UNIT 5 LESSON 4

<u>START</u> (10')

Play the game "Guess".

Show a set of 3D shapes.

Ask for two volunteers. The 2 children stand in front of the class. They choose a 3D shape. The rest of the class makes questions about simple properties of the 3D shape .The answer can be only yes or no:

> *Can they be stacked?*
> *Are all the faces flat?*
> *Are all the faces equal?*
> *Has the vertex met more than 3 faces?*
> *Has it got vertices*?

<u>MAIN TEACHING</u> (35')

Show prisms of different shapes (right, oblique, concaves, and convexes).

Give a definition of the properties such as the shape of the lateral faces and bases, number of edges and faces, number of vertices and axis of symmetry (look at power point U5 L4).

Ask if someone knows the meaning of right prisms, oblique prisms, irregular concave and irregular convex:

> *What is a right prism?*
> *What is an oblique prism?*
> *What is a convex prism?*
> *What is a concave prism?*

Establish that right prisms have two identical, parallel bases and all other faces are rectangular; other faces of the oblique prisms are parallelograms; a figure is convex if all line segments that join any two interior points stay inside the figure; a figure is concave if any line segment that joins two interior points goes outside the figure.
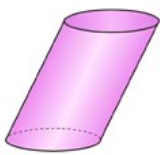
Oblique cylinder   Right cylinder

Classify the prisms in the groups above.

Split the class into 4 groups, one for each classification. Give out straws and play dough. Children make prisms of different shapes.

Ask to make a table with properties of a prism (name; number of faces, vertices and edges; net drawing).

Shape	Number of faces	Number of vertices	Number of edges	Drawing

Ask what they notice:

What do you notice about the number of faces and vertices?

" A right prism has two identical parallel bases and all other faces are rectangular"
"An oblique prism has two identical parallel bases and other faces are parallelograms"
"A figure is convex if all line segments that join any two interior points stay inside the figure"
"A figure is concave if any line segment that joins two interior points goes outside the figure"

ENDING (15')

Children explain their work to the class.

Make an exposition with all the constructions and the sheet of the properties. Do the exposition according to the classification.

RESOURCES

Set of 3D shapes, a variety of prisms, straws, play dough, P.Point shape properties U5 L4.