Overview:
In this activity you will identify and locate a variety of muscles and also get active with stretches. You will then complete an identification activity to reinforce your knowledge of muscle names.

Activity Plan:
What body part is used most when throwing a baseball?—the arm. Here are some different stretches you can do to show different parts of the arm at work.

1. Pretend to throw a ball. Place your non-throwing hand on the front of your shoulder. This muscle you can feel moving is the DELTOID.
2. Bend one arm with your palm up. Slowly lift your hand towards your shoulder, bending at the elbow. Place your free hand on your BICEP (front part of arm between shoulder and elbow). As you bend your arm, feel your bicep tightening.
3. Bring one arm straight up by your ear. Slowly bend at elbow to pat your back. Place your free hand on your TRICEP (back part of arm between shoulder and elbow). As you bend your arm at the elbow to pat your back, feel the tightening of your tricep.
4. Imagine you are pulling apart a tight spring with your arms raised to chest level. The muscle group in the upper front of your body is the pectoralis major or PECS.

Another group of muscles is used when swinging a bat.

5. Twist your body slightly to left and right. You should feel movement of the OBLIQUES as you twist.
6. With your hands on your stomach, tighten your stomach muscles. These are your abdominals or ABS.

Another group of muscles is important for many activities, but especially running, jumping and squatting. Did you know that the catcher needs to squat for over 100 pitches a game?

7. Stand with feet shoulder-width apart. Bending your legs, lower your upper body into an almost sitting position (called a squat). Place your hand on top of either thigh to feel tightening of the quadriceps or QUADS. This group of four muscles work to help swing the leg forward while running and are key in jumping and squatting.
8. Stand up. Lean forward to touch your toes. Place one hand on back of either thigh so that you can feel your biceps femoris or HAMSTRINGS tighten. This group of muscles bend the knees and are extremely important in running and jumping.
9. Stand on your tiptoes. Bend and place hand on either gastrocnemius or CALF muscle (the part of the back of the leg between the foot and knee) to feel tightening of your calf muscle. This muscle flexes the foot up and down, propels runners and provides power for starts and jumps.
10. Sit down. You are sitting on your gluteus maximus or GLUTES, the largest muscle in your body, the one that starts the running motion and stabilizes the hips.

Great Stretching! Remember, stay active and use those muscles. And as a review of these muscles, fill out the anatomy chart.
Muscle Fun Facts

- There are about 650 muscles in your body. Over 50 of these muscles are in your face alone. It takes 17 muscles to smile and over 40 muscles to frown.

- The strongest muscle in your body is the masseter, located on each side of your mouth. These muscles help you bite down with some 150 pounds of force.

- Some muscles in your body never get to rest. Your heart is a muscle that works all the time, contracting about 70 times a minute.

- Another constantly working muscle is the smooth muscle of your digestive tract. It takes between 12 and 15 hours to process a meal through the digestive system.

- Your most active muscles are those in your eyes. They move more than 100,000 times a day.

- Your heart is a hollow muscle about the same size as your fist. It beats about 3 billion times in the average person’s lifetime.

- Each hair on your body comes equipped with a tiny muscle that can make it stand upright.

- Approximately 40% of the body is skeletal muscle and almost 10% is smooth and cardiac muscle.

- The largest muscle is the gluteus maximus and the smallest muscle is in the inner ear and is less than 0.01 inch long.
Abdominals (abs)
Biceps
Biceps Femoris (hamstrings)
Deltoids
Gastrocnemius (calves)
Gluteus Maximus (glutes)
Obliques
Pectoralis Major (pecs)
Quadriceps (quads)
Triceps
ANSWER KEY

- Pectoralis Major (pecs)
- Deltoids
- Biceps
- Triceps
- Obliques
- Abdominals (abs)
- Gluteus Maximus (glutes)
- Quadriceps (quads)
- Biceps Femoris (hamstrings)
- Gastrocnemius (calves)
1. Mileage
Measure the approximate mileage and record from city to city.

