

**Reference List of Furniture and Equipment for  
Secondary School**

**Subject : NSS Geography**

Item No	Description	Quantit	Sketch No
<b>(I)</b>	<b>FURNITURE</b>		
<i>A</i>	<i>Geography Room</i>		
A1	<u>Pupils' tables</u>	24	ED-F46
A2	<u>Pupils' chairs, steel</u>	40	ED-F4
A3	<u>Chair, straight back, rattan seat</u>	1	ED-F3
A4	<u>Bookcase with glazed doors and lock</u>	1	ED-F9
A5	<u>Blackout Curtains**</u> - flameproof, preshrunk, thick and light proof material - 2 pieces for each window unit with rails - rufflette tape and hooks to fit windows	1 set	
<i>B</i>	<i>Geography Resource Room</i>		
B1	<u>Steel filing cabinet, 4 drawers, with locks</u>	1	ED-F10
B2	<u>Table, writing</u> with 2 locking drawers (steel)	1	ED-F7A
B3	<u>Chair, straight back, rattan seat</u>	1	ED-F3
<i>C</i>	<i>Geography IT Room</i>		
C1	<u>Tables for computer and printer</u> Table for computer & printer, overall dimensions 1000mm wide x 690mm high x 760mm deep. Materials (a) Legs and rails teakwood, seasoned and straight-grained and free from shakes; (b) Top 20 mm thick plywood top faced with acid and heat resistant plastic laminate lipped with 12mm thick teakwood edge all round. All surfaces should be sanded, filed and polished in natural lacquer. All arris-edges should be chamferred.	3	ED-F95B
C2	<u>Pupils' chairs, steel</u>	8	ED-F4
C3	<u>Steel Cupboard 2 doors</u> Cupboard, steel, double-door, fitted with 3 point locking espagnolette bolt, controlled	1	ED-F80 F80A/B

	by 6-lever lock with three adjustable		
<b>(II)</b>	<b>EQUIPMENT</b>		
<i>A</i>	<i>Chalkboard Equipment</i>		
A1	<u>Magnets</u> Colour magnets for the magnet board, with a minimum diameter of 3 cm.	15	
A2	<u>Compasses</u> Wooden varnished/plastic made up, overall length about 45cm, rubber non-slip tip on one leg and chalk holder on the other.	2	
A3	<u>Set Squares</u> (a) 45° Length of hypotenuse about 45cm. Provided with/without handle and with centimetre graduations on one edge. Corners are slightly rounded for safety, made of plastic/varnished wood. (b) 60° Similar to A3(a), but having angles of 90°, 60°, '30°. Length of hypotenuse about 50cm. Longest non-hypotenuse side graduated from 0 to 44 cm.	1  1	
A4	<u>Long Ruler</u> Plastic or wooden varnished, 1metre graduated in 1cm, with/without handle.	1	
A5	<u>Protractor</u> Half circle, plastic or wooden varnished, graduated in degree '0° to 180° in both directions, figured every 10o. The base is provided with a handle. Length of base	1	
A6	<u>Wooden Pointer</u> About 80cm.	1	
<i>B</i>	<i>Globes</i>		
B1	<u>Globe -Political</u> Showing clear locations of political of the world in colour, with a minimum diameter of 30cm, unted on wood/ moplastic/metal base with tilted axis.	1 (2)	
B2	<u>Globe-Physical</u> Showing mountains, rivers and other features of the earth's surface in colour, minimum 30cm diameter, mounted on wood/plastic/metal base with tilted axis.	1	
B4	<u>Physiographic Relief Globe</u> All of the major geologic landforms of the earth are depicted in raised relief. The two-piece globe construction provides students with a view of the cross- section of the earth, exposing the internal physical characteristics of the planet. The colourful	1	

	cutaway shows the earth's crust, mantle and inner and outer cores, and provides useful data such as temperatures, air densities, distances and atmospheric layers. The globe is markable.	
<i>C</i>	<i>Meteorological Instruments</i>	
C1	<b>Digital Weather Station</b> (1) a field unit consisting of sensors for measuring temperature, ultra-violet radiation, humidity, wind speed/direction, pressure and rainfall, and a display console for showing the (2) a software programme for transmitting the data to a PC and for running a user-friendly graphic display of the weather data in real-time on the (3) a software programme for transmitting the weather back to a local meteorological organisation for further	1
C2	<u>Six's Thermometer</u> To indicate present temperature as well as the highest and lowest temperatures since last resetting of indices. Ranges: about -30°C to 50°C, measures about 30cm in length. Thermometer as a single unit, e.g. a glass U-tube on a separate printed scale, with magnet for resetting the maximum and minimum temperatures. To be mounted on metal/plastic/wooden case.	1
C3	<u>Hygrometer with Celsius Tables</u> Wet and dry bulb thermometers mounted on plastic base-plate with printed scales from -30°C to 50°C (approx.). A plastic reservoir for the wet bulb is secured to the plate by a metal clip or strip, supplied with muslin thread. The table in Celsius is either printed on the base plate or on a separate sheet.	2
C4	<u>Wind Vane</u> Pointer rotates on a vertical steel shaft to be fixed on a mast. Indication of directions North, East, South and West are fixed to the shaft.	1
C5	<u>Thermometer, Maximum and Minimum</u> 2 thermometers about 20 cm in length mounted on a single unit. Mercury filled, dual scales, each calibrated in degrees Celsius and Fahrenheit. Weatherproof, all plastic casing and a push-button resetting system which does not require the use of	1

