Baseball is Education
...an educational experience like no other

2013 DATES
MONDAY, MAY 6 – 10:35 AM
THURSDAY, MAY 16 – 10:35 AM
THURSDAY, MAY 23 – 10:35 AM
THURSDAY, MAY 30 – 10:35 AM

Presented by:
IMPORTANT: PLEASE READ BEFORE CONTINUING

This curriculum was created to provide you with a learning “compass” to help guide your students through a truly rewarding “out-of-class” experience. The ideas and lesson plans included within stand to serve as a guide for educators to create educational, appropriate ideas to assist in “Education Day” at Roger Dean Stadium on May 6, May 16, May 23, and May 30, 2013.

For months, educators answered the call to pool their resources and produce this guide. They committed their time, expertise, and enthusiasm. They represent what is right in our schools today—educators who care about making learning exciting for their students.

The curriculum has been designed by educators and for educators. Although this curriculum guide focuses on students within grade levels K-5, the procedures and methods can easily be substituted to fit the appropriate grade level.

This curriculum has been organized with the following in mind:

- **Educators tailor their lesson plans to meet the needs of their students.**
- **Educators may use bits and pieces of a lesson plan to create their own lesson plan.**
- **Educators have the flexibility to use this curriculum and lesson plans to integrate ideas into current studies.**

This curriculum guide has been divided into four basic areas of study: **MATHEMATICS, SCIENCE, SOCIAL STUDIES, and LANGUAGE ARTS.** The provided lesson plans have been designed as complete, top-to-bottom, lesson plans. Each focused lesson plan contains exercises to be dealt with in the classroom, at the “Education Day” games, and after the game has been completed as follow-up or additional learning.

We sincerely appreciate your participation, and truly hope that you find this event worthwhile, educational, and enjoyable. Additionally, we welcome any specific ideas or comments that would aid or improve “Education Day” or the curriculum guide for future “Education Days.”

- **Was the guide easy to use?**
- **Did you find any errors? If so, please inform us so we can correct them.**
- **Was there any activity that stood out from the rest? One in which your students truly enjoyed?**
- **Did you enhance any of the activities in ways others might want to know about?**
- **Were there any activities that “struck out” or should have not been placed within the guide?**

Just as in the game of baseball, teaching only gets better with practice, so we would like your ideas for future editions of this curriculum guide. Send your lesson plan(s) or ideas to:

Education Days  
Roger Dean Stadium  
4751 Main Street  
Jupiter, FL 33458

Be sure to include your name and school. We will reward you if we use your ideas in the future!
Curriculum Supporting Staff

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Lesson Plan 1
“Discovering Shapes at the Ballpark”

Students will list the plane and space figures that can be found at a baseball game.

**Students will be able to:**
- List a variety of plane and space figures that are present at a baseball game

**Objectives:**
The children will understand plane and space figures.

**Materials:**
Paper, pencil

**Before the game:**
Students will learn about plane and space figures through math activities found in the curriculum. Read “The Greedy Triangle” to the class and describe the different shapes found in the environment.

**At the game:**
Students will look around for shapes that represent plane and space figures and be prepared to create a list. Examples include a diamond (the baseball diamond), a sphere (baseball), a square (the base), a rectangle (parking space), a cylinder (cup), etc.

**Beyond the game:**
When students return they will make a list of all the plane and space figures they found at the ballpark. Students should draw the shapes and label them. The class will create a master list when all students have finished.
Lesson Plan 2
“The Shape of the Game”

Children combine common shapes to create a model baseball field or other part(s) of a baseball stadium.

Students will be able to:
• Sort or identify objects on multiple attributes

Objectives:
The children will be able to observe and identify common shapes in the environment, to combine shapes to make a new whole, to develop concepts of properties of shapes, especially the consistency of the properties regardless of orientation of the shape.

Materials:
Pictures of baseball fields/stadiums or Appendix G (Ballpark Diagram), pattern blocks, building blocks, or parquetry blocks, paper versions of those blocks (commercial or child made)

Before the Game:
The children practice identifying shapes in the environment by noting those in the classroom, the playground, and at home. Look for what might be found at the game by looking at the pictures of baseball fields or talking about children’s previous experiences with baseball fields from playing, watching television or seeing games before.

At the Game:
Examine the baseball field to find shapes such as circles, squares, triangles, rectangles, ovals, and other shapes. Record the information by drawing on a pad, listing, reporting to a recorder (adult) or by reporting back after the game. Be sure to draw attention to the baseball diamond…it IS a square! Have children stand at various places when taking their seats to see the square from a variety of perspectives.

Beyond the Game:
Children can work in teams to make a drawing or model of a baseball field, stadium, scoreboard, or portion of any of those using a combination of simple shapes. These can be made using pattern blocks, building blocks, parquetry blocks or any combination of those. Paper versions or photographs can record the work. Children should be able to name the shapes they used and what they represented.
Lesson Plan 3
“Double Play”

Children combine two (or three or four) numbers taken from players’ jerseys to make a target total (100, 50, 25, etc...).

**Students will be able to:**
- Add, subtract whole numbers and explain, illustrate or select thinking strategies for making computations

**Objectives:**
The children will be able to use a variety of strategies to determine a variety of number combinations that would meet a target number such as 100.

**Materials:**
Cardinals/ Hammerheads program or Appendix E (Player Roster), paper, pencil, calculator

**Before the game:**
Practice combining numbers to make target numbers, especially those combinations that equal either ten or a hundred. Use tens charts, hundred charts, two-color chips, unifix cubes, place value blocks and more to explore combinations. Explore using a calculator, too.

**At the game:**
Informally use mental computations to add pairs of numbers such as the total of the value of the jersey numbers of the pitcher and catcher or the pitcher and the current batter; the total of the jerseys of two (or more) players making a double play (or of those caught in a double play), etc.

