

“ We have mixed red with yellow, and blue with yellow ; we have now to make one more mixture. Look on the paper and say which two colours we have not yet mixed ? ” *Red and blue.*

“ Right. We will now mix them.” [Teacher draws a broad purple * line between the red and blue.]

“ The name of this new colour is *purple.* ”

“ What colour must I mix with red to make purple ? ” *Blue colour.*

“ How did I make the purple colour ? ” *By mixing blue and red.*

“ What kind of a colour is purple ? ” *A mixed colour.*

“ How many mixed colours have we made ? ” *Three colours.*

“ What are their names ? ” *Orange, green, and purple.*

“ How many colours does it take to make these three mixed colours ? ” *Three colours.*

“ What are their names ? ” *Red, yellow, and blue.*

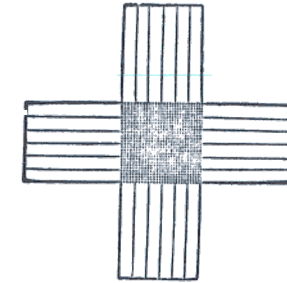
“ Take your papers. Show me the purple colour. Hold up the two colours which make purple. ”

The teacher should continue these and similar exercises

* Equal parts of red and blue will produce a good purple.

until all her scholars can distinguish the six different colours, and tell how to produce the mixed colours.

An interesting experiment may be made with crayons as a further illustration. Make crosses with parallel lines, as in the sketch. The horizontal band to be of one primary colour,



and the vertical band of another. If the part intersected be rubbed the secondary colour will be produced.

As a test exercise, to occupy the time, probably, of another lesson, take skeins of Berlin wool of the proper colours, cut into short lengths, mix, and give to each child a small bundle. The children to separate and arrange the colours in the order indicated by the teacher.

LESSON III.

ANGLES, TRIANGLES.

RIGHT-ANGLED, scalene, and equilateral triangles cut from cardboard to be given to each child.

Teacher [holding up a slate]. “ How many corners has this slate ? ” *Four corners.*

“ What kind of corners are they ? ” *Square corners.*

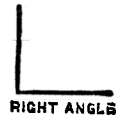
“ Of what shape is the slate ? ” *Of an oblong shape.*

"How many square corners has an oblong?" *Four square corners.*

"How many sides has a square?" *Four sides.*

"How many square corners has a square?" *Four square corners.*

"Now I will make a square corner on the black-board by



drawing two straight lines. What kind of lines are they?" *Straight lines.*

"What do you call this line [pointing to the horizontal]?" *A lying down line.*

"And this [pointing to the perpendicular]?" *An upright line.*

"What kind of corner do these lines make when they meet?" *A square corner.*

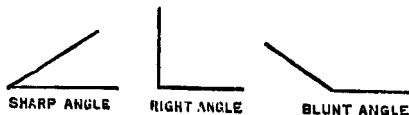
"I shall now give you another name for the point or square corner made by two lines where they meet. It is *angle*."

"And I want you to remember, too, that the point or angle made by a lying down and an upright line is called a *right angle*."

[Showing a finely-pointed pencil.] "What kind of point has this pencil?" *A sharp point.*

"And this one [showing pencil with blunt point]?" *A blunt point.*

"Now some angles are *sharp* and some are *blunt* angles."



"Here are three angles. What is the name of the middle angle?" *A right angle.*

"Which is the sharp angle?" *The top angle.*

"And which is the blunt angle?" *The bottom angle.*

"I want you to call all angles less than the right angle *sharp* angles, and all angles greater than the right angle *blunt* angles. Or you may call them *small* angles and *large* angles."

"Here I have a piece of cardboard. How many corners has it?" *Three corners.*

"What kind of corner is this [pointing to right angle]?" *A square corner.*

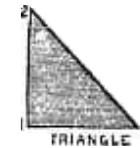
"And what can you say of these [pointing to the acute angles]?" *They are sharp corners.*

"I make a figure on the black-board like the cardboard."

"What kind of angle is this [pointing to 1]?" *A right angle.*

"And these [pointing to 2 and 3]?" *Sharp angles.*

"How many angles has this figure?" *Three angles.*



"Yes, and we may call the figure a *three-angle*, but there is a little word *tri* which means three, and we call the figure a *triangle*."

"How many sides has a triangle?" *Three sides.*

"And how many angles?" *Three angles.*

"Here is another triangle. How many sharp angles has it?" *Two sharp angles.*



"And what kind of angle is the other?" *A blunt angle.*