	a separate magnet. Range -35° to 50 °C (-31° to 122 °F).	
<i>D</i>	<i>Field Study Instruments</i>	
D1	<u>Measuring Tapes</u> Total length not less than 30 metres.	10
D2	<u>Prismatic Compasses (liquid- filled)</u> With prismatic reading, the pivoted dial and magnet assembly are liquid-filled and housed in a metal case about 60mm	1
D3	<u>Pocket Compasses</u> About 40 mm diameter, with circle in degrees and with compass points marked.	10
D4	<u>Orienteering Compasses</u> For rapid transfer of map bearings to field sightings and vice versa. The compass needle is enclosed in a clear liquid-filled housing, with a clockwise 0° - 360° scale and North/South index lines which can rotate on a rectangular clear plastic base plate. Convenient measuring scale on bevelled end and on one of the base plates.	20
D5	<u>5 in 1 Pocket Digital Weather Meter</u> Functions of the weather meter (about 15cm x 6cm x 2cm) include the measurement of wind speed, temperature, relative humidity, air pressure and altitude.	10
D6	<u>Rock Specimen Set</u> Packing in wooden/metal box. Including typical specimens of igneous, sedimentary and metamorphic rocks. Each specimen, more than 40mm x 40mm size, comprising a total of at least 40 pieces per set.	1
D7	<u>Abney level</u> A precision-made clinometer for measuring angles of elevation and depression. Scale divided 90° - 0°- 90° with vernier scale reading to 10min. of arc. Includes sighting tube with reflector and spirit level in case.	5
D8	<u>Ranging Rods</u> Ranging rod about 2 metres long (either in one piece or 2 pieces each of 1 metre long)	5
D9	<u>Soil Thermometer</u> Slotted aluminum/brass case with pointed end for easy insertion into soil. Encloses mercury/spirit in glass thermometer which	5

	may be read through a window in the tube; engraved stem to enable measurement at various depths, with range -10°C to 60°C x 1°C.	
D10	<u>Whirling Psychrometer</u> Wet and dry bulb thermometers with lens front stems, range -5°C to 50°C x 0.5°C, mounted in wooden/plastic frames to be rotated. With simple plastics conversion slide/plastic coated table in Celsius to compute relative humidity from the thermometer readings.	2
D11	<u>Laser / Infrared distance meter (up to</u> The meter (about 14cm x 3cm x 2cm) can be used to measure distance up to 100m as well as calculating area and volume.	5
D12	<u>Soil Testing Kit @</u> The test kit provides reagents and test tubes for measuring the level of lime, pH, phosphorus and potassium salts. Contained in a carrying case, for use in the field. Each reagent is sufficient for at least 50 tests. Complete with colour charts, for each test, and full instructions.	5
D13	<u>Environmental Test Kit (for water and / or air pollution) @</u> Designed to provide students with practical experience in environmental monitoring, this field kit supplies all of the required materials for investigations of the major types of air and/or water pollution. Water tests include dissolved oxygen (D.O.), hardness, chloride, phosphate, nitrate and pH. Air tests are for windblown particles, smoke density, nylon deterioration and carbon dioxide. Included in the kit are clear instructions, background information and sufficient reagents for at least 50 individual tests.	5
D14	<u>Simple Stereoscope</u>	5 pairs
D15	<u>Stop Watch</u> With a 0 - 60 seconds main dial graduated 0.2 second. The subsidiary dial reads up to 60 minutes and is graduated to 1 minute. Size: about 5.5 cm diameter x 1.5 cm deep.	10
D16	<u>pH meter</u> The meter (about 15cm x 3cm x 1cm) can be used for	10

