the Celebration	Poem: “Come Play With Me” Discussion and Shared Writing: Sharing Special Foods
Read-Aloud	<i>The Doorbell Rang</i>	<i>Have a Ball</i>	<i>The Doorbell Rang</i>	<i>The Little Red Hen</i>	<i>Play Ball!</i>

Small Group	Option 1: What Happened Next? Option 2: Continuing the Story	Option 1: Making Play Dough Option 2: Matzo Balls	Option 1: Dinnertime Option 2: Number Cards	Option 1: Show Me Five Option 2: Nursery Rhyme Count	Option 1: Recounting the Ball Collection Option 2: Voting
Outdoor Experiences: Exploring Bubbles; Kick Hard; Kick High					
Family Partnerships: Please join our class for the end-of-study celebration on Friday! Also, please access the ebook, <i>The Little Red Hen</i> .					
Wow! Experiences: Friday—Balls celebration					

Integration of 21st Century Themes and Career Exploration

Performing assigned classroom jobs and duties

CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.

Technology Integration

Students will interact with SmartBoard activities.

Students will interact with read-aloud texts both individually and as a large group.

Use of Shutterfly Share Site

Utilize programs on the iPad

Watch and interact with SchoolTube videos.

TECH.PK.8.4.1	Use basic technology terms in conversations (e.g. digital camera, battery, screen, computer, Internet, mouse, keyboard, and printer).
TECH.PK.8.2.5	Operate frequently used, high quality, interactive games or activities in either screen or toy-based formats.
TECH.PK.8.2.3	Turn smart toys on and/or off.
TECH.PK.8.2.2	Access materials on a disk, cassette tape, or DVD. Insert a disk, cassette tape, CD-ROM, DVD, or other storage device and press “play” and “stop.”

Interdisciplinary Connections

Units are interdisciplinary throughout the curriculum.

SED.PK.0.5.1	Play independently and cooperatively in pairs and small groups.
HE.PK.2.4	Children develop competence and confidence in activities that require gross- and fine-motor skills.
HE.PK.2.4.3	Use objects and props to develop spatial and coordination skills (e.g., throw and catch balls and Frisbees, twirl a hula-hoop about the hips, walk a balance beam, lace different sized beads, and button and unbutton).
MA.PK.4.1	Children demonstrate an understanding of numbers and numerical operations.
MA.PK.4.2.1	Use and respond to positional words (e.g., in, under, between, down).
MA.PK.4.1.1	Demonstrate emergent understanding of numbers (for counting: at least through 20; for ordinals: first through fifth, including the last).
MA.PK.4.1.2	Recognize and name some one-digit written numerals:
MA.PK.4.1.3	Compare groups of objects (e.g., using the terms “more,” “less,” “same”).
SED.PK.0.1.2	Express ideas for activities and initiate discussions.
SED.PK.0.1.3	Actively engage in activities and interactions with teachers and peers.
SED.PK.0.5.4	Take turns.
VPA.PK.1.4	Children express themselves through and develop an appreciation of the visual arts (e.g., painting, sculpting, and drawing).

Differentiation

Students will be offered support and challenges as deemed appropriate.

Modifications & Accommodations

Pre-school has multiple identification processes and services for students needing support.

Benchmark Assessments

Teacher created benchmark assessment

Formative Assessments

Teacher observation

Summative Assessments

Anecdotal record keeping

Instructional Materials

See items located in lesson plans above.

Standards

SCI.PK.5.2.4	Investigate how and why things move (e.g., slide block, balance structures, push structures over, use ramps to explore how far and how fast different objects move or roll).
ELA.PK.RI.PK.4	With prompting and support, ask and answer questions about unfamiliar words in informational text.
ELA.PK.RL.PK.1	With prompting and support, ask and answer key elements in a familiar story or poem.
ELA.PK.RL.PK.2	With prompting and support, retell familiar stories or poems.
ELA.PK.RL.PK.7	With prompting and support, using a familiar storybook, tell how the illustrations support the story.
SCI.PK.5.1.1	Display curiosity about science objects, materials, activities, and longer-term investigations in progress (e.g., ask who, what, when, where, why, and how questions during sensory explorations, experimentation, and focused inquiry).
SCI.PK.5.1.4	Communicate with other children and adults to share observations, pursue questions, make predictions, and/or conclusions.
ELA.PK.RI.PK.7	With prompting and support, tell how the illustrations support the text (information or topic) in informational text.
SCI.PK.5.2.1	Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor

environment based on size, shape, color, texture, and weight.

SCI.PK.5.1.5

Represent observations and work through drawing, recording data, and “writing” (e.g., drawing and “writing” on observation clipboards, making rubbings, charting the growth of plants).

ELA.PK.RL.PK.10

Actively participate in read aloud experiences using age appropriate literature in individual, small and large groups.

ELA.PK.RI.PK.2

With prompting and support, recall important facts from a familiar text.

ELA.PK.RL.PK.4

With prompting and support, ask and answer questions about unfamiliar words in a story or poem read aloud.

ELA.PK.RL.PK.5

Recognize common types of literature (storybooks and poetry books).

ELA.PK.RI.PK.3

With prompting and support, make a connection between pieces of essential information in a familiar text.

ELA.PK.RI.PK.5

Identify the front and back cover of a book.

ELA.PK.RI.PK.6

With prompting and support, identify the role of author and illustrator in presenting ideas in informational text.

SCI.PK.5.1.2

Observe, question, predict, and investigate materials, objects, and phenomena during classroom activities indoors and outdoors and during any longer-term investigations in progress. Seek answers to questions and test predictions using simple experiments or research media (e.g., cracking a nut to look inside; putting a toy car in water to determine whether it sinks).