

SOIL GROUP	PRINCIPAL SOIL TYPE	Particle Size (mm)	Visual Identification	Density/ Consistency		Discontinuities	Bedding	Colour	Composite soil types (mixtures of basic soil types)	Minor constituent type	Particle Shape	PRINCIPAL SOIL TYPE	Minor Constituents
				Term	Field Test								
Very Coarse Soils	BOULDERS	large boulder 630	Only seen complete in pits or exposures	None defined	Qualitative description of packing by inspection and ease of excavation.	Describe spacing of features such as fissures, shears, partings, isolated beds or laminae, desiccation cracks, rootlets etc.	Describe thickness of beds in accordance with geological definition		For mixtures involving very coarse soils see BS 5930 Cl4.1.4.4.2		Very angular	BOULDERS	
		boulder 200											
Coarse Soils (over about 65% sand and gravel sizes)	GRAVEL	coarse 63	Easily visible to naked eye; particle shape can be described; grading can be described.	Borehole with SPT N - Value		Fissured Breaks into blocks along unpolished discontinuities	Inter-bedded or if in equal proportions.	LIGHTNESS	slightly (sandy) see Note 2	<5 %	Subangular	GRAVEL	with rare with occasional with numerous/ frequent/ abundant
		medium 20		Very Loose	0 - 4								
	SAND	fine 6.3	Visible to naked eye; no cohesion when dry; grading can be described	Loose		Sheared Breaks into blocks along polished discontinuities	Otherwise thickness of and spacing between subordinate layers defined.	CHROMA	(sandy) see Note 2	5 - 20 % see Note 3	Subrounded	SAND	Terms can include: shell fragments pockets of peat gypsum crystals flint gravel brick fragments rootlets plastic bags
		coarse 2		Dense	10 - 30								
	SILT	coarse 0.063	Only coarse silt visible with hand lens; exhibits little plasticity and marked dilatancy; slightly granular or silky to the touch; disintegrates in water; lumps dry quickly; possesses cohesion but can be powdered easily between fingers.	Very soft		Scale of spacing of discontinuities	Scale of bedding thickness	HUE	slightly (sandy) see Note 4	<35 %	Well rounded	SILT	Terms can include: glaucconitic micaceous shelly
		medium 0.02		Finger easily pushed in up to 25 mm Exudes between fingers	Term								
	CLAY	fine 0.0063	Dry lumps can be broken but not powdered between the fingers; they also disintegrate under water but more slowly than silt; smooth to the touch; exhibits plasticity but no dilatancy; sticks to the fingers and dries slowly; shrinks appreciably on drying usually showing cracks.	Soft		widely	Very thickly bedded	Pink	(sandy) see Note 4	35 - 65 % see Note 6	Cubic Flat Elongate	CLAY	Proportions defined on a site or material specific basis or subjectively
		0.002		Finger pushed in up to 10 mm Moulded by light finger pressure	Very								
				Firm		Closely	Thinly bedded	Green	very (sandy) see Note 5	>65 % see Note 6	Silty CLAY	CLAY	Proportions defined on a site or material specific basis, or subjectively
					Thumb makes impression easily Cannot be moulded by fingers Rolls to thread								
				Stiff		Extremely	Thickly laminated	White	under 20		Clayey SILT	CLAY	
					Can be indented slightly by thumb Crumbles in rolling thread Remoulds								
				Very stiff		closely	Thinly laminated	Grey					
					Can be indented by thumb nail Cannot be moulded, crumbles								
				Hard				Black					
					Can be scratched by thumb nail (or extremely weak)								

Organic Soils	Condition		Accumulated in situ		Transported mixtures		NOTES
	Term	Colour	Term	Colour	Term	Colour	
Firm	Fibres compressed together	PEAT	Predominantly plant remains, usually dark brown or black in colour, distinctive smell, low bulk density. Can include disseminated or discrete inorganic particles	PEAT	Dark grey	Contain finely divided or discrete particles of organic matter, often with distinctive smell, may oxidise rapidly. Describe as for inorganic soils using terms above	1) % coarse or fine soil type assessed excluding cobbles and boulders
			Fibrous peat				
Spongy	Very compressible Open structure	Pseudo- fibrous peat	Plant remains recognisable and strength lost. Turbid water and <50% solids on squeezing	Amorphous peat	Dark grey	Slightly organic	2) Gravelly or sandy and/or silty or clayey
			Amorphous peat				
Plastic	Can be moulded in hand. Smears fingers	Gyttja	Decomposed plant and animal remains. May contain inorganic particles	Humus	Black	organic	3) Or described as fine soil depending on mass behaviour
			Humus				
						very organic	4) Gravelly and/or sandy
							5) Gravelly or sandy
							6) Or described as coarse soil depending on mass behaviour