**Beyond the Game**
Set a target number (such as 100) and have the children work in teams using copies of the player roster (Appendix E) to find as many combinations of player numbers to equal that target. How many can you find using just two numbers? What is the highest number of player numbers to total 100?

Other variations: Play with other ways to reach a target number: Can you find two people in class whose weight is equal to 100 (or another target number)? Can you research the building population to find 2 (or 3 or more) classrooms whose total number of children is 100 (or another target number)?
Lesson Plan 4

“Scoreboard Math”

Children will play with variations of numbers as organized on a baseball scoreboard.

Students will be able to:

- Use patterns to make generalizations and predictions by determining a rule and identifying the missing numbers in a table of number pairs

Objectives:
The children will be able to use a variety of strategies to predict, estimate, and compute using the scores earned by teams during a baseball game.

Materials:
Student-made nine-inning scoreboards, paper, pencil

Before the game:
The children make a 2 X 9 matrix to represent a scoreboard, placing the opponent’s team name and the Cardinals/ Hammerheads name in front of the rows of nine. Students then predict the score for each team per inning and then compute their prediction for the final score. Make a blank scoreboard to take to the game.

At the game:
Children mentally compute the total score per inning. They may take a blank scoreboard to record the actual score per team, per inning. Or take and use their predictions.

- How much would the Cardinals/ Hammerheads have to score an inning to make the predicted total for that inning?
- How many runs would the Cardinals/ Hammerheads (or their opponents) need to score the remainder of the game to equal the total predicted score for that team? (for example...If you predicted the two teams would score 5 runs in the 3rd inning and the other team scored 1 in the 3rd, how many would the Cardinals/ Hammerheads have to score that inning to make your prediction accurate?)

Beyond the game:
Use blank scoreboards to make up all the ways on this scoreboard that a team can score 15 runs in 9 innings, all the ways a team can go ahead of a team up by 6 in the 7th inning, or all the ways a team can score X runs in X innings. Compare the predictions made to the actual scores on the scoreboards. Each of your students can analyze their predictions by inning and by team. How close were your predictions? Which inning came closest to the predicted score?
Lesson Plan 5
“90 Feet”

Children explore the magic distance of 90 feet (the distance between bases) through movement, estimation, measurement, counting, and the use of a variety of measurement drills.

Students will be able to:
- Apply the use of tools to measure length
- Use the mental, paper-and-pencil, and physical strategies to determine time elapsed

Objectives:
The children will be able to use a variety of material and strategies to analyze a specific distance, while concentrating on estimation strategies.

Materials:
A variety of materials to use for measuring units (unifix cubes, large paper clips, pencils, books, toothpicks, etc.) stopwatches, paper, pencil

Before the game:
Measure and mark off 90 feet in the hallway or outside. Determine how many _____’s (hands, feet, cubes, blocks, books, pencils, baby steps, giant steps, scissor steps, etc...) would equal the 90 feet.

At the game:
Give groups of 3 to 5 children a stopwatch, pencil, and paper to record. Periodically, children may time the speed of a player running from one base to another and record the number of seconds.

Beyond the game:
Using the 90 foot distance you marked off at school and the player times recorded at the game as baselines, estimate how quickly you can run it? Walk it? Skip it? Hop on one foot? Walk backwards? Etc...
Children use calculators to play with a variety of number computations.

**Students will be able to:**
- Add and subtract whole numbers and explain, illustrate or select thinking strategies for making computations

**Objectives:**
The children will be able to use a variety of strategies (and a calculator) to solve mathematical problems.

**Materials:**
Calculators, newspaper sports pages (especially the box scores for the game the children attended)

**Before the game:**
List all of the things that a person can quantify (use numbers to talk about) related to a baseball game. These can include all the statistics that the newspapers include about the game as well as fan attendance, food sales, money taken in through ticket sales, number of non-players in uniform, number of times your row had to stand up to let someone in or out, number of water fountains or restrooms. As many things as the children can think of.

**At the game:**
Children choose some events or items they would like to count and record and maintain their count(s).

**Beyond the game:**
Children can use information from the game, from the newspapers, and from the appendices of this guide to calculate the following using calculators:
- The number of hits by outfielders for a season... if for the whole season, the three outfield positions hit, on average, the same as they did the day of the game
- The number of females attending the game, if each section had the same number as their own section
- The number of inches of mustard, if spread from one end of a hot dog to the other on every hot dog, if each person who bought a ticket averaged one hot dog each
- The number of times people in a row would stand if every person in it got up to two times each during the game...for one game, and then for season and more

The children should be able to think of many other examples.
Lesson Plan 7
“Peanuts and Cracker Jacks”

Students will be able to:
• Add the cost of different orders at the concession stand and count change

Objectives:
The children will be able to add and subtract dollar amounts using decimal points and be able to make change.

Materials:
Play money (optional), paper, pencil, Appendix F (Roger Dean Stadium Prices)

Before the game:
Instruct students that they (hypothetically) have $10.00 to spend at the game. Give them the price list for the concession stand and ask them to choose the items they would like to purchase. They should write the items on their paper and add the total cost. They should then determine the amount of change they should receive from their purchase. This activity can be advanced by giving them several problems with a list of items purchased beside each question that will request they add the total and determine change for each. Students can also illustrate and color their purchases. For older students, teachers can instruct students in adding tax to the total.

At the game:
Students should keep a list of all the ways you can spend money at the game. This list will include: concession stand, gift shop, programs, parking, gas to the game, etc...

Beyond the game:
Students should get into groups of 4 and make a wish list of all the things they would like to purchase at a ballgame. They must include the necessary items such as tickets and parking. They should estimate and add the total cost off all these items and determine how much change would be received from $100.
Lesson Plan 8
“The Perfect Size”

Summary: Students will conduct, apply, and analyze research to find out regulated sizes and distances involved in the game of baseball. This real life application of measurement concepts will allow students to connect mathematics with baseball and other sports.

