

Name \_\_\_\_\_ Hour \_\_\_\_\_

Math 8 Worksheet 8.3a  
Volume of Spheres

1. What is the formula for finding the volume of a sphere?

1. \_\_\_\_\_

**Find the volume of a sphere with the given dimensions.**

**Round all answers to the nearest tenth. Include units in each answer.**

2.  $r = 8$  in.

2. \_\_\_\_\_

3.  $r = 11.3$  cm.

3. \_\_\_\_\_

4.  $d = 12$  m.

4. \_\_\_\_\_

5. What is the formula for finding the volume of a hemisphere?

5. \_\_\_\_\_

**Find the volume of a hemisphere with the given dimensions.**

**Round all answers to the nearest tenth. Include units in each answer.**

6.  $r = 9$  yd.

6. \_\_\_\_\_

7.  $d = 7.4$  km.

7. \_\_\_\_\_

8. A volleyball has a diameter of 10 inches. Find the volume of the ball.

8. \_\_\_\_\_

9. Paul is filling 4 identical bowls with soup. If each bowl has a diameter of  $6\frac{1}{2}$  inches, what is the total volume of soup needed to fill the bowls?

9. \_\_\_\_\_

10. A snowball has a diameter of 6 cm. How long will it take the snowball to melt if it melts at a rate of  $1.8\text{ cm}^3$  per minute?

10. \_\_\_\_\_