- St. Louis to Milwaukee
- Milwaukee to Chicago +
- Chicago to Pittsburgh +
- Pittsburgh to Cincinnati +
- Cincinnati to Houston +
- Houston to St. Louis +

What is the approximate mileage of the entire road trip? 

2. Directions
Write the correct Cardinal or Intermediate Direction on the line.

A. San Francisco is ________________ of St. Louis.
B. Baltimore is ________________ of St. Louis.
C. Chicago is ________________ of St. Louis.
D. Miami is ________________ of St. Louis.

3. States
What states do you drive through in a straight line to get from:
A. St. Louis, Missouri to San Francisco, California?
B. St. Louis, Missouri to Seattle, Washington?
C. St. Louis, Missouri to Miami, Florida?
D. St. Louis, Missouri to New York City, New York?

4. Minor Leagues
Plan a trip visiting each Cardinals minor league teams. Measure the mileage and record from city to city.

- A-Palm Beach, FL to AA-Springfield, MO
- AA-Springfield, MO to AAA-Memphis, TN +
- AAA-Memphis, TN to Major Leagues-St. Louis, MO +

What is the approximate mileage of your minor league trip? 

Cities to label on map:
- St. Louis
- Milwaukee
- Chicago
- Pittsburgh
- Cincinnati
- Houston
- San Francisco
- Baltimore
- Miami
- Seattle
- New York City
- Palm Beach, FL
- Springfield, MO
- Memphis, TN.
1. Mileage
Measure the approximate mileage and record from city to city.

St. Louis to Milwaukee  300
Milwaukee to Chicago  +  75
Chicago to Pittsburgh  +  375
Pittsburgh to Cincinnati  +  200
Cincinnati to Houston  +  775
Houston to St. Louis  +  575
What is the approximate mileage of the entire road trip?  2300

2. Directions
Write the correct Cardinal or Intermediate Direction on the line.

A. San Francisco is _____________ West of St. Louis.
B. Baltimore is _____________ East or Northeast of St. Louis.
C. Chicago is _____________ North or Northeast of St. Louis.
D. Miami is _____________ Southeast of St. Louis.

3. States
What states do you drive through in a straight line to get from:
A. St. Louis, Missouri to San Francisco, California?
   Missouri, Kansas, Colorado, Utah, Nevada, California

B. St. Louis, Missouri to Seattle, Washington?
   Missouri, Nebraska, Wyoming, Montana, Idaho, Washington

C. St. Louis, Missouri to Miami, Florida?
   Missouri, Illinois, Kentucky, Tennessee, Georgia, Florida

D. St. Louis, Missouri to New York City, New York?
   Missouri, Illinois, Indiana, Ohio, West Virginia, Pennsylvania, New Jersey, New York

4. Minor Leagues
Plan a trip visiting each Cardinals minor league teams. Measure the mileage and record from city to city.

A-Palm Beach, FL to AA-Springfield, MO  875
AA-Springfield, MO to AAA-Memphis, TN  +  200
AAA-Memphis, TN to Major Leagues-St. Louis, MO  +  200
What is the approximate mileage of your minor league trip?  1275
Overview:
This is an activity where you will play the age-old game of “Go Fish,” renamed “Pick a Winner” for this activity. You will match 12 character education word cards with 12 scenario cards to play the game. Print the 24 cards out and cut them apart. Note: If you would like to play on your own, these cards can also be used for “Memory” game (cards are set out face down in a grid, flip them over and try to find pairs).