Objectives:
The children will be able to describe several, important rules and regulations related to linear measurement that are followed in baseball. They will also be able to apply their understanding of these rules to an actual game of baseball, analyzing how following rules and regulations related to sizes and distances affect the game itself.

Materials:
Computers with internet access, Appendix Q (The Perfect Size), lined papers, pencils, drawing paper, colored pencils or markers

Before the game:
- Ask the students about the sports they play
- Have the students brainstorm a list of sports they have played and then will be asked about the rules they have to follow in those sports. Probe the students so that they also mention length and size related rules, like the size of the filed and ball)
- Instruct the students that there are not only rules that they players have to follow, but also rules that are followed before the game is even played. For example, in baseball, the glove, the field, and the ball must be an exact, certain size. The distance between bases has to be an exact amount as well
- Have the students discuss the similar aspects of the game of baseball that must be a certain regulation size or distance
- At the computer lab, at classroom computers, or as a homework assignment, have the students visit the website: http://www.mlb.com/mlb/official_info/official_rules/foreword.jsp
- Have the students read the information at this website (Official Rules of Major League Baseball) and fill in the table on The Perfect Size Worksheet, answering the sizes and distances of important things used in the game of baseball. Make sure students do not forget to include the units of measurement in their answers

At the game:
- Students should bring their completed table to the game, and take notes as they watch.
- In their notes they should reflect on how the established rules and regulations about sizes and distances make the game of baseball more exciting, enjoyable, or challenging.

Beyond the game:
- Students can conduct similar research on other spots.

Students can select one or more of the smaller items they found the regulation size of, for example, a baseball or glove. They can draw and color a “blueprint,” to the size of the selected item.
Lesson Plan 1
“Bat-Like and Ball-Like”

Students explore the functions of objects by trying out a variety of objects to use as bats and balls.

Students will be able to:
- Explain and/or predict the motion of an object(s) and describe the effects of some objects on other objects
- Apply the use of tools to measure length of an object using inches

Objectives:
The children will be able to predict and explain the motion of objects and describe the effects of the motion of objects.

Materials:
Classroom objects and objects from home to serve bat-like and ball-like functions, paper, pencil (also possibly, cameras, stopwatches, tape measures, targets, etc.)

Before the game:
Discuss the tools that players use in baseball, especially the bat and the ball. List all of the physical and functional characteristics of those two tools. Name some other sports with similar tools (for example: a hockey puck and stick, tennis ball and racket, badminton shuttlecock and racket, etc.)

At the game:
Observe the bats at the game to see if some look heavier or if some are made of different materials than others. Also, observe how players handle the baseball to make it do what they want... and how they swing the bat. Is it always as hard as possible?

Beyond the game:
Children choose items that would function as bats and those that would serve as balls. What characteristics describe “bat-like” and “ball-like”? When a number of tools have been gathered, experiment with combinations to see which offer the potential for the greatest distance, best accuracy, greatest speed, or loudest noise. Have the children devise methods for recording results for comparisons and for showcasing their work. These can be tables, graphs, photographs, drawings, video recordings, and more!
Lessons Plan 2
“Game Sense (s)”

Children actively observe during their experience at the baseball game, using all five senses to gather information.

Students will be able to:
• Create and use categories to organize a set of objects, organisms, and phenomena
• Select instruments to make observations and organize observations of an event, object or organism

Objectives:
The children will be able to describe observations made with all five senses.

Materials:
An assortment of coins, food, wood, leather, chewing gum, sunflower seeds, team uniforms, cardboard, tape recorders, cassette tapes

Before the game:
Discuss how we take information using all of our senses and use that information to understand the world. Begin making lists of words that describe a day at school, classifying each one as data gained from looking, smelling, tasting, hearing, or touching. Record the information by classification.

At the game:
Play with senses. Predict which coin(s) will cover an outfielder or catcher’s head when held at arm’s length in the direction of that player. During loud fan noise, use fingers to quickly plug and unplug ears to make the sound come and go. Try tasting food while holding ones’ nose plugged. Does it taste the same? Make a point to thoughtfully touch objects usually taken for granted: the seats, a ticket, a hot dog bun, the railings, etc.

Beyond the game:
Have children work in teams to make games, posters, or tape recordings, or anything to document or showcase the sensory experiences of the baseball game. For example, the “Smellers,” team could choose to make smell boxes of game day smells: the leather of the mitt, the wood of the bat, the sweat of a player, etc. The “Touchers” team could choose to approximate some of the textures of game day with classroom items and classify the items touched at the game as rough, smooth, cool, warm, soft, etc. The information can be charted on a poster.
Lesson Plan 3
“Rain Delay”

The children will describe the weather on the day of the game and apply their understanding of weather to other game conditions.

Student will be able to:
- Make predictions about the weather from observed conditions and weather maps

Objectives:
The children will be able to create a simple weather report.

Materials:
Thermometer, weather sections of the newspaper, video of weather from the news, paper, pencil

Before the game:
As a class, children will make observations of weather on a daily basis and devise means to record their weather conditions. Periodically, watch on television or on videotape some weather reports and discuss what is included in these reports and how they are expressed and explained. How do the weather reporters use maps, tables, charts, and graphic displays to communicate and explain the weather to their viewers?

At the game:
Make careful observations of the weather conditions on game day. Note the temperature in the Palm Beach Post or on www.weather.com before you leave your school.

Beyond the game:
Children make a full weather report of the game day conditions. This gives them the opportunity to combine their experiences with television weather casting with the weather conditions they experienced on game day. These may be videotaped, recorded, or simply enjoyed by their classmates.

