# TEACHER'S GUIDE: LESSONS K-3


*WORLD OF LITTLE LEAGUE® MUSEUM*

Dear Educator,

Thank you for your interest our free printable Lesson Plans. Each lesson plan includes the lesson's main objective, common core standards, and an activity. They are a great way to get more out of an on-site field trip or one of our virtual field trips, or if you just want to teach the subject material in a new and fun way. The best thing about each lesson is that they are separated into three different levels, Minors (elementary), Majors (middle school), and Seniors (high School) so it doesn't matter what age group you are teaching -- our lessons adapt to fit. We have topics from all the major categories (Science, Math, History, Art, and Language Arts), plus we plan on adding new lesson plans to these categories each year.

We ask that you take the time after you complete the lesson to have your students fill out an "Exit Ticket." It is a quick one-page questionnaire, that can be printed out *or* filled out online, so the Museum staff can gather information on how the lessons were perceived and what we may need to improve on in the future.

Sincerely,

Melissa Mull, *World of Little League Museum* Tour Director

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## Introduction of the Topic: Origami Cranes

In this lesson you will learn a little about the history of origami in Japan, how paper folding was part of ceremonial rituals, as well as learn why, for one team, it became a special part of the Little League Baseball® World Series in 2010. You will also learn how to make one of the most famous origami designs in Japan, the Japanese crane.

# Minors (K-3)

**Origami Cranes**

**Objective:** Students will be able to:

• Demonstrate their understanding of the history of origami and the importance of the "Senbazuru" (thousand origami cranes)

• Consider the cultural importance of the origami crane to the 2010 LLBWS championship team

