

Play Ball!

Parent Guide

Read the “Directions” sheets for step-by-step instructions.

SUMMARY

In this activity, you and your child will find and explore a local baseball field and consider how the baseball field connects to other topics like math and American history.

WHY

This activity will encourage children to look for math in their everyday activities, and introduce science concepts behind the game of baseball.

TIME

- 50 minutes or more

RECOMMENDED AGE GROUP

This activity will work best for children in grades three through five. Some parts may be adapted for younger learners.

GET READY

- Read *Baseball Saved Us* together. This book tells the story of a Japanese American community coming together to build a baseball field in an internment camp during World War II. For tips on reading this book together, check out the Guided Reading Activity (http://americanhistory.si.edu/ourstory/pdf/internment2/internment_reading.pdf).
- Read the Step Back in Time sheets.

YOU NEED

- Directions sheets (*attached*)
- Step Back in Time sheets (*attached*)
- ThinkAbout sheet (*attached*)
- *Baseball Saved Us* book (*optional*)
- Baseball bat, ball, and glove (*optional*)

More information at <http://americanhistory.si.edu/ourstory/activities/internment/>.

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Step Back in Time, page 1 of 2

For more information, visit the National Museum of American History website <http://americanhistory.si.edu/ourstory/activities/internment/>.

On December 7, 1941, Japan attacked the United States naval base at Pearl Harbor, Hawaii. The next day, the United States government went to war with Japan. The government was afraid that Japanese Americans might threaten the country's safety. On February 19, 1942, President Franklin Roosevelt signed a law that allowed the military to remove Japanese Americans from some parts of the country, and move them to new places.



In the spring of 1942, scenes like this were repeated in every Japanese American community along the Pacific Coast. [Dorothea Lange, Courtesy of National Archives]

The Japanese Americans weren't given a lot of time to pack, sell, or store their things. Families were allowed to take only what they could carry. Some families were lucky enough to have neighbors or friends to care for their things. Others had to leave behind family pets, special toys, and many memories.



Two children and their father await baggage inspection at an assembly center in 1942. [Dorothea Lange, Courtesy of National Archives]

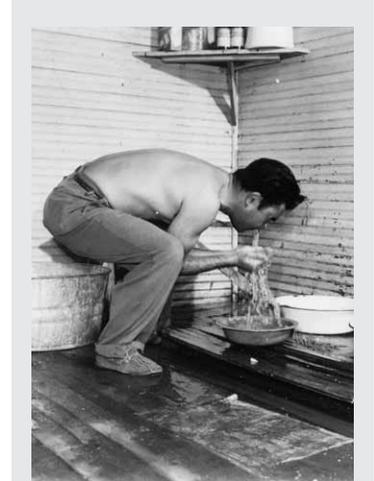
Assembly centers were the first stop for these Japanese Americans before the **internment camps** were ready. The **assembly centers** were not designed for housing—in fact, some people had to live in horse stalls! The food was bad, the living space was dirty, and there were not enough doctors to take care of all the people. Sadly, some had to stay in assembly centers for months before moving to an **internment camp**.

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The **internment camps** were located far away from other people and towns. They were fenced in and guarded by soldiers. Families lived in rough buildings called **barracks** where many people stayed together in a small space. They were cold in the winter and hot in the summer. The bathrooms and kitchen were in separate buildings from the bedrooms, so adults and children had to wait in line to take a bath or get a meal.

Even though the Japanese Americans lost many of their basic rights, they tried to create a community within the camps. Kids went to school and formed Boy Scout troops, played on sports teams, and went to dances. Grown-ups had jobs, played cards, and formed clubs like the Parent Teacher Association.



A man washes his face in a basin. There was no running water at the camps. [Courtesy of National Archives]

Assembly center: fairgrounds, racetracks, and other public places where Japanese Americans were held after being removed from their own homes until permanent internment camps could be built

Internment camps: a barbed wire fenced in area built by the U.S. government to imprison the Japanese Americans.

