

NOTES: LESSON 9.1 – SURFACE AREA: FIND B, P, and h

Learning Goal: I can find the **Area of the Base**, the **Perimeter of the Base**, and the **height** for cylinders, rectangular prisms, and triangular prisms.

Meta de Aprendizaje: Puedo encontrar el **Área de la Base**, el **Perímetro de la Base**, y la **altura** de los cilindros, prismas rectangulares y prismas triangulares.

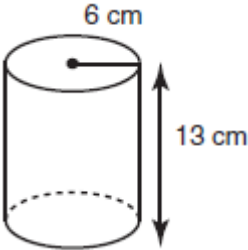
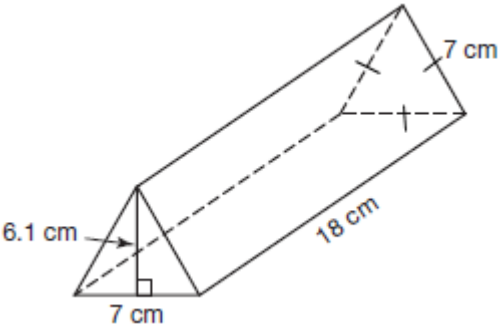
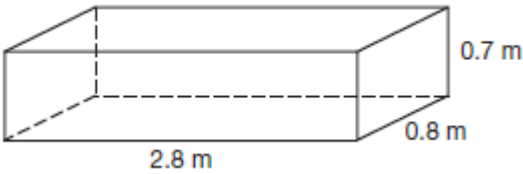
Language Goal: I can discuss with a partner how to calculate the **Area of the Base, B**, the **Perimeter of the Base, P**, and the **height of a prism, h**, then write an explanation.

Lenguaje Objetivo: Puedo discutir con un compañero cómo calcular el **Área de la Base, B**, el **Perímetro de la Base, P**, y la **altura de un prisma, h**, luego escribir una explicación.

WHAT IS SURFACE AREA?

- The _____ of a 3-D shape, like a soda can, a box, the walls of a room, etc...
- _____ **Surface Area** is the area of all the sides **EXCEPT THE BASES**.
- _____ **Surface Area** is the area of all the sides **INCLUDING THE BASES**.

FOR WHAT SHAPES DO WE CALCULATE SURFACE AREA?

<p align="center">CYLINDER</p>	<p align="center">_____ PRISM</p>	<p align="center">_____ PRISM</p>
		
<p>FORMULAS:</p> <p>LATERAL S.A.: _____</p> <p>TOTAL S.A.: _____</p>	<p>FORMULAS:</p> <p>LATERAL S.A.: _____</p> <p>TOTAL S.A.: _____</p>	<p>FORMULAS:</p> <p>LATERAL S.A.: _____</p> <p>TOTAL S.A.: _____</p>

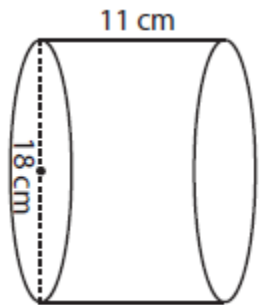
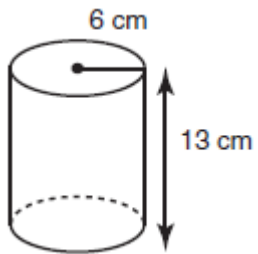
WHAT INFORMATION DO WE NEED FOR SURFACE AREA?

CYLINDERS (EASY!)

Step 1: Shade the BASES

Step 2: Find the radius, if needed

Step 3: Circle the **height of the prism**, which is **BETWEEN THE BASES!**



TRIANGULAR and RECTANGULAR PRISMS

Step 1: Shade the BASES, then calculate the **B, Area of the Base**.

Step 2: Highlight the PERIMETER of the BASES, then calculate **P, Perimeter of the Base**.

Step 3: Circle the **height of the prism**, which is **BETWEEN THE BASES!**

