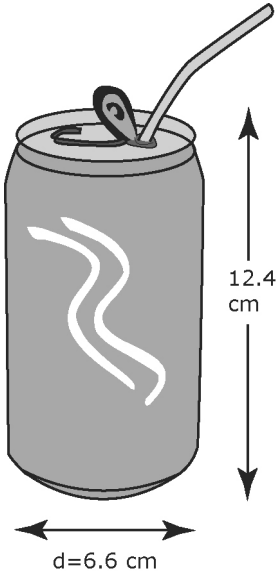
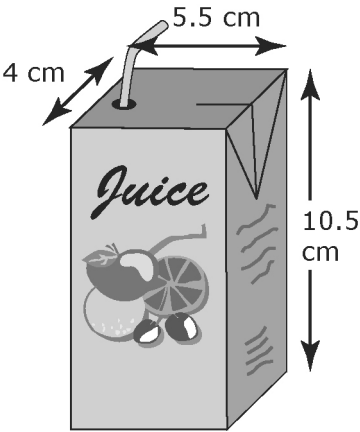
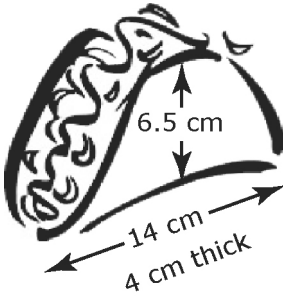
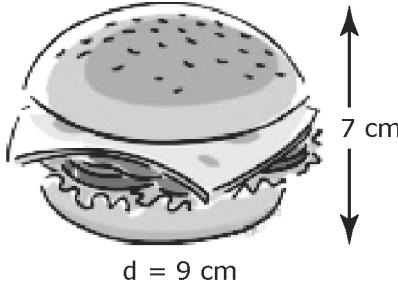
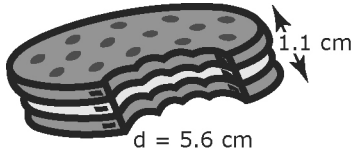
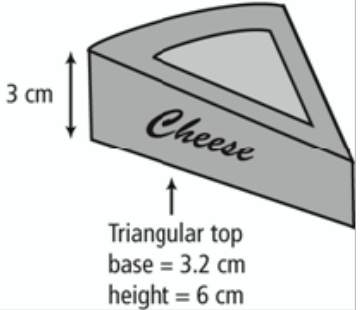
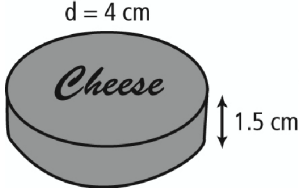
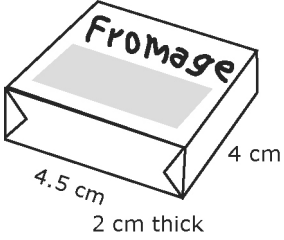


Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Design a Picnic Box

Ants "R" Not Us wants a new design for its picnic boxes. Design a container using the *least* amount of packaging that will hold three of the following items.

Drink	Sandwich	Snack
 <p>12.4 cm d = 6.6 cm</p>  <p>5.5 cm 4 cm 10.5 cm</p>	 <p>6.5 cm 14 cm 4 cm thick</p>  <p>7 cm d = 9 cm</p>	 <p>1.1 cm d = 5.6 cm</p>  <p>3 cm Triangular top base = 3.2 cm height = 6 cm</p>  <p>d = 4 cm 1.5 cm</p>  <p>4.5 cm 4 cm 2 cm thick</p>



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

Date: \_\_\_\_\_

- 1.** Choose an item from each of the three categories. Use at least two different shapes.
  - a)** Build a net for each item.
  - b)** Calculate the volume for each item. Round up the volume to the next cubic centimetre.
- 2.** Design a 3-D container to hold your items.
  - Try to keep your container as small as possible but still large enough to hold the items.
  - Draw and label the top, front, and side views.
  - Justify your design.
- 3.** Consider how the three items fit into the container. How much space is left over? Justify your answer.
- 4.** Add a fruit to your lunch. Do you need to change the volume of your picnic box? Justify your response.