• Create their own origami crane

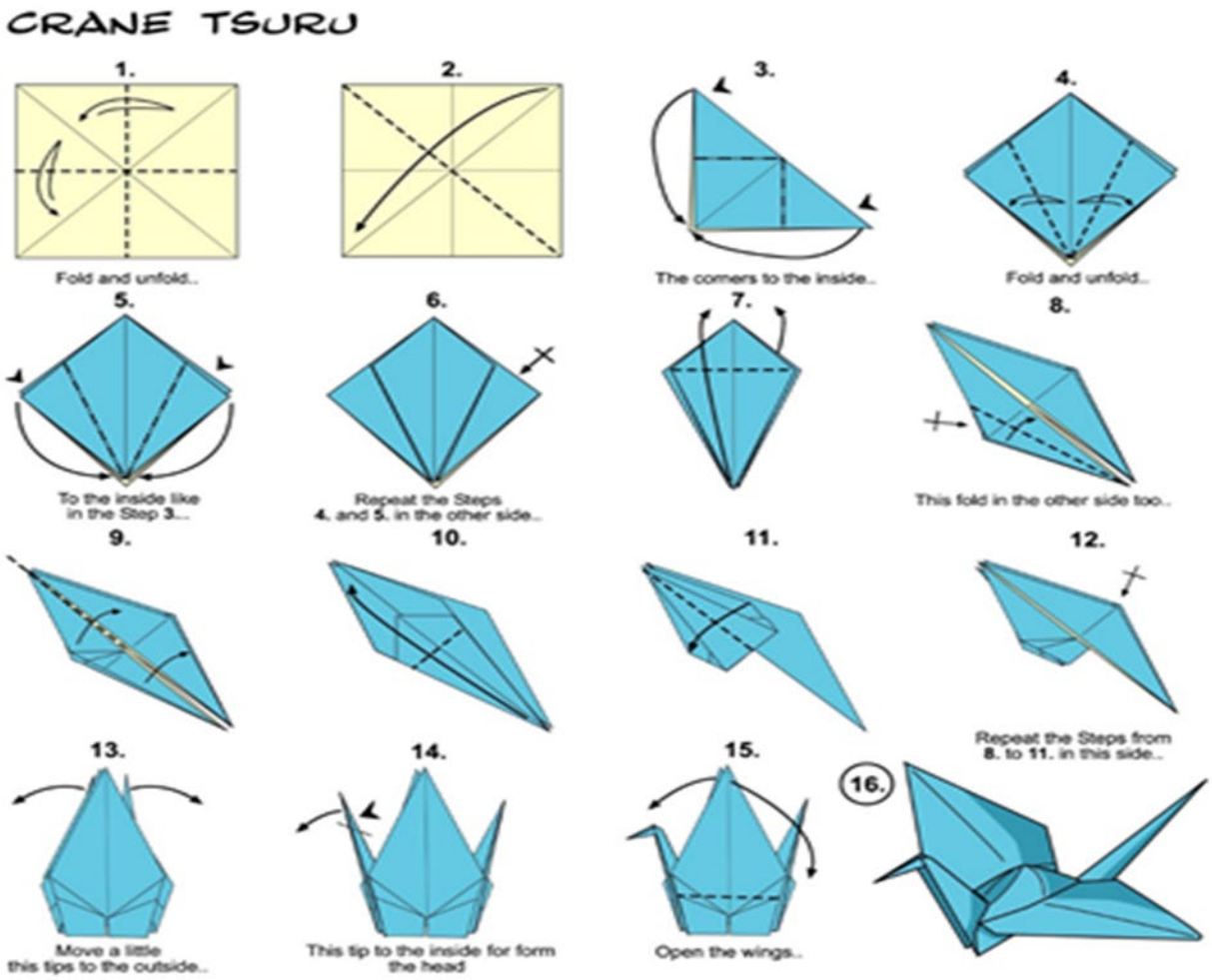
**Standards:**

- Anchor Standard #1. Generate and conceptualize artistic ideas and work.
- Anchor Standard #2. Organize and develop artistic ideas and work.
- Anchor Standard #3. Refine and complete artistic work.

**Activity:**

1. Discuss attached PowerPoint.
2. Students then learn to create their own origami crane as a symbol of good luck.

**Steps:**




Click here for a more detailed walk through of this lesson: Lesson Plans\Art Cranes Powerpoint.pptx

Prepared by: Jess Riordan from Lycoming College

## Introduction to the Topic: Build your Own Brochure

Write and arrange a descriptive and engaging brochure for the *World of Little League® Museum*. Using materials provided by the Museum, tell us what you loved most about your visit or virtual tour by creating your own brochure and present them to your class.

**Minors (K-3)**

Build you Own Brochure We need to add photos to download!

**Objective:** Students will be able to:

• Write and arrange a descriptive and engaging brochure for the *World of Little League Museum* based on their own virtual tour.

Common Core Standards:

- CCSS.ELA-LITERACY.RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- CCSS.ELA-LITERACY.W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

**Activity:**

1. Students will watch a virtual tour of the *World of Little League Museum*. (Insert Link Here)
2. After, the class will discuss important and interesting things they noted while watching the tour. (Uniforms, Girls featured in the Museum, Hall of Excellence, etc.)
3. Have students create a brochure for the Museum by cutting out and gluing pictures from magazines and other materials that are related to baseball and softball.

a. Brochures can be trifold or single page, like examples shown below:



4. Students will present their brochures to the class.

5. Students will write a paragraph on why they included the pictures they did.

    b. An example paragraph would be: “I love the game of baseball and softball. What interests me the most is the people up to bat. They are so powerful, and I love watching how far the ball is hit. Home runs are my favorite. That is why I included a lot of pictures of people up to bat like I saw in the virtual tour. In my head they all hit home runs!”

Prepared by: Jess Riordan from Lycoming College

## Introduction of the Topic: Leadership

Students will learn through discussion why good sportsmanship is important both on and off the field. Students will design a situation where they can be a good citizen or "sport" in the community and discuss the benefits of being kind to others.

**Minors (K-3)**

**Leadership**

**Objective:** Students will be able to:

• Learn through discussion how good sportsmanship is important in sports and life.

