

Name: \_\_\_\_\_

Date Started: \_\_\_\_\_ Date Completed: \_\_\_\_\_ Score: \_\_\_\_\_

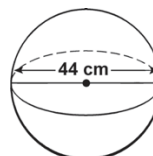
### Learning Activity Sheet Surface Area of Spheres

- A. Determine the amount of rubber needed to make a basketball if the diameter of the ball is approximately 4.38 inches. (2 points for each step)**

Step 1	<p>Find the surface area of the basketball. Use 3.14 for <math>\pi</math>.</p> <p><i>Given:</i> Note that the radius is half the diameter. Since the diameter of the basketball is 4.38 inches, the radius is 2.19 inches.</p> <p><i>Solution:</i></p> $SA = 2 \times \pi \times r^2$ <p>SA = _____</p> <p>SA = _____</p> <p>SA <math>\approx</math> _____</p> <p><i>Answer:</i> The surface area of the basketball is approximately ...</p>
Step 2	<p>State the answer in a complete sentence.</p> <p>&gt;&gt; Approximately _____ of rubber is needed to make the basketball.</p>

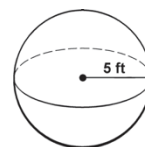
- B. Circle the letter that corresponds to the correct answer.**

1. What is the surface area of the sphere? (Use 3.14 for  $\pi$ .)
- a. 1,519.76 sq. cm                      c. 7,744.00 sq. cm
- b. 6,079 sq. cm                          d. 24,316.6 sq. cm



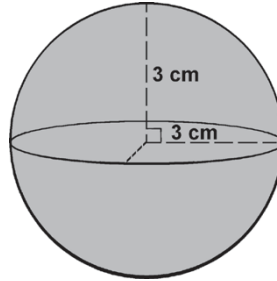
2. The radius of a sphere measures 14 centimeters. What is the surface area of the sphere? (Use 3.14 for  $\pi$ .)
- a. 196 sq. cm                              c. 784 sq. cm
- b. 615.44 sq. cm                          d. 2,461.76 sq. cm

3. What is the surface area of the cylinder? (Use 3.14 for  $\pi$ .)
- a. 31.4 sq. ft                                c. 314. sq. ft
- b. 78.5 sq. ft                                d. 1,156 sq. ft



4. The radius of a sphere measures 8 centimeters. What is the surface area of the sphere? (Use 3.14 for  $\pi$ .)
- a. 50.24 sq. cm                              c. 803.84 sq. cm
- b. 200.96 sq. cm                              d. 3,215.36.8 sq. cm

C. Find the surface area of the sphere below



1. *Solution:*

2. *Answer:* \_\_\_\_\_