Other variations: Discuss why baseball games are cancelled or postponed due to certain weather conditions. Have children research the relationship between other sports and weather conditions. Are football games cancelled when it rains or when it is cold? Why or why not? What about soccer, hockey, basketball, horse racing, auto racing, fishing, or other sports?
Lesson Plan 4
“Competition is the Mother of Invention”

Children conceptualize an invention that would improve the performance of a particular player on a baseball team or an invention that would make the job of a stadium worker a little bit easier.

**Students will be able to:**
- Explain the operation of a simple mechanical device

**Objectives:**
The children will be able to observe events and explain how to effect a change in that event for a specific purpose.

**Materials:**
Paper, pencil

**Before the game:**
List the people who they will likely be able to observe at the ballgame. What are their roles and functions? Children choose which role they would like to analyze in order to invent them. Teams of children can decide to work for the pitcher, the batter, the fielder, the catcher, the ticket taker, the food vendor, the usher, the fan, and more.

**Beyond the game:**
Teams discuss the observations they made of their “client” at the ballgame. Choose one component of a person’s actions or an attribute of the tools they use or of the stadium/environment itself and invent a way to improve or simplify their performance. Their improvements might consist of a more efficient way of moving, an improvement on a tool, a new tool to use, an adjustment made to the working environment, or something the “client” might wear. Diagrams and descriptions of these inventions can be shared with the other teams of inventors and the best ones sent to the Cardinals/ Hammerheads.
Lesson Plan 5
“We’ve Got Class”

Students will be able to:

- Understand how to classify objects according to similarities and differences

Objectives:
The children will be able to classify objects according to similarities and will be able to understand the difference between living and non-living things.

Materials:
Chart paper, pencil, notebook, magazines, scissors, glue

Before the game:
Discuss classification, the grouping of objects according to similarities and differences, and its use in science. Discuss living and non-living things. Locate items throughout the classroom and around school that can be classified as living and non-living. Create a list using living and non-living classifications. For older students, create more specific classifications. For example: things you can write on paper or a chalkboard or things you can read, such as newspapers, magazines, bulletin boards, and schedules.

At the game:
Instruct students to keep a list of things they see at the game and classify them into living and non-living. Living examples include people, grass, trees, birds, and insects. Non-living examples would be equipment, bleachers, lights, billboards, etc. Older students can create more specific classifications. For example: things you can eat, things you play with, things you wear, places you go, things you can buy. To simplify this lesson, objects can be classified into living and non-living.

Beyond the game:
Students will review classification. In groups, students will cut pictures out of magazines and classify them into living and non-living. Older students can create more specific classifications.
Lesson Plan 6
“Energy In Action: From Potential to Kinetic”

This activity teaches students a basic concept about potential versus kinetic energy, through a fun and hands-on game they can play as a class at the baseball game they attend.

Objectives:
The children will be able to describe the difference between potential energy and kinetic energy using the example of a baseball bat to support their understanding. Students will be able to explain that when a bat is being held in the ready position it has potential energy. When the bat is swung, it has kinetic energy.

Materials:
Chalkboard or white board, chalk or markers, Appendix R (Potential and Kinetic Energy Cards), pencils, markers or colored pencils

Before the game:
• Explain the difference between potential and kinetic energy. Write the following explanation for them to learn. “Potential energy is the energy something has because of its position or where it is. Kinetic energy is the energy something has because of its motion.” The students should underline or highlight the vocabulary words in different colors so they stand out.
• Explain that at the upcoming baseball game, the class will be playing a fun game. They will fill in and decorate cards that correspond to each type of energy. At the game, when the bat is in the ready position the class will chant together and hold up the card for potential energy. When the bat is swung, the class will chant together and hold up the card for kinetic energy.
• On the potential energy card, draw 2 examples of potential energy, one using the baseball bat in ready position.
• On the kinetic energy card, draw 2 examples of kinetic energy, one using the baseball bat being swung.

At the game: 
When the player holds the bat back before swinging, the class should say together and hold up the “POTENTIAL” card, led by teacher. When the player has swung the bat, the class should say together and hold up the “KINETIC” card, led by teacher. This activity should be done a few selected times at bat, not every time.

Beyond the game:
• Upon returning to the classroom, lead the students in a review discussion, having them recall when the bat had potential energy and when it displayed kinetic energy.
• Now, students can illustrate the batting process, drawing a line through the center of the paper to create 2 sides, then drawing and labeling the 2 steps in which the bat displays potential energy (when it is held up, ready to bat) and kinetic energy (when the player swings it).
Lesson Plan 1
“It Takes a Village to Play Ball”

Students will list the effects resources have on everyday activities like going to see a baseball game.

**Students will be able to:**
- Cite the resources necessary to maintain and run a baseball stadium

**Objectives:**
The children will understand what resources are and how they affect our lives.

**Materials:**
Paper, pencil

**Before the game:**
Students will read and learn about communities around the globe and the human and natural resources that contribute to their success. Teachers will read about a variety of different communities in stories and nonfiction books that can be checked out from the libraries. Prior to reading, students will discuss what resources are and how they affect us. After reading each book, students will chart the resources available to each community and how they are used.

**At the game:**
Students will be aware of their surroundings and think about the resources necessary to create this event.

**Beyond the game:**
Students will list the human and natural resources necessary to build a stadium and make it successful. Examples include land (for the stadium), gasoline (for cars and delivery trucks), employees, water (for bathrooms and drinking), etc.
Lesson Plan 2
“Interview, Inquire, and Investigate: What can you find out at the Ballpark?”

Children determine what they would like to know and how they can find it out when visiting Roger Dean Stadium.

Students will be able to:
• Identify and describe the relationship between human activity and the environment

Objectives:
The children will be able to explore the richness of a particular environment and experience by anticipating, planning ahead, and seeking out information and understanding through a variety of observations and discussions.