• Design a situation in which they can a good sport.

• Write sentences describing their situation and the impact.

**Common Core Standards:**

- CCSS.ELA-LITERACY.RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events.
- CCSS.ELA-LITERACY.W.3.3
  Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

**Activity:**

1. Students learn about why it important to be a good citizen or “sport” in the community. Explain how they can be good sports through doing their part, such as recycling, picking up trash throughout the community, and being kind to others.

2. Explain how this connects to sports, specifically the Little League World Series. Share this info: Players for the Little League World Series come from all over and represent different communities, but they come together to make one Little League community. Within the community they create, they all have to be good sports on and off the field. When at the World Series, an American team will live next to a team from another country. When this happens, they have to respect each other and respect their customs. They are good sports by keeping their areas clean and being kind to one another. On the field, they are good sports through showing respect to each other and the umpires. After the game, they shake hands and congratulate each other on their playing. Through this, it creates a strong community that can be expanded upon to other parts of the country and world.

3. Students draw a picture of a situation in which they can be good sports in their community or while playing a sport.

4. After, they will write sentences or a paragraph explaining their drawing and how they are a good sport.

Prepared by: Jess Riordan from Lycoming College

## Introducing the Topic: Civil Rights

Learn all about the inspiring story behind Carl Johnson and the Cannon Street YMCA Little League all-stars back in the summer of 1955 and how their league helped serve as a trailblazer in Little League's history and communities around the world. Then, continue with an activity that discusses segregation both on and off the field along with the struggles and contributions made by African Americans to the game of baseball and softball.

## Minors (K-3)

### **Civil Rights**: Carl Johnson

**Objective:** Students will be able to:

• Name and describe Carl Johnson and his life story.

• Connect Little League Baseball for African Americans to Civil Rights

• Summarize African Americans that contributed to the Little League World Series and the struggles they might have faced.

**Common Core Standards:**

- CCSS.ELA-LITERACY.RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- CCSS.ELA-LITERACY.RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- CCSS.ELA-LITERACY. W.3.1. Write opinion pieces on topics or texts, supporting a point of view with reasons.

## Activity:

1. Begin this lesson by asking students, “How many of you have ever played an organized sport (such as Little League, team soccer, etc.)?” If you have had an opportunity to do so, what was your experience when you went to practice for the first time? Were you excited? Nervous? Both?
2. Now tell students, “Imagine going to practice for the first time and being told that the team wouldn’t let you play.” How would that make you feel? Ask the students, “What does it feel like to be left out of something that is important to you?”
3. Explain that there was a time in American history when African American athletes were left out. They faced segregation. That means they were often treated differently than everyone else. They were sometimes excluded from events and places because of the color of their skin.
4. Discuss that public places, like bathrooms, theaters, schools, and buses were segregated. Sports teams were segregated too.
5. Read the story *Let Them Play* (https://www.youtube.com/watch?v=WVp-6bwa7Pc)
6. Discuss the article as a group. Use the following questions to help guide discussion:
    c. Review any unfamiliar vocabulary words.
    d. Summarize the historical events in this article. What happened? Why?
    e. What was the cause of African Americans’ exclusion from Little League baseball?
    f. What effect did segregation have on opportunities for African Americans in baseball?
7. Introduce Carl Johnson with this link: https://www.littleleague.org/news/little-league-international-remembers-cannon-street-ymca-little-leaguer-carl-johnson/
8. Introduce activity.
9. Students will create a sequence chart from when Little League started (1938, to when segregation completely ended (1964), to monumental African Americans today in sports or daily life that have made a change.
    g. Students can include African Americans that have earned Little League’s highest honor in the Hall of Excellence, using this link: https://www.littleleague.org/news/meet-the-african-american-members-of-the-little-league-hall-of-excellence/
10. Conclude this lesson by discussing the sequence chart and writing sentences on how African Americans have contributed to the game of baseball/softball and struggles they had to face.