	measuring the pH value of liquid from 0-14 ( $\pm 0.05$ ).	
D17	<u>Level angle finder</u> Each 8cm x 8cm x 2 cm It can be used to measure the angle of a flat surface / slope angles.	10
D18	<u>10xField Lens</u> About 18mm in diameter each The lens are used for the close inspection on rock composition.	10
<i>E</i>	<i>Atlas</i>	
E1	<u>Comprehensive Reference Atlas</u> Includes maps showing world and regional relief, climate, natural vegetation, political divisions and density of population, with some basic information, statistical tables and comprehensive index.	1
<i>F</i>	<i>Hong Kong Maps and Photographs</i>	
F1	<u>Maps Index @</u> (Published by Lands Department, H.K.) (a) 1:1 000 Large Scale Plan Index (Index	1
F2	<u>Geological Maps @</u> HGM 20 series (Sheets 2-16)	1 set
F3	<u>End-maps for Hong Kong Annual Report</u> 20 copies of any 5 sheets to be selected by the school	100
F4	<u>Topographic Maps @</u> (a) Series HM20C (1:20 000) (Sheets 2-16) (b) 20 copies of any 3 sheets in Series HM20C (1:20 000) to be selected by the school (c) Series HM50CP (1:50 000) (2 sheets) (d) Series HM100CL (1:100 000) (e) Series HM200C (1:200 000)	2 sets 60 copies 2 sets 5 copies 50 copies
F5	<u>Large Scale and Medium Scale Plans@</u> To be selected by the school from the following scales: (a) Series HP1C (1:1 000) (b) Series HP5C (1:5 000) (c) Series SM10D (1:10 000) (d) Series SM15D (1:15 000) (Kowloon & Hong Kong- 2 sheets)	50 copies (10 copies per selected sheet)
F6	<u>Countryside Series Sheets @</u> Hong Kong Island Central N.T. North-West N.T.	1 1 1

	Lantau Island	1
	Outlying Islands	1
	Sai Kung and Clear Water Bay	1
	North-East N.T.	1
F7	<u>Hong Kong Guide - Streets &amp; Places@</u>	1
F8	<u>Vertical Aerial Photos (Black &amp; White) @</u> To be selected by the school.	10
F9	<u>Ground and Oblique Aerial Photos (Black &amp; White) @</u> To be selected by the school.	15 copies
F10	<u>Vertical Aerial Photos (Colour) @</u> To be selected by the school	5 pairs
F11	<u>Ground and Oblique Aerial Photos (Colour) @</u> To be selected by the school	15 copies
G	<i>Aerial Photos and Maps of U.K. and other Countries</i>	
G1	<u>Aerial Photos @</u> To be selected by the school	
G2	<u>Ordnance Survey Maps @</u> (a) Landranger Sheets (1:50 000) (b) Student Map Packs (c) Examination Map Extracts	
G3	<u>Aerial Photos and Maps of Other Countries @</u> e.g. - Australia 1:100 000 topographic maps - Canada 1:50 000 topographic maps - New Zealand 1:50 000 topographic maps (NZMS 260 sheets) - USA 1:24 000 or 1:25 000 topographic To be selected by the school	
<b>I</b>	<b>IT Equipment</b>	
<u>II</u>	<u>Computer Softwares, GIS Software and data files</u>	
	Softwares to be selected by the school:	No
	(a) Softwares in floppy diskette, CD ROM DVD providing either updated facts and data for themes covered by the geography curriculum or simulation	specified quantity but controlle d
	exercises. For example, The Physical (PC Version), World Atlas (CD-ROM for Windows), Microsoft ENCARTA Encyclopaedia, Simcity, Simfarm.	by ceiling of the estimate
	(b) GIS software and data files	d cost

I2	<u>Desktop Computers</u> Three sets of desktop computers equipped with essential software. Specifications should conform to the latest standard of desktop computers acquired by school via the bulk contract of information technology (IT) equipment	3	
I3	<u>Printers</u> One printer. Specifications should conform to the latest standard of printers acquired by school via the bulk contract of information technology (IT) equipment.	1	

Notes:

@ Consumable items

\*\* 1. For the installation of curtain rails, the school should follow the suggestions from Architectural Services Department of the Particular Specification for Curtain Tracks.

**Particular Specification for Curtain**

The curtain tracks shall be an approved proprietary brand, 'Kirsh' (USA) or complete with matching fittings of the same make, as follows -

- (a) Rigid UPVC T box section track with nylon slides;
- (b) Regular of double duty enamelled steel 'C' section track with nylon runner; and
- (c) Regular of double duty enamelled steel 'C' section track complete with cord

The curtain tracks shall be fixed in accordance with the manufacturer's including runners at the rate of 13 Nos. per metre and all other accessories including bracket.

stopped ends and overlap set. Cord sets shall be installed and left in proper working

The curtain tracks shall be able to provide adequate support for the type of curtains to be installed.

The curtain tracks shall be subject to a defects liability period of 12 months. period, any defective work shall be rectified by the contractor at his own costs.

- 2. The flammability of the curtain complies with the requirements of BS5867/Pt II 1980
- 3. A copy of flame-proof certificate should be obtained from successful tenderers.