List of Character Traits in game:
Respect       Responsibility       Integrity       Courage
Goal-setting  Caring              Honesty         Patience
Cooperation   Trustworthiness     Fairness         Self-Control

Activity:
1. Before you play the game, you may want to think about and discuss the 12 character words and what they mean. You also may want to read through all of the scenarios in the game and think about the character traits being described.
2. RULES of the game:
   • Deal 5 cards to each player. Any matches received may be placed face up in front of player.
   • Place extra cards face down in center for “Pick a Winner” pile.
   • Player to left of dealer reads a scenario in their hand out loud and asks any one person for a character card that matches that scenario. Or they list a character word in their hand and asks one person for the scenario that matches that character word.
   • If that person has that card he/she answers, “Yes, I have ___________” --reads the scenario or word—and then passes the card to the player.
   • The player sets down his/her match and states, “I have ____________.”
   • Player gets a second turn when given a match.
   • If the person asked has no match, he/she says, “Pick a Winner”.
   • Player draws card from the pile in center.
   • If the card from the pile matches a card in the player’s hand, he/she may place it on the table.
   • Play continues to the left.
3. WINNING: “Pick a Winner” continues until either someone has no cards left in his/her hand, or the draw pile runs out.
4. After you have played the game a few times, do the word search included.
5. It doesn't stop here. There are lots of traits and many ways that we can show good character. Remember to show good character in your daily lives!
<table>
<thead>
<tr>
<th><strong>Self-Control</strong></th>
<th><strong>Goal-Setting</strong></th>
<th><strong>Respect</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a close play at first and the umpire calls you out. You accept the call and walk back to the dugout.</td>
<td>You have a book report due in three weeks. The first week you plan on reading your book; the second week outlining your paper; and the third week completing your report by the due date.</td>
<td>You listen quietly to a classmate sharing something important during class.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th><strong>Responsibility</strong></th>
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<th><strong>Courage</strong></th>
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<td>Today at school you remembered your book in math class; your reading homework; paper and pencil; tennis shoes for P.E.</td>
<td>Your next-door neighbor is an elderly lady. During the summer you cut her grass; during the winter you shovel her sidewalk; and take out her trash.</td>
<td>You witness a classmate being a bully. You stand up and tell them to stop.</td>
</tr>
<tr>
<td><strong>Integrity</strong></td>
<td><strong>Patience</strong></td>
<td><strong>Honesty</strong></td>
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<td>While playing ball in the backyard, the ball goes over the fence. Your parents’ rule is to not go in your neighbor’s yard. You wait to ask for permission to get the ball.</td>
<td>You are waiting in line at the concession stand at a Cardinals game. Although you are hungry, you wait your turn and return to the game.</td>
<td>You find a camera under a seat at a Cardinals game. You decide to turn it into the usher so the rightful owner may be found.</td>
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</tbody>
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<th><strong>Trustworthiness</strong></th>
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<td>A groundball is hit to the third baseman. He throws the ball to second. The second baseman throws the ball to first. Their cooperation makes for a successful double play.</td>
<td>You are home alone after school. Your parents expect you to stay in the house, not invite friends over, and answer the phone using the safety rules you have discussed.</td>
<td>There is one slice of pizza in the refrigerator. You and your sister want a snack and decide to cut it in half so you each get a piece.</td>
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ACROSS
3. Crazy pitcher with a brother nicknamed "Daffy"
4. Greatest Cardinal basestealer
5. 2005 Cy Young Award winner
7. "The Wizard" on the field
10. "Little Big Man" at shortstop
15. "The Man"
16. A picture made up of many unique and diverse pieces
17. First modern African-American Major Leaguer
18. 1968 MVP and Cy Young Award winner
19. First baseman who later became National League President
20. The shape of the ballfield

DOWN
1. Honoring differences
2. Where Yadier Molina was born
6. Nickname and hair color of this Hall of Fame second baseman
8. Open to everyone
9. First Cardinal from Japan
11. Known as "El Hombre"
12. 1967 MVP and leader of "El Birdos"
13. Challenged the reserve clause in Major League Baseball
14. Fan-favorite who wore #51 in the 1980’s

WORDBANK
DIVERSITY CURTFLOOD LOUBROCK MOSAIC SOTAGUCHI DAVIDECKSTEIN BILLWHITE WILLIEMCGEE DIZZYDEAN DIAMOND ORLANDOCEPEDA RED OZZIESMITH BOBGINSON ALBERTPUJOLS INCLUSION CHRISCARPENTER JACKIEROBINSON PUERTORICO STANDARD