Prepared by: Jess Riordan from Lycoming College

## Introducing the Topic: Diversity

Students will learn the definition of a "community" and how it is important to recognize that everyone in your community is not the same. Students will engage in a hands-on exercise and discussion to find out what types of micro communities they have in their own classroom? Do you have a soccer fan community, math lovers', or perhaps a simple thing like a cheese pizza lovers' community? Lastly, students will be questioned, what would happen to our class/school if one particular group left?

**Minors (K-3)**

**Diversity**

**Objective:** Students will be able to:

• Give examples of people who are community helpers and leaders and describe how they help us.

• Explain why people in a community do different jobs.

• Summarize different communities that contributed to the Little League World Series.

**Common Core Standards:**

- CCSS.ELA-Literacy.SL.3.1, SL.4.1, SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade appropriate topics and texts, building on others' ideas and expressing their own clearly.
- CCSS.ELA-Literacy.W.3.4, W.4.1, W.5.1 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.
- CCSS.ELA-Literacy.W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

**Activity:**

Community:

1. As a class, discuss community. The word "community" actually has many meanings. According to the Merriam-Webster Dictionary, community could refer to:
    a. "The people with common interests living in a particular area"
    b. "An interacting population of various kinds of individuals in a common location"
    c. "A group of people with a common characteristic or interest living together within a larger society"
2. Discuss that the place in which you live is a community made up of many different people. Everyone has a different background, different skills, and different interests. When people of similar backgrounds, skills, or interests get together, they also form communities - even though they may not live in the same place.
3. To help clarify this idea, conduct a class exercise in which students determine what communities they belong to. Give students different prompts such as:
    a. What sports do you like?
    b. What school do you attend?
    c. What is your favorite subject in school?
    d. What's your favorite food?
    e. What's your favorite thing to do after school?
4. Discuss that some communities to which students belong are the same. All of the students in your class attend the same school and live in the same geographic area. However, students also belong to many different communities based on their interests. Perhaps your class includes students who belong to the soccer-fan community, or the cheese pizza-lovers community.
5. Discuss that despite all of the students' varying interests and their different communities, they all remain part of the one community of your school and your hometown
6. To demonstrate, ask one of the interest-based communities (i.e. the math-is-my favorite-subject community) to stand up and come to the front of the room.

**Questions to Consider:**

1. Ask students, "Would our school community be the same if all of these students suddenly left?" The empty seats should help students realize that your school community would be very different without this group of people.
2. Ask students, "If this group of students left, what would we lose?" Discuss how the loss of the group would impact your school community.
3. Discuss that the diversity of your community is what makes it strong. Everyone brings something different to the larger group.
4. Conclude with the example of Little League World Series.
    a. Teams come from all over the world to compete in the Little League World Series. They include teams from the United States, Europe and Africa, Mexico, Australia, and many

more. These teams speak many different languages, and all of these teams have their own community, but they come together to make one big community at the Little League World Series. If one of these teams were missing, the community would not be the same and would lack diversity.

**Activity:**

1. Based on the classroom exercise completed during this lesson, explain that students will create collages that represent the communities to which they belong.
2. Provide students with art materials such as old magazines, scissors, and glue sticks. You may choose to have students go online if they are looking for specific images, or students may simply draw pictures.

An example may be:


Prepared by: Jess Riordan from Lycoming College

## **Introducing the Topic:** Girls with Game

In this lesson students will discuss stereotypes between boys and girls and then connect them back to sports using a Venn Diagram. Students will hear the story of Kathryn Johnston, who in 1951 caused quite the stir when she dressed as a boy and signed up to play Little League out of Corning, New York, and unknowingly paved the way for future girls to play baseball without controversy.

## Minors (K-3)

## Girls with Game

## Objective: Students will be able to:

• Use a Venn Diagram to discuss stereotypes of girl and boy sports (for example cheerleading is typically considered a female sport).

