Close and Check

Focus Question

Why might you want to find the volume of a sphere?

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Do you know **HOW?**

1. To the nearest cubic inch, how much space is there inside the ball for the hamster? Use 3.14 for π.

10 in.

[_____]
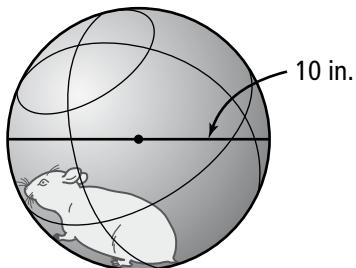
2. A gazing ball in the center of a garden has a volume of 904.3 cm^3. To the nearest centimeter, find the diameter of the gazing ball.

[_____]

3. To the nearest tenth of a cubic foot, find the volume of a 9 ft diameter inflatable ball.

[_____]

Do you **UNDERSTAND?**

4. Writing The height and diameter of a cylinder is equal to the diameter of a sphere. Explain the relationship between the volume of the sphere and the volume of the cylinder.

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5. Reasoning A ball of twine has a diameter of 3.4 m. More twine is added until the diameter is 12 m. A classmate subtracts the diameters and uses the result to find the change in volume of the sphere. Is he correct? Explain.

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