

DRAWING.—IX.

9 to 11 a. m., Tuesday, 22 June, 1920.

Note.—All drawings must be made as large as possible within the space indicated. Good sized drawings alone will receive high marks.

(Any *eight* questions to be answered).

1. Make as complete a representation as you can in lead pencil of a group consisting of an onion, a turnip, and a potato by the side of a bowl. Let the drawing be harmoniously placed within a space 6"x5".
2. Make a drawing in pencil of the May Flower, or any other flower showing the growth of its *stem, leaves and flower*: or of a spray of leaves of the maple or any other tree showing clearly the *junctions* of the *leaves* with the *stem*.
3. Make a drawing in pencil or in crayons or in water colors of *one* of the following:—a boat, a ship, a plough, a harrow, a railway engine, a motor car, a sleigh or any object used in connection with the sea, or on a farm, or on the road.
4. Make such a drawing of *three* objects, as a wooden box, a tin can and a glass, as shall show the kind of reflecting surface that is peculiar to each object.
5. Make a drawing of a group of objects which shall illustrate some occupation such as baking day, carpentry, house painting, or some game such as cricket, football or hockey. When the drawing of the group is done, place a suitable environment about it if you can, and so make the picture complete. The group to be enclosed within a space 7"x5".
6. Name and group the colors of the spectrum in the order in which they occur in the rainbow. Name flowers, fruits, minerals birds or any natural object in which each color approximately occurs.
7. Represent any natural object such as a flower with its leaves, or a shell, or a bird, or a fish, or a butterfly, and make a design based upon its forms suitable for a border for a cover or blotter.
8. A. B. and C., are pine trees in a level country. A is one mile west and 2.5 miles north of B. C is 2.5 miles west and 4 miles to the south of B. Plot these points. Find the distance between the trees and the direction of C. from A.
9. A motor car runs 60 miles, turns thru an angle of 45° to the left, goes 10 miles, turns 90° to the left and goes 20 miles further. How far is it from the starting point?
10. Draw a circle with radius of 2 inches. In it describe a square and about it circumscribe a square. Measure the sides of the square and calculate how many times the area of the larger square is greater than the smaller.
11. The temperature at midday during the first week in June registered each day as follows:—60°, 68°, 66°, 70°, 78°, 72° and 64°. Make a chart or graph that will clearly show the variations of temperature.
12. Make a working drawing of a bench showing plan and a front and an end elevation. The bench is to be 24" long by 12" wide. The top is to be 2" deep and the legs 1" square. Plot to a scale of 2" to 1'.
13. A man on the ground observes the angle of elevation of the top of a barn to be 45°; and that of a windmill 12 feet high on the top of the barn to be 60°. How high is the barn, and how far from the barn is the man standing?