• Summarize girls that played in the Little League World Series and the struggles they might have faced.

Vocabulary:

- Stereotype: A simplified view of a group of people.

**Common Core Standards:**

- CCSS.ELA-LITERACY.RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- CCSS.ELA-LITERACY.RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

**Activity:**

1. Students start lesson by discussing what a **stereotype** is and common **stereotypes** they have heard.
2. Connect **stereotypes** back to sports. Share this info: Kathryn Johnston was the first girl to play on a boys Little League team in 1951. She signed up for her team in Corning, New York. Kathryn had to hide that she was a girl and even cut off her hair and tucked the rest in her cap because of the common **stereotype** that girls do not play sports. She went by the name "Tubby" to hide her identity, but when people found out she was a girl, they would purposely shove her into the dirt and hang signs that said, "NO GIRLS ALLOWED." Although girls are now allowed to play in Little League, there are still sports that are seen as boy-only sports or girl-only sports.
3. Class completes Venn Diagram drawn on board. One side has boy sports, the other has girl sports. As a class complete the Venn Diagram by asking students what sports are typically girl/boy sports, and what sports are played by both.

4. Ask the class how they believe these **stereotypes** started. Share this info: There have been 20 girls to participate in the Little League Baseball World Series. Girls were officially allowed to play in the World Series in 1974. Since then, there has been 19 girls to contribute to the game, with the most recent being Ella Bruning, Maddy Frecking, Mo'ne Davis, and Emma March. More info here: https://www.littleleague.org/girls-with-game/girls-who-have-played-in-little-league-baseball-world-series/. These girls broke the **stereotype** that only boys could play in the Little League Baseball World Series.
5. Have students discuss what discrimination they think the girls dealt with.

**Breaking Stereotypes Handout**

1. How do you think Kathryn Johnston or "Tubby" gained respect from her peers?

2. Would you have the courage to cut off your hair and pretend to be a boy for the love of a sport? Why or why not?

3. Do you believe girls still have to prove themselves today in predominately male sports?

4. Do you think it was difficult for more recent girls to compete at the Little League Baseball World Series (such as Ella Bruning, Mo'ne Davis, and Maddy Frecking) since girls in Little League are more accepted?

Prepared by: Jess Riordan from Lycoming College

## **Introducing the Topic:** Hall of Excellence

Students will learn about the importance of being a role model in their community and how to become one themselves. Students will also learn how Little League's Hall of Excellence recognizes their special role models.

**Minors (K-3)**

**Hall of Excellence**

**Objective:** Students will be able to:

• Complete examples of what it means to be a role model.

• Identify members of the Little League Hall of Excellence.

• Write about an experience where they were a role model.

**Common Core Standards:**

- CCSS.ELA-LITERACY.RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events.
- CCSS.ELA-LITERACY.W.3.3
  Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

**Activity:**

1. Students learn about why it is important to be a role model in the community. Explain how they can be role models through doing their part such as doing their best, playing and interacting with everyone throughout the community, and having a positive attitude.

2. Explain how this connects to sports, specifically Little League World Series. Share this info: The Little League Hall of Excellence started in 1988. To be considered for the Hall of Excellence you must have played in a chartered local Little League and must be recognized as a role model as an adult. The Hall of Excellence is the highest honor Little League can bestow.

3. Share the example of Dr. Story Musgrave. Dr. Story Musgrave was inducted into the Hall of Excellence in 1994. Dr. Musgrave is a NASA Astronaut who has flown more than 17,000 hours in more than 160 types of aircraft including five missions on the Space Shuttle. Dr. Musgrave, who was instrumental in the repair of the Hubble Space Telescope, has three bachelor's degrees and five master's degrees in addition to a Doctorate in Medicine. Dr. Musgrave played Little League in Boston, Massachusetts.