Materials:
Books (about baseball, sporting events, occupations, stadiums, and cities), steno pad, pencil

Before the game:
Hold multiple discussions about what to expect to see and learn at the Education Day baseball game. After the discussion, each child should have several specific plans for observing and gathering information. Some methods might be asking questions of other fans, interviewing an employee, counting, estimating and sketching what they see, and thinking of specific questions for further research upon their return.

Students should work in groups to design two brief questions that could be asked to gain the information we would like. How should they be phrased to be succinct and polite? Assign some children the task of interviewing an usher or concessionaire.

At the game:
Children enjoy the game while actively observing and making mental notes of information the class has identified as being of interest. Interviews can be conducted as opportunity affords. Children may choose to sketch or make notes on their pads to record information they are seeking.
Lesson Plan 3
“(Put Your Name Here) Stadium”

Children, to any level of complexity and with a variety of focuses, create their own version of a baseball stadium. This can be done on paper, as a classroom center, or in make-believe.

**Students will be able to:**
- Identify and/or describe the relationship between human activity and the environment.

**Objectives:**
The children will be able to apply their understanding of economics, occupations, and service in developing a model of a baseball stadium.

**Materials:**
Child-made props, books about baseball and stadiums, samples of “real” programs, tickets, job applications, paychecks, child-made signs and advertisements

**Before the game:**
As a class, plan a day at the ballgame within the classroom. Discuss the roles that students can take, the setting, props to be designed and made, and the details to be developed.

**At the game:**
Be very observant and gather examples of hard data (tickets, programs, even food wrappers) to assist in designing the class stadium.

**Beyond the game:**
Open the ballpark in the classroom: offer applications and interviews for prospective employees, develop advertising, design and create the physical representation of the stadium itself, hold try-outs for players, make real or pretend (paper, clay, cardboard) food, develop roles (such as player, fan, ticket taker, manager, vendor, announcer, etc.) and allow opportunities for children to take on multiple roles. Discuss what worked, what did not work, and why!
Lesson Plan 4
“Concession Stand”

Children gather information to develop and run their own version of a stadium concession stand.

Students will be able to:
• Apply the counting and collection of coins and bills in a buying situation
• Identify the factors of production needed to produce various goods and services
• Classify various economic activities as examples of production and consumption

Objectives:
Develop a menu for a classroom concession stand based on student preferences and feasibility. Estimate the costs of common items based on prior experiences and on keeping competitive prices. Design and make signage and advertisements, and apply knowledge of occupation involved through role-playing.

Materials:
Steno pad, paper, cardboard, clay, paint, markers, paper, pencil, Appendix F (Roger Dean Stadium Prices)

Before the game:
Predict what will be available at the concession stand at the game and the prices. Make a list of things to look for while at the game and prepare a few students with assignment to record information on steno pads.

At the game:
Selected students can copy foods and prices from the concession stands. All students should notice what the other fans are eating (especially non-student fans), and make a mental note of the “best” foods and the ones that are not so appealing. Remind students to give attention to methods of sales and advertising.

Beyond the game:
Children open a concession stand in the classroom. They can work in teams to make their own menus and prices (based on surveyed interest of classmates) and set up a structure and roles for acting out the concession stand.

Other variations: Give various budgets to fans. Ask, “What can you buy for $10?” and require students to think of three different meal combinations for one amount. Ask what they can buy with a specified amount to share among three people or what can they buy with a $10 bill and still have “folding money left for their mom/ or dad. Workers in the concession stand should find ways to “push” items that are underselling.
Children research the cities of the Cardinals/ Hammerheads opponents.

**Students will be able to:**
- Demonstrate map skills by identifying selected major reference points on earth
- Demonstrate map skills by using a map key to understand map symbols and a linear scale to measure distances on a map, and a direction indicator

**Objectives:**
The children will be able to use map skills to describe locations of places on a map and compare features of his/her local community with that of other communities.

**Materials:**
Appendix H (Florida State League Map), Appendix I (Florida State League Mileage Chart), a variety of resources, paper, pencil

**Before the game or beyond the game:**
Children work in teams to research a city that sends a team to play the Cardinals/ Hammerheads. At least one team of children should choose the team that the Cardinals/ Hammerheads will face on the day that they attend. Some areas include:
- Population of the city
- Products and occupations of the city
- Distance of the city from Jupiter Hammerheads/ Palm Beach Cardinals (determine which are the closest and farthest)
- Other professional sports teams from the same city or area
- Historical facts of interest
- Famous persons born in the city

Each team should determine and access sources from information (people, books, chambers of commerce, team front offices, internet, etc...) and then work together to decide how to share the information about their city with the rest of the class. Showcasing could include posters, maps, tables, and graphs, skits, drawings, etc...
Lesson Plan 6
“Find My Way to the Ballgame”

Children gather information on the way to and form the ballpark and make a map of their route on game day.

Students will be able to:
• Demonstrate map skills by identifying selected major reference points on earth, using a direction indicator and a map key to understand map symbols

Objectives:
The children will be able to work with others to gather information to draw a map of the local community.

Materials:
Steno pad, maps of the Town of Jupiter and of your city or town (optional), Appendix J (Major League Baseball Map), paper, pencil

Before the game:
Walk in the immediate area of school, making note of the street signs and discussing right and left turns. Ask children to keep track of their route from their homes to school, noting the names of the streets they ride or walk and of the turns they make on each. Help children to use that information to make a map of their route.

At the game:
On the bus or in cars on the way to Roger Dean Stadium, have children observe and call out the street signs and the turns made. An adult or child volunteer can record the information as given. For example, “Left turn, now we are on Donald Ross Road!” Check those written directions upon the return trip.

