

“Here is another triangle. What kind of angles has it?”
Sharp angles.



“I want you now to say *acute* for sharp, and *obtuse* for blunt.”

Exercise with the forms held by the children thus—
 Point to acute angle, right angle, obtuse angle. Show triangle with a right angle, with three acute angles, &c.

LESSON IV.


CURVED LINE, CIRCLE, RING.

ARTICLES for illustration :—Circles and rings cut from cardboard for the scholars, and any circular objects and rings for the teacher's use.

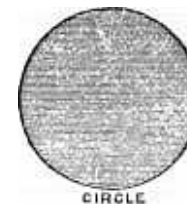
“I draw a square on the black-board. How many sides has it?” *Four sides.*

“How many sides has a triangle?” *Three sides.*

“What kind of lines are the sides of squares, oblongs, and triangles?” *Straight lines.*

“What name did we give to a line like this ?” *A curved line.*

“I will now, with this piece of string, show you how to make a figure quite unlike the square or the triangle. You see I press one end of the string on the black-board with the forefinger of my left hand, and with the opposite end of the string and a piece of chalk in my right hand I make a curved line *with both ends meeting.*”



“How many lines have I made?” *One line.*

“And what kind of line?” *A curved line.*

“You may call this figure I have made a *circle.*”

“Now, how many lines are there round a circle?” *One line.*

“What is the shape of the line?” *A curved line.*

“How many angles has a circle?” *No angles.*

“Now tell me the names of some things which are of the same shape as this circle?” *Penny, button, plate, &c.*

“What is the shape of the side of this box?” *Oblong shaped.*

“And what is the shape of the end?” *Square shaped.*

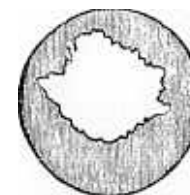
“And what may I call the shape of this biscuit?” *Circle shaped.*

“And this penny?” *Circle shaped.*

“What name do you give this thing I have on my finger?”
A ring.

“Show me the paper ring I have given you.”

“I will show you how to make paper rings. Or, perhaps, you can show me. Here is a circle-shaped piece of paper. How can I make a ring?” *Cut out the middle.*



“Very well, I will cut out the middle; here it is. Will that do?” *No.*

- “Why not?” *It is not round.*
 “You may say it is not circle-shaped instead of not round.”
 “Which side is not circle-shaped?” *The inside.*
 “Very well, I will cut it circle-shaped.”



“Now tell me what toy girls and boys often play with in the streets like this ring.” *A hoop.*

Exercise with the cardboard forms, and then let the children draw circles and rings on their slates. Of course the drawings will be very imperfect, but that is of little consequence so long as the results show that the scholars have grasped the ideas of the lesson.

LESSON V.

CUBE AND BRICK-SHAPE.

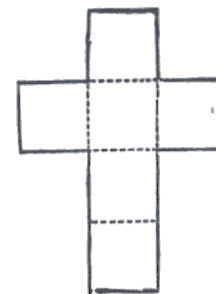
THE cubes and “bricks” of the Kindergarten gifts will serve for this lesson. If these are not at hand, a cube and brick can be cut from a turnip, a potato, or a piece of soap or wood, or can be made with a lump of stiff putty.

The children taking up their cubes will have their attention directed to the corners and the sides or faces.

“Count the number of corners. How many are there?”
Eight.

“Count the sides or faces. How many?” *Six.*

Where the Kindergarten materials are not in use, a cubical box will be of great advantage because of its size. It can be made with a piece of cardboard as represented in the figure. The dotted lines show how the card is to be folded.



“Look at each face and tell its shape.” *Square shape.*

“Look again at the faces and show me the largest and the smallest.” *They are all of the same size.*

“We call this piece of wood, which has six square faces, a cube.”

“Now, how many faces has a cube?” *Six faces.*

“And what is the shape of each face?” *Square.*

“And what name do we give to an object which has six square faces?” *A cube.*

Next, the attention of the children may be directed to the brick-shaped solid either in their hands or in the hands of the teacher. They should be called to note the number of faces and their oblong shapes. The pieces may then be compared with a building-brick, and the children told that things having the same shape as a brick may be called *brick-shaped*. Questions should then follow, such as:—

“How many faces has a brick?” *Six faces.*

The brick-shaped box can be made from cardboard as here shown.