4. Use this website to talk about other individuals in the Hall of Excellence, such as Sydney Leroux, Heather Tarr, and many of our presidents! https://www.littleleague.org/world-of-little-league/hall-of-excellence/

5. As a class, pick a project where the students can be a role model. Complete this project at home, at school, or some place within the community. Some examples include picking up trash, helping senior citizens, and a used sports equipment drive.

6. After the project is complete, have students write a short paragraph on their experience and what it means to them to be a role model.

Prepared by: Jess Riordan from Lycoming College

## **Introducing the Topic:** Throwing Length

Using word problems involving distances, intervals of time, masses of objects, etc., students will identify how length is used in sports, such as the length that a baseball/softball is hit or how far a ball is thrown.

**Minors (K-3)**

**Throwing Length**

**Objective:** Students will be able to:

• Identify how length is used in sports, such as the length of how far a baseball/softball is hit, how far a ball is thrown, and how far away a player can catch a ball.

**Common Core Standards:**

- CCSS.MATH.CONTENT.4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb., oz.; l, ml; hr., min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
- CCSS.MATH.CONTENT.4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

**Activity:**

1. Begin activity by explaining to students' what measurements are (specifically inches and feet for this activity).
2. Students will experiment with measurements by **throwing** a baseball as far as they can on four attempts.
3. Students will record the length on the chart and will perform multiple attempts to see if their length improves.

| Attempt # | Length in inches converted to feet |
|---|---|
| | |
| | |
| | |
| | |

4. Student will present their findings to the class.

## **Introducing the Topic:** Reaction Time

Through experimentation students will begin to understand reaction time and how it is important in sports as well as everyday activities. Students will be asked to record their own reaction times in a chart during the experiment and try to improve upon time.

## Minors (K-3)

## Reaction Time

**Objective:** Students will be able to:

• Understand reaction time through experimentation.

• Identify how reaction time is used in sports.

• Use the engineering design process to solve a problem.

## Common Core Standards:

- CCSS.ELA-LITERACY.RST.6-8.9: Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
- CCSS.ELA-Literacy.SL.6.4, SL.7.4, SL.8.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
- CCSS.ELA-Literacy.RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

## Activity:

1. Begin activity by explaining to students' what reaction time is (the length of time it takes to respond to a stimulus).

2. Explain that reaction time can be important in emergency situations, everyday activities, and playing sports. Ask students if they can think of any examples.

3. Explain that reaction time plays a key role in baseball/softball. Baseball/softball players have to react fast for their safety and for the game. Watch this video to see reaction time in action! https://www.youtube.com/watch?v=LJxJN3hK9bs

4. Students will then test their reaction time by performing a baseball/softball drop test. The teacher will drop a baseball or softball in front of the student, and the student will try to react as fast as possible to catch the ball. A student will work a stopwatch.

5. Students will record their time on the chart and will perform multiple attempts to see if their time improves.

| Attempt # | Stopwatch Speed |
|---|---|
| | |
| | |
| | |
| | |

6. Student will present their findings to the class.

Prepared by: Jess Riordan from Lycoming College

## **Introducing the Topic:** Paint/Draw Lamade Stadium

This activity can be done both in the classroom or right here at the Little League International Complex! Students will have the chance to paint or draw Howard J. Lamade Stadium while also considering how the atmosphere during the Little League Baseball World Series, such as the number of fans or being on camera, could impact the young players.

**Minors (K-3)**

**Paint/Draw the Stadium**

**Objective:** Students will be able to:

• Demonstrate their knowledge of the Little League Baseball World Series and where it is played.

• Consider how the stadium affects the players.

• Create their own painting/drawing of the stadium.

**Standards:**

- Anchor Standard #1. Generate and conceptualize artistic ideas and work.
- Anchor Standard #2. Organize and develop artistic ideas and work.
- Anchor Standard #3. Refine and complete artistic work.

