

**Drawing for all Grades — No. II.**

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As indicated in the introductory article, this series is intended to outline a combined course in ruler and freehand drawing. Before proceeding to freehand curves, two or three lessons with the ruler will be necessary. Interspersed with these, the freehand lessons should of course be kept up, by giving suitable exercises composed of straight lines as suggested last month.

Some teachers have an objection to the introduction of a ruler in connection with freehand drawing. If all the pupils of such teachers were born with a decided artistic tendency, the objection would probably hold good, but as such gifted pupils are usually in a very small proportion in an average class, any mechanical assistance is not only legitimate, but is to be commended. The use of the ruler will give children a better conception of straight lines and right angles, and these become their standards for comparisons with other lines and angles. Acquaintance with the ruler also gives a better idea of judging the lengths of lines and the sizes of objects, a faculty which many adults lack and would like to possess. Again, class work with the ruler is a great aid to mental calculation, and this alone should justify its inclusion. The teacher should be provided with a T-square, as a large straight edge is difficult to manipulate without assistance. The blade should be not less than three feet in length, and marked off in feet and inches. The children will require paper, pencils and rulers. The pencils for this work should be fairly hard, as clearer work and better lines can be obtained with them than with soft pencils. The rulers may be nine or twelve inches in length, bevelled at one edge, and should be divided into inches, halves and quarters. Smaller divisions are not required below Grade V, and are only confusing to the children. If possible, rulers with the lines marking the inches carried right across should be obtained. The reason for this will be apparent later. Before beginning to use the ruler, it is necessary that the children should understand the meaning of the marks on it. This may be made not only an instructive, but an exceedingly useful lesson to young children. The following will give some idea of such a lesson, but teachers will, of course, suit the questions to the class being taught, and if necessary make it a series of lessons.

Show a ruler. What is this? What is it for?

What kind of lines can we draw with it? What do you see on one side of it? Are the marks all alike? How many long marks are there? How many parts do the long marks divide the ruler into? This question is very important, as it is a very common mistake even for older children to confuse the marks with the parts which they separate. It should be made clear by a sketch of the ruler on the blackboard, or, if necessary, a piece of paper may be marked like the ruler, and then cut in pieces at the marks, allowing the children to count the pieces. The lesson can then proceed. What do you see near the long marks? Read the figures. Explain that the figures show the number of parts into which the ruler is divided, and that each of these parts is an inch. If a foot ruler is being used, give the term foot, and show that the twelve inches make up a foot. Allow some of the children to measure various objects in the room, such as the desk, table, door, wall, etc. Now let the children place the ruler down the left hand edge of the paper, and opposite each inch mark place a point with the pencil. (Fig. 7). Next let them place the ruler

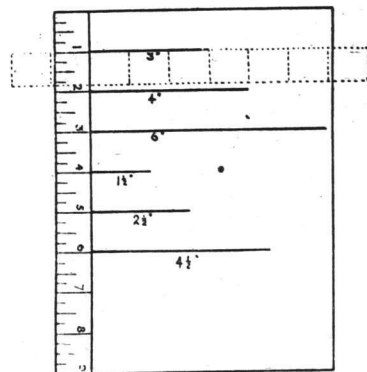


Fig. 7.

across the paper, in line with the top point, and as nearly as they can judge, parallel with the upper edge of the paper (see dotted lines in Fig. 7), and from the point draw a line, say, three inches long. From the next point, a line four inches, and from the next a line six inches may be drawn, the teacher passing quickly round the class to see that each child is correct. Care must here be taken that the pencil and ruler are held correctly. The ruler should be held firmly in position, with the fingers well spread, nearly in the centre of the ruler, never at the end. (Fig. 8). The pencil should be held sloping at an angle of about sixty degrees, with the point close in to the edge of the ruler touching the paper, so that the upper end of the pencil will be