Beyond the game:
As a class, draw a map of your recorded route to Roger Dean Stadium. Include all streets you traveled on, and mark the turns. Individual children can draw landmarks in the appropriate places and develop keys. Include a compass and determine whether they traveled north, south, east, or west on each street.
Lesson Plan 7
“Where in the World is...?”

Students will be able to:
• Understand how to read a map and locate different states on a United States Map and different countries on a World Map
• Understand a map legend (key)

Objectives:
The children will be able to locate and label different locations on a United States and World Map and will be able to use a map legend.

Materials:
Appendix E (Player Roster), Appendix J (Major League Baseball Map), World Map, drawing paper, colored pencils, pencil, large chart paper

Before the game:
Using the player information from the Player Roster, discuss the birthplace of each player. Using a United States Map and a World Map, point out the location of each player’s birthplace on the appropriate map. Discuss the use and purpose of different types of maps and the importance of the map legend.

At the game:
Instruct students to draw a map of the stadium labeling different parts of the stadium such as bathrooms, concession stands, entrances, bleachers, playing field, etc...

Beyond the game:
Using the maps drawn at the game, students should divide into groups and create large maps of the stadium. They should label the parts of the stadium and create a legend. Older students may create questions about their map for other groups to answer.
Lesson Plan 8
“Baseball around the World”

Summary:
Baseball is an American sport, but it boasts teams and fans in countries all over the world. This activity teaches students about aspects of assorted cultures and countries throughout the world, while also sharing with them the impact that cultures can have on each other through sports, the arts, and other cultural expressions. Australia, Japan, Cuba, and the Dominican Republic, countries where baseball is a very popular sport, will be the examples used in this activity.

Objectives:
The children will be able to name and describe several countries in different geographical areas where baseball is one of the most popular sports.

Materials:
World Map, computer with Internet access, Appendix S (Research Journal Guide), film about any of the countries mentioned (optional, great extension activity)

Before the game:
• Explain that since baseball was invented in New York in the early 1800’s, it has become an extremely popular, American game. However, it has also spread throughout the world and is popular today in many countries.
• Show Australia, Japan, Cuba, and the Dominican Republic on the World Map or have students point out these countries. Explain that these are 4 countries where baseball is a very popular sport.
• Assign an equal amount of students to each country. At home, in the computer lab, or as a homework assignment, have students conduct research about their country's culture, their baseball teams, and games using their Research Journal Guide for guidance.

At the game:
Students should bring their Research Journal Guide to the game and fill in the United States side of the chart, paying attention to areas where their country is similar or different from the United States.

Beyond the game:
• Using the completed handouts, engage in discussions about what made baseball the same (rules, objectives, etc.) and what made it different (languages, uniforms, certain customs, foods). This causes the students to consider the similarities and differences between ourselves and people throughout the globe.
• Students can conduct further, hands-on, research by writing letters to team members in other countries!
Lesson Plan 1
“The Write Stuff”

Students will create a narrative essay on their experience at a baseball game.

Students will be able to:
• Write a narrative essay about an experience at a baseball game describing sights, sounds, smells, etc. The essay will contain vivid, descriptive writing and describe a small moment at the game.

Objectives:
The children will be able to write a narrative essay about a personal experience using details.

Materials:
Paper, pencil

Before the game:
Students will read several books that are related to baseball. They will also view small news clips and videos that contain baseball game footage. Each student will make a list of items they expect to see at a baseball game and draw a picture of important elements of the setting.

At the game:
Students will enjoy the game and choose a favorite moment from the experience.

Beyond the game:
Students will write a narrative essay describing one small moment at the game. Students will be expected to use vivid details and dialogue to describe the event.
Lesson Plan 2
“Get a Visual”

Students will create an illustration and written product that help them “visualize” a baseball game.

**Students will be able to:**
- Understand the skill visualizing by creating a drawing of the sights, sounds, smells, tastes and feelings experienced at a baseball game. They will be able to write descriptions of the things they visualize as well.

**Objectives:**
The children will be able to understand the skill of visualizing.

**Materials:**
Paper, pencil, crayons

**Before the game:**
Students will read books related to baseball and view clips. They will produce a list of things they visualize from the game they will attend. They will also draw an illustration which depicts the scene. Teachers should relate this to reading a text that they may be unfamiliar with and explain that in order to understand a story that one hasn’t experienced, we must visualize what the author is describing.

**At the game:**
Students will enjoy the game and be aware of their surroundings.

**Beyond the game:**
Students will again produce a list and illustration from the game and compare it to the first one. They will discuss in pairs how close they were to truly visualizing the event. The teacher will discuss with the class their original product and how closely it correlated with the actual experience. The teacher will explain that if one uses this skill as they read they will better understand the stories.
Lesson Plan 3  
“My Life as Bat (Batter, Umpire...)

The children will take on the perspective of people or objects related to baseball.

**Students will be able to:**
- Elicit a long fictional narrative using the writing process to make the intended clear as evidence by the use of a variety of words, a response that stays on topic, and the use of detail to support the topic

**Objectives:**
The children will be able to write an essay from the perspective of an object or person related to baseball.

**Materials:**
Paper, pencil

**Before the game:**
After reading a variety of baseball oriented literature, children will choose to become a bat, ball, pitcher, umpire, hot dog, vendor, etc...and begin a preliminary draft of a composition written from the perspective of that object or person. Discuss with the class the author’s need to research a topic and to take from authentic experiences. Then each student makes a list of what to look for and pay attention to at the game in order to contribute detail and interest to their composition.

**At the game:**
Gather sensory experiences for the story. Think of descriptive words to represent the sighs, sounds, smells, and feelings surrounding your “character” in the composition.

**Beyond the game:**
Complete the composition incorporating the information, experiences, and words gleaned from the game.
Lesson Plan 4
“WDTM? (What Does This Mean?)”