**Activity:**

1. Students learn that the Little League Baseball World Series is located in Williamsport, Pennsylvania.

2. As a class, look up pictures of the stadium and the field of Howard J. Lamade Stadium. (https://www.littleleague.org/news/lamade-stadium-little-league-baseball-world-series-gets-fresh-look/).

3. Consider how the atmosphere (such as the number of fans, the cameras, the size) impacts players (such as nervousness, tiny mistakes, camera shy).

4. Students decide to paint or draw the field portion of the stadium.

Prepared by: Jess Riordan from Lycoming College

## **Introducing the Topic:** Innovation-Creating different Sports Equipment

Design and build different types of sports equipment using science, mathematics, and engineering concepts. As well as learning how, different designs impact the equipment's performance.

**Minors**

Innovation (In connection to the handmade baseball glove made by a little boy featured in the *World of Little League Museum*)

**Objective:** Students will be able to:

• Learn through experimentation how design impacts performance.

• Design and build a baseball using science, mathematics, and engineering concepts.

• Use the engineering design process to solve a problem.

**Common Core Standards:**

- CCSS.ELA-Literacy.SL.6.4, SL.7.4, SL.8.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
- CCSS.ELA-Literacy.RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

**Activity:**

1. Students imagine they work for a sporting goods company, and they have to design a better baseball.

2. Students will work in pairs or small groups. Each team will:

    a. Design and draw their own baseball
    b. Create a prototype of their baseball
    c. Test the baseball for functionality on four attempts based on height of bounce

| Attempt # | Height of Bounce |
|---|---|
| | |
| | |
| | |
| | |

    d. Redesign the baseball based on the test
    e. Retest on four attempts based on height of bounce

| Attempt # | Height of Bounce |
|---|---|
| | |
| | |
| | |
| | |

    f. Present their findings to the class and compare/contrast results

3.Students may use any household or art supplies they can find to create their baseballs.

    g. Their baseballs do not need to match the standard weight.

4. Have students write in their journal about how using their baseball in a Little League game may affect the outcome.

Prepared by: Jess Riordan from Lycoming College

## **Introducing this Topic:** Visual Literacy

In this activity, students will be given various pictures to look at and questions to answer by writing narratives to develop real or imagined experiences using descriptive details and clear event sequences.

**Minors (K-3)**

**Visual Literacy**

**Objective:** Students will be able to:

• Analyze photographs to create narratives.

## Common Core Standards:

- CCSS.ELA-LITERACY.RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events.
- CCSS.ELA-LITERACY.W.3.3
  Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

## Activity:

1. Have students look at different pictures included in this activity and have them answer the questions listed below.


a. Did this bat help someone hit a double or triple or a home run?

b. Where did the bat hit the ball exactly? Did the ball go deep into left field?

c. Was it a strike out?

d. Would you have hit the ball thrown to you, or would you have gotten out?

2. 


a. What is the child thinking?

b. What does his face demonstrate? Concentration? Nervousness?

c. Does he hit the ball or does he strikeout?

d. What do you think this image is about?

3. 

a. What does his face tell you about the game? Is it serious?

b. Are they winning or losing? What is the inning?

c. Does he strike the batter out?

d. Caption this photograph.

Prepared by: Jess Riordan from Lycoming College

## **Introducing the Topic:** Earth Science-The Danger of Rainstorms

Students will learn the dangers of playing baseball/softball in the rain/thunderstorm and then be asked to pair up and find reasons whether or not they believe all outside sports should postpone due to heavy rain and report their finding to the class. Last, students will look up weather reports for the day/week and discuss why or why not it would be safe to play outside.

**Minors (K-3)**

**Earth Science**

**Objective:** Students will be able to:

- Explain the danger of a storm.
- Recall the importance of not playing baseball/softball in the rain.
- Debate if all outside sports should be cancelled with heavy rain.

**Common Core Standards:**

- CCSS.ELA-Literacy.SL.3.1, SL.4.1, SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade appropriate topics and texts, building on others' ideas and expressing their own clearly.
- CCSS.ELA-Literacy.W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.