Barracks: a large, poorly built structure in the camps in which many families lived

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Directions, page 1 of 2

For adults and kids to follow together.

1. Contact your community's Parks and Recreation Department to find a baseball field that is close to your house. Request a schedule for the field. Plan to visit the field when there are no teams using it for practice or a game.

2. In the book *Baseball Saved Us*, Shorty hits a home run to win his baseball game, which gives him hope during a hard time for him and his family. Have you ever hit a home run in a baseball game? How did it make you feel? If you were feeling sad, would it have cheered you up?

3. Today, baseball players use math (such as force, speed, and distance) to help them win games. Even though it doesn't look like baseball players are doing math out on the field, they are always trying to figure out how fast to pitch, how hard to hit, and how far to throw.

Tip To explore this idea online, visit these websites from the Exploratorium to find out your fastball reaction time (<http://www.exploratorium.edu/baseball/reactiontime.html>) and experiment with pitches and swings to discover what it takes to hit a home run (<http://www.exploratorium.edu/baseball/scientificslugger.html>).

4. Pick the best ThinkAbout sheet for your adventure. If you don't have a baseball or a bat, use the **ThinkAbout for Running the Bases**. If you've played baseball before and are looking for a challenge, use the **ThinkAbout for Pitching**. If you want to learn what it takes to hit a home run and exercise your math skills, use the **ThinkAbout for Hitting**.

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Directions, page 2 of 2

4. Before you go, take another look at the book. Compare the baseball field in the camp with the one on the second-to-last page of the book . Why do they look different? What is the same? Which field would you like to play on? Which one do you think will look more like the one you're going to see?

Tip Some of the ThinkAbout sheets present prompt questions in a worksheet format. If your child doesn't like worksheets, just talk through the questions out loud! There's no need to write things down just the way it's presented here.

5. Walk, bike, or drive to a baseball field in your community.
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6. (*optional*) Check out a baseball or softball game! During the spring and summer, there are often leagues for kids and adults that have games several times a week. Grab a bag of peanuts or some popcorn and enjoy nine innings of fun!
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7. (*optional*) Join a team! In many communities, Parks and Recreation Departments or public schools offer a baseball, softball, or T-ball team that you can join. If you aren't sure if you want to join a team yet, do like Shorty did in *Baseball Saved Us* and organize a game for you and your friends. When you play just for fun, you have the opportunity to practice new batting grips, crazy pitches, and catching fly balls!
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For more activities about Japanese American internment and *Baseball Saved Us*, visit <http://americanhistory.si.edu/ourstory/activities/internment/>.

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ThinkAbout for Running the Bases, page 1 of 4

PLANNING SUGGESTIONS

- Call ahead to find a field that is available and open to public use.
 - Bring a digital timer, or a watch with a second hand, and a pen or pencil to write down the data you collect.
 - Wear tennis shoes and clothes that can get a bit dirty, in case you want to practice sliding into home!
-

BEFORE YOU GO

- Have you ever been to a baseball field before? What do you expect to see?
 - Do you think it will be different from the field at the internment camp in *Baseball Saved Us*? How so? What do you think will be the same?
 - Many famous baseball players have nicknames—Jake “Eagle Eye” Beckley, Roger “The Rocket” Clemens, George Herman “Babe” Ruth, “Joltin’” Joe DiMaggio, and many more. What do you want your nickname to be?
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DURING THE TRIP

- When you get to the baseball field, what do you see? How does it compare to the two ball fields in *Baseball Saved Us*?
- The bases on the field form a diamond. Home base is usually closest to the dugouts, or where the teams sit when not on the field, and the bleachers. Right in the middle of the field is called the pitcher’s mound. The pitcher throws the ball from here to home base.

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ThinkAbout for Running the Bases, page 2 of 4

- Start at home plate and run around each of the bases. Make sure that you touch each base! As you round the bases, think about what you see. What part of the field is straight ahead? What's behind you that you can't see?
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AFTER THE TRIP

- Drink lots of water! Running the bases can wear you out, and it's important to stay hydrated.
 - Draw something different that you could see from each base.
 - Do some research on the history of baseball. Why are each of the bases 90 feet apart? Why does the pitcher stand on a mound to throw?
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THINK ABOUT IT

The distance from home plate to first base is 90 feet.

