ACTIVITY SHEET

TEAM MEMBER: Eileen H. Balajadia

INTERDISCIPLINARY UNIT: Cultural Diversity

GRADE LEVEL: 7th Grade

SUBJECT: Math

NAME AND DESCRIPTION OF ACTIVITY:

**Baseball Geometry**

In this activity students will learn about the specifications needed to make the modern baseball. With the aid of wax paper, play-doh and a baseball students will be able to observe and find the surface area as well as solve for volume of the baseball.

STUDENT LEARNING OUTCOMES (SLOs):

* Students will be introduced to historical and modern materials and construction of baseballs.
* Students will apply various methods for finding, volume, and surface of area of a sphere.
* Students will compare and contrast results among these methods/

COMMON CORE STANDARDS:

**7.G.1 Solve problems involving scale drawings of geometric figures,  
including computing actual lengths and areas from a scale drawing  
and reproducing a scale drawing at a different scale.**

SUPPLEMENTARY READING MATERIALS AND INTERNET SOURCES TO EXTEND STUDENTS’ UNDERSTANDING OF THE CONTENT:

* <http://www.baseball-almanac.com/>
* <https://www.khanacademy.org/math/geometry/cc-geometry-circles/circles/v/circles--radius--diameter-and-circumference>
* <http://externalmath.blogspot.com/2010_08_01_archive.html>

RUBRIC TO EVALUATE THE LEARNING OUTCOMES for BASEBALL GEOMETRY:

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Unsatisfactory | Satisfactory | Excellent |
| Area | Student was unable to solve for area. | Student miscalculated area. | Student correctly calculated area. |
| Surface Area | Student was unable to solve for surface area. | Student did not double area to find total surface area. | Student was able to calculate surface area. |
| Circumference | Student was unable to solve for circumference. | Student did not measure string properly to get accurate circumference. | Student was able to get correct measurement of circumference. |
| Diameter | Student was unable to solve for diameter. | Student did not divide circumference correctly by PI. | Student was able to calculate diameter. |
| Radius | Student was unable to solve for radius. | Student did not divide diameter correctly. | Student was able to get accurate radius. |
| Reporting of findings with partner. | Student was unable to use supporting evidence to report on findings. | Student was able to report on some accurate findings from activity. | Student had reported correctly on all findings from activity. |