**Activity:**

1. Explain to students that storms of any kind can cause a great deal of damage and it is important to stand inside during storms.

1. Give the example that baseball/softball is stopped in heavy rain and will not play in storms. Share Little League's Lightning Safety Guidelines www.littleleague.org/playing-rules/appendices/appendix-a/
2. Ask the class if they can think of any reasons why.
    a. Examples: Chance of injury, slip on muddy ground, water puddles slow players down making it hard to catch balls or run to bases, cloud coverage and wind impact the game/reduces vision and can distract the players/lightning strikes, wind has the potential to change the ball's trajectory, causing an issues with both pitchers and hitters, **Ball becomes heavy and wet-absorbs water and humidity and can actually increase the ball's size which can make the ball harder to play with. The pitcher has a harder time throwing the ball at the right angle and the hitter is unable to hit the ball far away. Can cause the arms of the pitchers to get hurt and can affect the players in the field as well,** a wet ball can be harder to catch, slippery- can cause more injuries, a wet ball doesn't bounce the same as a dry ball making it more unpredictable.

3. Inform students that baseball and softball are the only two sports that stop just because of heavy rain.

4. After, share the story of the one Major League player struck by lightning. *On August 24, 1919, a pitcher named Ray Caldwell who played Cleveland Indians was playing against the Philadelphia Athletics during a thunderstorm. Ray was struck by lightning and was knocked unconscious for five minutes, he got up and played the rest of the game. He is the first and only known baseball player to be struck by lightning.

5. Pair students up and have them come up with reasons whether or not they believe all outside sports should postpone their game due to heavy rain (Think-Pair-Share).

6. Have students report to the class after.

7. After discussion, as a class look at local weather for the day. Have students write a report on whether they would play baseball or softball in the weather forecasted for the day and why or why not. (weather.com)

Prepared by: Jess Riordan from Lycoming College

## **Introducing the Topic:** Baseball Word Problems

Students will read and identify problems within a passage as they learn to correctly set up a mathematical problem and justify the way they choose to solve it. This lesson also identifies how math is used in various ways in sports.

**Minors (K-3)**

**Word Problems**

**Objective:** Students will be able to:

• Read and identify problems within a passage as they correctly set up a mathematical problem and justify the way they choose to solve it.

• Identify uses of math in sports.

• Use a multistep process to solve a problem.

**Common Core Standards:**

- CCSS.MATH.CONTENT.3.OA.D.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- CCSS.MATH.CONTENT.3.NBT.A.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

**Activity:**

1. Have students complete word problems.

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**Word Problem Handout:**

A. Dugout the Mascot hits a baseball 98 feet. Dugout runs to first base, which is 60 feet away from home plate. He then proceeds to run to second base, which is another 60 feet away. How many feet in total did Dugout run?

B. Johnny on the Southwest Region baseball team has two strikes. He then hits the ball foul three times. Finally, he hits his next pitch and goes to first. How many pitches were thrown to Johnny?

C. Mo'ne Davis pitched seven out of nine innings. How many innings did she not pitch?

D. Maddy Frecking went up to bat each inning. At the end of the game, the pitcher had thrown 32 pitches to Maddy. Maddy only hit 14 of the 32. How many pitches did Maddy not hit?

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# Word Problem Handout Answer Key:

A. 120 feet

B. 6 pitches

C. 2 innings

D. 18 pitches


**EXIT TICKET**

**WHAT ARE TWO THINGS THAT STOOD OUT MOST TO YOU TODAY IN THIS LESSON?**

**1.**

**2.**

**IS THERE STILL SOMETHING YOU ARE CONFUSED ABOUT?**

**1.**

**2.**

**WHAT DID YOU LIKE MOST ABOUT THE LESSON?**

**1.**

**WHAT DID YOU LIKE LEAST ABOUT THE LESSON?**

**1.**