How fast can you cover the distance? _____

Run all the bases a second time, and ask someone to record the time when you run past each. Ask each person in your group to run the bases and compare the results. The chart on the next page can help you keep track of each person's time.

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ThinkAbout for Running the Bases, page 3 of 4

Name	Start Time	First Base	Second Base	Third Base	Home Plate
Example	0 seconds	7 seconds	15 seconds	24 seconds	31 seconds

Use subtraction to answer these questions:

- How many seconds passed between when you left home base and arrived at first? _____ (Example: $7 - 0 = 7$ seconds)
- How many seconds passed between when you left first base and arrived at second? _____ (Example: $15 - 7 = 8$ seconds)
- How many seconds passed between when you left second base and arrived at third? _____ (Example: $24 - 15 = 9$ seconds)
- How many seconds passed between when you left third base and arrived at home plate? _____ (Example: $31 - 24 = 7$ seconds)
- Even though all the bases are the same distance apart, do you slow down, speed up, or stay steady as you run?

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ThinkAbout for Running the Bases, page 4 of 4

- Subtract your start time from the time you crossed home plate. How long did it take you to run all the bases together? (Example: $31 - 0 = 31$ seconds)
- Divide that number by four. This is called the average, and it will tell you about how long it takes you to run from base to base. (Example: $31 \text{ seconds} \div 4 \text{ bases} = 7.75 \text{ seconds}$)

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ThinkAbout for Pitching, page 1 of 2

PLANNING SUGGESTIONS

- Call ahead to find a field that is available and open to public use.
 - Bring a baseball and at least one glove.
 - Wear tennis shoes and clothes that can get a bit dirty, in case you want to practice sliding into home!
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BEFORE YOU GO

- Have you ever been to a baseball field before? What do you expect to see?
 - Do you think it will be different from the field at the internment camp in *Baseball Saved Us*? How so? What do you think will be the same?
 - Visit this website (http://www.thecompletepitcher.com/pitching_grips.htm) to learn about the different types of pitches, and how to throw them. Take notes or print out the instructions to practice at the baseball field.
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DURING THE TRIP

- When you get to the baseball field, what do you see? How does it compare to the two ball fields in *Baseball Saved Us*?
- The bases on the field form a diamond. Home base is usually closest to the dugouts, or where the teams sit when not on the field, and the bleachers. Right in the middle of the field is called the pitcher's mound. The pitcher throws the ball from here to home base.

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ThinkAbout for Pitching, page 2 of 2

- Stand on the pitcher's mound and practice throwing the ball to different places on the field. Can you throw it over home plate? Ask someone else in your group to be the catcher—have him or her squat or kneel behind home plate with a glove so you have somewhere to aim.
 - Put your research to work! Practice pitching using one of the grips that you looked up before coming to the field. How is pitching different from just throwing the ball in a game of catch?
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AFTER THE TRIP

- Keep your pitching skills in shape by playing catch in your backyard with a grown-up or friend.
 - Do some research on the history of baseball. How far is the pitcher's mound from home plate? Is it different for professional baseball and Little League? Has it changed over time?
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ThinkAbout for Hitting, page 1 of 3

PLANNING SUGGESTIONS

- Call ahead to find a field that is available and open to public use.
 - Bring a digital timer or a watch with a second hand, a pen or pencil to write down the data you collect, a ball of string, and a ruler for measuring. You'll also need a baseball and bat. You may want to bring at least one baseball glove, or a T-stand, if you have one.
 - Wear tennis shoes and clothes that can get a bit dirty, in case you want to practice sliding into home!
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BEFORE YOU GO

- Have you ever been to a baseball field before? What do you expect to see?
 - Do you think it will be different from the field at the internment camp in *Baseball Saved Us*? How so? What do you think will be the same?
 - You're going to measure the speed of a ball that you hit as the distance traveled in a certain amount of time. For example, a car driving through your neighborhood is probably going 25 miles per hour. That means that if the driver drove for one hour, she or he would travel 25 miles. The speed is distance (25 miles) over time (one hour).
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DURING THE TRIP

- When you get to the baseball field, what do you see? How does it compare to the two ball fields in *Baseball Saved Us*?

