and west points; the position of the school and class-room, and of buildings and other objects visible from the playground, with reference to the cardinal points; the direction of the wind on different days, and whether a given wind brings rain, is hot or cold; the snow upon the mountains and lower hills, whether always seen or not: the distinction between clay. sand, and other very common rocks.

First lessons might be given in the playground, or the roadside near the school, upon the action of water running down a gentle slope to form streamlets, streams, and rivers. Models of damp sand or clay should be made by the teacher in the playground, or on a large wooden tray or a blackboard placed upon the floor, to illustrate the geographical features seen within a short distance of the school, and the children should make

smaller models of sand or clay or plasticine.

The children should be taught to make plans, first full-size, of wooden blocks or bricks, books, ink-pots, &c.; then plans, roughly to scale, from their own measurements of desks, tables, the class-room, the school, the playground; and the drawing of plans might be extended to such portions of the district within, say, three or four miles of the school as come within the common knowledge of the children. The direction of one or two of the nearest towns should be known, and a plan or simple map should be drawn upon the blackboard to show the relative position of these towns with reference to the school. All plans should be drawn in the first instance with the blackboard, slate, or paper in a horizontal position. (The drawing of plans may be very conveniently co-ordinated with the lessons in "brick-building" if this is taken as part of the course in "handwork.")

in "handwork.")

The geography indicated above is, strictly speaking, a part of nature-study, and should be treated accordingly.

## SENIOR DIVISION.

## Physical and Mathematical Geography.

First Year (S3).—The elementary geographical notions should be taught, or, if geography has been taken in S2, be extended as far as possible from actual observation (or, where this means cannot be used, from pictures), models and plans being constructed by the teacher and the children. The children should also be taught to observe the length of the shadow of a post at noon at different times of the year, noon being the time on any given day at which the shadow is shortest, and at which, therefore, the sun is highest in the sky (with indoor illustration of the same principle by the shadow of any object cast by a lamp or candle held at different heights); the more exact position of the north and south line, being the direction of the shadow at noon (the north and south line when found should be marked by two wooden pegs in the playground and by two brass nails in the class-room); the directions N.E., S.W., N.W., S.E., &c.; the compass, the fact being observed that the north and south ends of the needle point to the east and west respectively of the north and south line; the phases of the moon, and the number of days from new moon to new moon, from new moon to full moon, and from full moon to full moon; if the children live near the sea they should know, further, the time of high tide and low tide, and the interval between high tide and high tide, or low tide and low tide, or high tide and low tide; the chief forms of clouds—the "feather-cloud" (cirrus), the "heap-cloud" (cumulus), the "sheet-cloud" (stratus), the "rain-cloud" (nimbus); the most common birds, plants, and issects found near the school; the fact that water sinks very quickly through sand but not through clay.

Further lessons might be given outside on the action of water and the drainage of the earth's surface; river channel, source, mouth, tributary, wearing-away or denudation of the surface and deposition of alluvium (the terms "denudation," "deposition," "alluvium," need not necessarily

be used); the formation of deltas.

More extended and more accurate plans of the neighbourhood should be drawn to scale, observations and measurements being made by the children. There should be in every school a map, on a large scale, of the town or district, and a map of the education district or of the provincial district in which the school is situated. The children should know three or four of the most important places and geographical features within that district; but it is not desirable that any name should be known merely as "a name on the map": every name (and this is true throughout the whole course in geography) should be introduced to illustrate some principle, or in association with some interesting fact. Pictures of places or geographical features not known to the children should always be used, if available. The map of the district should be laid flat upon the ground