



Strike Zone Student Instructions

Materials

Tape measure (100 ft.)
Markers
Butcher paper (not provided) or use worksheet 2.1
Wiffle bat (If possible)
Worksheet
Pencil

Key Concept

Area of a rectangle = height x width

Vocabulary

Strike Zone: The area over home plate through which a pitched baseball must pass to be called a strike

Square Units: The metric unit used to measure area.

Decimal: Expressed by utilizing a decimal system especially with a decimal point.

Strike Zone Background

- The strike zone is the area over the plate above the hitter's knees, below the midpoint between the hitter's waist and shoulders. The strike zone is an invisible rectangle of unique area for each player based on their height and batting stance.
- Video about the history of the strike zone: <https://youtu.be/xUmMfewERLg>
- Umpire strike zone: <https://www.mlb.com/official-information/umpires/strike-zone>

Strike Zone Worksheet Instructions:

1. Watch the video link provided by your teacher
2. Get a partner. Each group will need a tape measure (100 ft.), markers (colored pencils, crayons, etc), and butcher paper or use worksheet 2.1. Cut pieces of butcher paper so you can draw their strike zone (butcher paper must be at least 17 inches wide). If you do not have any butcher paper, use worksheet 2.1 as your strike zone. Have one person from the group hold the wiffle bat or pretend to hold the wiffle ball bat in baseball stance.
3. Have your partner use the tape measure (100 ft.), to determine the height of the strike zone for their partner, measure the distance between the batter's knees and their chest



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(specifically the midpoint between their shoulders and waist). On butcher paper, draw a line of the answer in inches for the height (For example, if the answer is 17 inches, draw a line that is 17 inches long). If you do not have butcher paper, record the answer on worksheet 2.1 for height.

- a. Note: The strike zone in professional baseball is slightly different than in Little League baseball. In pro baseball, the top of the strike zone is marked by the batter's chest while in Little League it is marked using the batter's armpits.
4. The width of the strike zone is based on the width of the home plate (17 inches). On butcher paper, draw a line that is 17 inches long for the width. If you do not have butcher paper, record the answer on worksheet 2.1 for width. If you have butcher paper, fill in the rest of the strike zone by drawing lines to connect the height and width to make a rectangle (See worksheet 2.1 as reference).
5. Calculate the area of the strike zone using the equation $\text{area} = \text{height} \times \text{width}$ on butcher paper or on worksheet 2.1.
6. Record answer on butcher paper in the middle of strike zone or on worksheet 2.1 by labeling answer using inches². (For example: 30 inches X 17 inches = 510 inches²)
7. If have butcher paper, can hang up and practice throwing baseball at the strike zone.
8. Switch with partner in the group.