Children explore language by playing with the letters that make up the titles of baseball statistics.

**Students will be able to:**
- Demonstrate an understanding of language and elements of non-fiction by responding to items in which they analyze the text, discern major ideas and supporting ideas
- Make or use a table to record and sort information

**Objectives:**
The children will be able to compose phrases given initial letters and create phrases to describe events at baseball games and in everyday occurrences.

**Materials:**
Newspaper sport pages, paper, pencil

**Before the game:**
Search newspaper sport pages for initials that describe baseball statistics and compile a list (for example RBI, CS, HR, ERA, GIDP, etc…). Have each child generate a list of phrases that the initials could stand for (for example RBI= Robbie’s Best Inning or Raise Blue Insects, ERA= Earl’s Runs Allowed or Everyone Rhymes Always, HR = Hamilton’s Runs or Hums Rapidly).

**At the game:**
Ask children to be on the lookout for other events and behaviors that they might wish to keep statistics on: BDOOG (balls dropped out of gloves), SOG (spit on ground), MOM (meetings on mound), etc. Keep a tally of those events as they occur. Some children may keep a tally of the “real” statistics for the game to use to calculate averages and other scorer’s data as well.

**Beyond the game:**
Determine kinds of events that can be documented on an on-going basis at school such as TCT (Times Chris is Tardy) or BR (Bells Ringing). Create methods for tallying, organizing, and representing the data that is collected.
Lesson Plan 5
“Cause it’s One, Two, Three, Squirts of Mustard on the Old Hot Dog!”

Children create a “Piggyback” song, sung to the tune of “Take Me Out to the Ballgame.”

Students will be able to:
- Elicit a short written piece (song) using the writing process to make the intended clear as evidenced by:
  1. A response that stays on the topic
  2. The use of detail to support the topic
  3. The use of a variety of words

Objectives:
The children will be able to explore syllabication, rhythm, and composition via playing with words and phraseology to write a song.

Materials:
Paper, pencil

Before the game:
Teach the song “Take Me Out to the Ballgame” to the children (if you can find the book of the same name, use that to help). Have the children work in teams of 3 or 4 to compose new words to the song, celebrating or descending another part of the game or general baseball experience (the food, the pitcher, the stadium, the fans, etc.) The entire class should learn the best ones.

At the game:
At the 7th inning stretch, sing the words to one of the new songs after the crowd sings the traditional version. Teach it to any interested parties.

Beyond the game:
Write songs sung to the tune “Take Me Out to the Ballgame” that are about other topics (for example “Let us Play Out at Recess” or “School Lunches are not Tasty” or “A Liquid is not a Solid”).
Lesson Plan 6
“Gratitude Expressed”

Children will compose a letter, note, or card of thanks.

Students will be able to:
- Elicit a short written piece (friendly letter, thank you note) using the writing process to make the intention clear as evidenced by:
  1. A response that stays on topic
  2. The use of detail to support the topic
  3. The use of a variety of words

Objectives:
The children will be able to produce a written product for a specific purpose.

Materials:
Paper, pencil, markers, card stock, and other media as required by the children’s ideas

Beyond the game:
Discuss reactions to the game and the importance of expressing positive reactions to the appropriate audience. Students may decide to express their appreciation to those responsible for purchasing tickets, to a specific ball player for signing an autograph, to the Cardinals/Hammerheads organization, a friendly usher or ticket taker, an umpire for a good call, or to the parents who served as chaperones for the trip.

Other variations: Encourage children to use their imagination when formatting the communication. For instance, the card may take the structure of a scoreboard, be written in the language of a radio sportscaster giving play by play, or composed as a comic strip that represents a sequence of events in the game.
Lesson Plan 7
“Buy Them, Trade Them, Just Do Not Bend, Fold, Spindle, or Mutilate Them!”

Children represent their specific characteristics via a drawing or photograph, numerical statistics and biographical, anecdotal text on baseball cards.

**Students will be able to:**
- Make or use a table to record and sort information
- Elicit a summary using the writing process to make the intended clear, as evidenced by the use of a variety of words and a response that stays on the topic

**Objectives:**
The children will be able to produce various forms of writing.

**Materials:**
An assortment of baseball cards, blank index cards, pencils, markers, camera, and film

**Before the game or beyond the game:**
After children have had the opportunities to study baseball cards, discuss the components (illustrative picture on front, statistics that represent what is important about the player, some biographical or anecdotal information about the player, etc.) Discuss why those items were chosen to be included on the baseball card.

Children determine what to include on their personal cards and how to represent the selected information. One focus might be their “stats” as a classmate and/or student. The students could focus on an interest of theirs. The card could represent a musician, comedian, chess player, jump roper, reader, videogame player, or soccer player. How can each student draw themselves and their citizenship and scholastic skills or even how they would like to be photographed? What statistics would represent them? What biographical information or anecdotes can be included?

In creating the cards, children should use actual baseball cards as models so that each component they create is analogous to real baseball trading cards. Encourage students to make multiple copies of their cards so that one afternoon can be devoted to a “Trading Day.”
Children gather facts from a baseball game and use those facts to compose an article reporting on the game and/or an oral sportscast describing the game.

**Students will be able to:**
- Demonstrate an understanding of language and elements of non-fiction by responding to items in which they analyze and examine the text, compare and contrast, cause and effect, and/or fact and opinion

**Objectives:**
The children will be able to express thoughts effectively through the written word or drawing, and will orally share experiences.

**Materials:**
Paper, pencil, steno pad, newspapers, magazines

**Before the game:**
Read and discuss some published articles describing baseball games found in newspapers and magazines. List how reporters describe who, when, where, what, and how in the articles. Discuss what kinds of things the reporter probably looked for, did, and wrote down while at the event he/she wrote about. Assign teams of children to be responsible for reporting on an inning at the game. Children could follow one player’s performance to report on and decide what information is important to gather. Each team should plan on how they will record or remember the information they need.

