Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Designing a Shipping Box Filled with Candy**

A candy company wants you to design a shipping box that will contain 16 candy containers.

Your design must consider the following:

* The candy container is a cylinder that is 8 inches tall and 3 inches in diameter.
* The needed shipping box must be made in the form of a rectangular prism.

1. Draw a picture of your shipping box with its labeled dimensions. Explain how you determined your dimensions.
2. Determine the amount of cardboard needed to make your shipping box. Explain how you determined your answer.
3. Compare your shipping box with a classmate’s shipping box that is different. Decide which shipping container is the most efficient in terms of the amount of cardboard needed?