Handout #1

Rocio, were are going to learn the names of **three dimensional shapes**.

Unlike **two dimensional shapes** like squares and triangles, **three dimensional shapes** have a **volume**.

That is, they **take up three dimensional space**.

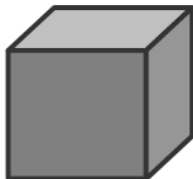Here are some very basic three dimensional shapes along with their names and proprieties.

Box (Rectangular Solid)

Must have **six sides**. Opposite sides are equal **in area and perimeter**.
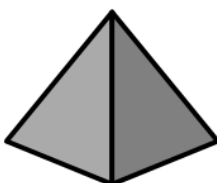
Every angle is a **right (90º)** angle.

Cube

Must have **six sides**. All sides are equal **in area and perimeter**.

Every angle is a **right (90º)** angle.

Pyramid

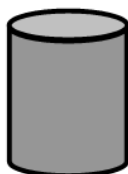Must have four **sides**.

All sides are **flat triangles**.

Cone

Must have **two continuous surfaces**.

The bottom is a **flat circle**.

Cylinder

Must have **three continuous surfaces**.

The bottom and the top are **flat circles.**

The middle is a **tube.**

Sphere

Has only one **continuous surface**.

Forms a perfectly symmetric ball.

Every point is equal distance from the center.

1 **Fold Your Shapes**

Get some **three dimensional shape cutouts**.

With your tutor, fold the flat shapes into **three dimensional shapes**.

First, fold your shapes. Then fill in the table below:

Shape Letter	Three Dimensional Name of Shape
A	
B	
C	
D	
E	

(?)

*There was no **sphere** shape. Why do you think that was?*

*What separates a **cone** form a **pyramid**?*

*Is a **cube** also a **box (rectangular solid)?***

*Put your shapes away. Now draw a cube **spread out flat on a piece of paper** (like the one you folded):*

*Now draw a pyramid **spread out flat on a piece of paper** (like the one you folded):*

2 **Shapes, Shapes, They're All Around**

You run into shapes all the time.
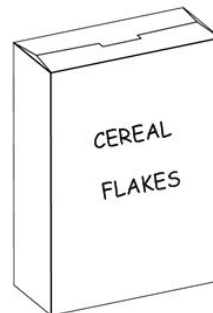
Like a basketball. What's a basketball?

Basketball

Well, it's a **sphere**.

Let's see if you can put a **shape name** on these **three dimensional figures** you run into in real life:
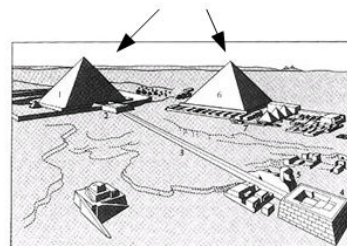
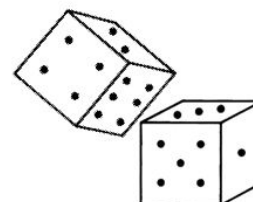Ice Cream
Shape:

Cereal
Shape:
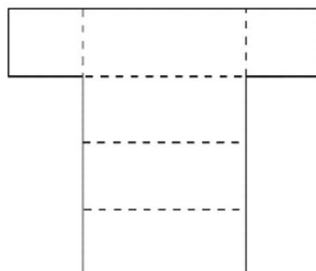
Pop Can
Shape:

Egypt
Shape:

Earth
Shape:

Dice
Shape:

<table>
<tr><td>

?
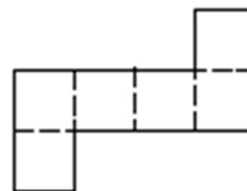
Questions
</td></tr>
</table>

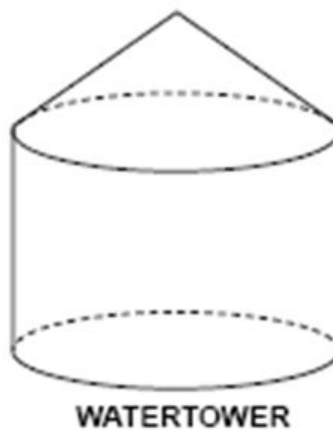**Q1** In your head, fold the figures along the dotted lines. Then fill in the shape names for each figure:

Shape:

Shape:

Q2 What shapes are represented in this drawing of a water tower?

WATERTOWER

A: pyramid and cone

B: rectangular solid and triangle

C: parallelogram and pyramid

D: cylinder and cone

Handout #1

Handout #1

-- *scratch paper* --

A

B

C

E

D

B

A

C

D

E