SURFACE AREA OF RECTANGULAR PRISMS

Name: _____ Class: _____ Due Date: _____

Family Member Signature: _____

Objective: To practice using our knowledge of the area of a rectangle to find the surface area of rectangular prisms.
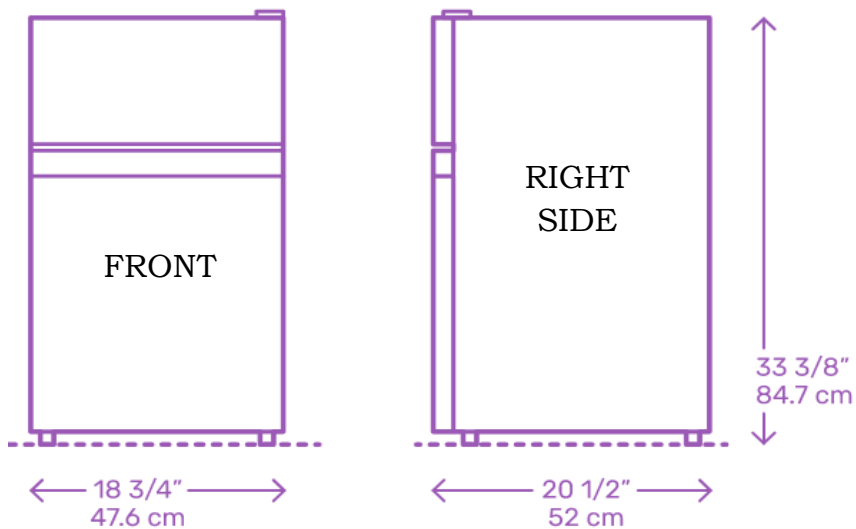
Necessary Information:

A rectangular prism is a three-dimensional object which has a rectangle on the top and the bottom.

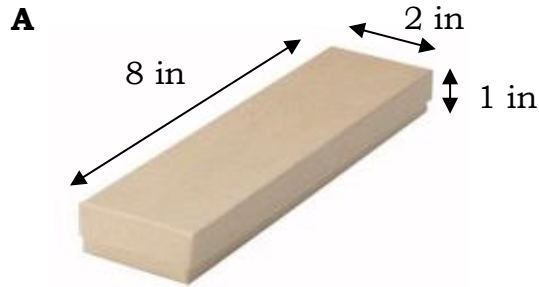Surface Area is the amount of area showing on the outside of the object.

Practice Section:

1) Use the picture of the refrigerator to answer the following questions.

FRONT

RIGHT SIDE

33 3/8"
84.7 cm

18 3/4"
47.6 cm

20 1/2"
52 cm

a) What is the area of the front in centimeters?   _____

b) What is the area of the back in centimeters?   _____

c) What is the area of the right side in centimeters?   _____

d) What is the area of the top in centimeters?   _____

2) Which jewelry box uses the most cardboard? (Disregard the overlap where the lid wraps over the sides.)

A

8 in   2 in   1 in

A_{front} = _____

A_{back} = _____

$A_{leftside}$ = _____

$A_{rightside}$ = _____

A_{top} = _____

A_{bottom} = _____

Total cardboard = _____

B

5.5 in   1 in   3.5 in

A_{front} = _____

A_{back} = _____

$A_{leftside}$ = _____

$A_{rightside}$ = _____

A_{top} = _____

A_{bottom} = _____

Total cardboard = _____

_____ **uses the most cardboard**

In Your Real World:

With a family member, find a book. Use a measuring device to determine the width, length and height of the book. **Sketch** a diagram with labels. **Calculate** how much cardboard would be needed to cover your book in order to ship it.