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ThinkAbout for Hitting, page 2 of 3

- The bases on the field form a diamond. Home base is usually closest to the dugouts, where the teams sit when not on the field, and the bleachers. Right in the middle of the field is called the pitcher's mound. The pitcher throws the ball from here to home base.
- Using a pitcher or a T-stand, hit a ball as far as you can. How fast did it go? Since the baseball doesn't have a speedometer on it like a car, we'll have to figure it out.

AFTER THE TRIP

- Describe your visit to the baseball field to someone else. Could you teach someone else how to calculate speed?
- Want to know how fast your baseball traveled in miles per hour? Use Google Calculator! Visit (<http://www.google.com>). To use the calculator, type in the search bar: "convert 51 feet/second to miles per hour." Be sure to substitute the distance that your ball traveled! How fast did the ball travel in the example? How fast did yours go?

HOW FAST DOES YOUR BASEBALL FLY?

1. Using a pitcher or a T-stand, hit a baseball as far as you can.
2. Ask someone to time how long it is from the time the ball hits your bat to when it hits the ground.
3. Have a friend or adult hold one end of the string at home plate. Walk towards where your ball landed, unrolling the string as you go.

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ThinkAbout for Hitting, page 3 of 3

4. Snip or pinch the string (if you want to reuse it) where it meets the ball. Carry the length of string (and the ball) back to home plate.
5. Using a ruler or tape measure, measure the length of string from home plate to where you cut or are holding it. That will tell you how far it went.

Tip Wrap the string lengthways around the ruler. Each complete circle equals two feet of length.

6. Figure out the baseball's speed by dividing the distance it traveled (in feet) by the time it took to land (in seconds). For example, if a baseball travels 255 feet and lands in 5 seconds, the equation looks like this: $255 \text{ feet} \div 5 \text{ seconds} = 51 \text{ feet/second}$.
7. Experiment with changing your grip or stance. Does it change how far the ball flies? Can you affect how fast the ball goes?

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For Teachers, page 1 of 2

Read the “Parent Guide” and “Directions” sheets for specific instructions.

OBJECTIVES

The student will be better able to:

- Identify examples of math in everyday activities.
- Describe the role that math and simple science play in a game of baseball.

STUDENT PERFORMANCE CRITERIA

- Identification is accurate or builds logically from the student’s experience.
- Description reflects accurate details of the experience.

STANDARDS

NCHS History Standards

K-4 Historical Content Standards

- 1A. The student understands family life now and in the recent past; family life in various places long ago.
- 5A. Demonstrate understanding of the movements of large groups of people into his or her own and other states in the United States now and long ago.

U.S. National Math Standards

Number and Operations

- Understand meanings of operations and how they relate to one another
- Compute fluently and make reasonable estimates

Measurement

- Understand measurable attributes of objects and the units, systems, and processes of measurement
- Students should be able to apply appropriate techniques, tools, and formulas to determine measurements.

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For Teachers, page 2 of 2

Benchmarks for Science Literacy

Grades K-2

- **12B-K-2-5:** Make quantitative estimates of familiar lengths, weights, and time intervals and check them by measurements.
- **4F-K-2-2:** The way to change how something is moving is to give it a push or a pull.

Grades 3-5

- **12B-3-5-1:** Add, subtract, multiply, and divide whole numbers mentally, on paper, and with a calculator.
- **4F-3-5-1:** Changes in speed or direction of motion are caused by forces. The greater the force is, the greater the change in motion will be. The more massive an object is, the less effect a given force will have.

More information at <http://americanhistory.si.edu/ourstory/activities/internment/>.