**At the game:**
The teams of children will implement the plans for observing and recalling information from the game.

**Beyond the game:**
Teams work to compile their observations to share with an audience. Children may represent their news through a collaborative written paragraph, a list of information, or through sequential drawings.

**Other variations:** If you want your children to extend their work by giving an oral presentation (sportscast or sports reporting), bring in videos of televised sports from reporting from ESPN or network TV to watch and discuss. Then videotape their presentations to share with parents or other audiences.
Lesson Plan 9
“Diamonte”

Children will use terms and descriptive words about baseball-related themes (such as fans, food, stadium, players, officials, vendors, or events such as double plays, steals, or strikeouts) to compose a *cinquain* or *diamonte*’ poem.

**Students will be able to:**
- Elicit a short written piece (poem) using the writing process to make the intention clear as evidenced by:
  1. A response that stays on the topic
  2. The use of detail to support the topic
  3. The use of a variety of words

**Objectives:**
The children will be able to express thoughts and ideas effectively.

**Materials:**
Paper, pencil, poster board, markers

**Before the game:**
The children will practice composing poems in the structure of *cinquains* (for younger children) or *diamonte*’, both of which are shaped like baseball diamonds.

**CINQUAIN:**
| Line 1: Title (noun), 2 syllables | Line 1: Noun or subject |
| Line 2: Description, 4 syllables | Line 2: Two adjectives |
| Line 3: Action, 6 syllables | Line 3: Three _____ ‘ing words |
| Line 4: Feeling (phrase), 8 syllables | Line 4: Four words about the subject |
| Line 5: Title (synonym for Line 1), 2 syllables | Line 5: Three _____ ‘ing words |

**DIAMONTE:**
| Line 1: Noun or subject |
| Line 2: Two adjectives |
| Line 3: Three _____ ‘ing words |
| Line 4: Four words about the subject |
| Line 5: Three _____ ‘ing words |
| Line 6: Two adjectives |
| Line 7: Synonym for the subject |

Practice should consist of describing through poetry some things the children are very familiar with such as a TV show, an event/ activity at school, or a person in their life.

**At the game:**
Use all senses to closely observe the game, stadium, players, fans, field, food, advertisements, plays, vendors, or the umpire. Begin to generate descriptive words to use in composition.

**Beyond the game:**
Children determine a baseball-themed topic to create their *cinquain* or *diamonte*’ poem. They can then call on their experience of the game to compose their poem. Final drafts or poems can be printed on poster board with decorative borders or illustrations and then can be showcased.
Lesson Plan 10
“ComparaBALL”

Students will be able to:

• Understand, compare, and contrast baseball to other sports they enjoy

Objectives:
The children will be able to complete a Venn Diagram to compare and contrast baseball to another chosen sport.

Materials:
Venn Diagram, 3 hula hoops (optional), chalk, chalkboard, notebook, pencil

Before the game:
Discuss a Venn Diagram. Teacher can draw a Venn Diagram on the board and may use two overlapping hula hoops to illustrate a Venn diagram. The teacher should instruct the students in compare/ contrast skill. They will discuss the difference between baseball and another sport the teacher chooses. The teacher should list all the similarities and differences that the sports share. The lesson can be advanced for older students to include three overlapping circles (hula hoops) comparing three sports.

At the game:
Instruct students to keep a list of things they observe occurring at the game. Students might include the environment itself, specific details related to the game such as uniforms, rules, player interactions, and even the food that is available.

Beyond the game:
Students should use their notes from the game to create their own Venn Diagrams on large poster board. They will compare baseball to another sport of their choosing (one that was not done in the previous “before the game” lesson). This lesson can be expanded for older students to include writing a compare/ contrast paragraph or essay using the information in the Venn Diagram that the students produced.
Summary:
Students will write descriptive, non-fiction paragraphs about what they observe at the baseball stadium. The skills practiced in this activity are crucial to both narrative and expository styles of writing.

Objectives:
The children will be able to write a paragraph using multiple adjectives, adverbs, and sensory words.

Materials:
Lined paper, pencils, blank paper, colored pencils or markers

Before the game:
- Descriptive writing is an important part of the writing curriculum. Students should be told that descriptive writing is like painting a picture with words. Their writing must bring the sights, sounds, smells, and tastes of a place to life for the reader. The students should practice descriptive writing by coming up with 2-3 sentences about an object they focus on in the classroom, such as a desk, television, computer, or chair.
- Explain to the students that they should take notes (on paper or in their heads) on their observations at the baseball stadium, focusing on as many objects, sights, sounds, and smells as they can.
- Optional: Provide students with lists of sensory words (words that appeal to the senses, sight, sound, touch, smell, and taste), descriptive adjectives, and descriptive adverbs. Allow students to refer to these lists for help as they write. Students could also use a dictionary, thesaurus, or other writing aids as they write.

At the game:
Students should take notes (on paper or in their heads) on their observations at the baseball stadium, focusing on as many objects (sights, sounds, smells) as they can.

Beyond the game:
- Upon returning to the classroom, lead the students in brainstorming. As a class, list as many objects (sights, sounds, smells) as they can remember observing at the game.
- Students should write a paragraph draft of descriptions of the baseball game. These paragraphs should include at least 4 adjectives, 4 adverbs, and 4 sensory words. Over the next week, guide the students in revising and editing the paragraph until a final draft is complete.
- Explain to students that stories begin with “setting the scene” or describing the setting of the story. Therefore, a brief description of the stadium would make an excellent introduction to a story that takes place at the baseball stadium. Lead the students in writing a story that takes place at the baseball stadium, beginning with the excellent descriptive paragraph they wrote earlier.