facet	Name of category	Description:	Top Terms	Examples of included terms:	Excluded terms:	Mapping to previous MLT categories:
Transportable objects	Chemical elements CHEI	Chemical elements, ions and isotopes and names for groups of elements (actinides, etc.)	• HALOGEN • INERT GAS • ION • ISOTOPE • METAL • METALLOID • NONMETAL • TRANS-URANIUM ELEMENT • RARE EARTH ELEMENTS		• radiometric dating methods (in Methods) • isotope ratios (in Properties) • elements and isotopes as commodities (in Commodities and Natural Resources)	most from CHEE
Transportable objects	Chemical substance CHCP	Inorganic chemical components and organic compounds	• INORGANIC COMPOUND • ORGANIC COMPOUND	ethane, fulvic acid		most from CHES, ORGS, some from CHEE
Transportable objects	Commodities and Natural Resources COMR	Mineral deposits, ores, hydrocarbon resources, timber and other material commodities for human consumption	• ENERGY SOURCE • MINERAL RESOURCE	Fullers earth, iron ore, peat, petroleum	• water resources (in Waters) • natural geothermal water (in Waters) • harnessing of geothermal energy (in Human Activities) • ore bodies (in Endogenic structures)	most from COMS, some from ECON
Non-transportable / Fixed location objects	Earth Realms and Environments RENV	Realms and environments of the solid earth, oceans and atmosphere. They are defined by their ambient hydrological, chemical, physical, biological or climatic properties.	• ATMOSPHERE • BIOSPHERE • ENVIRONMENT • HYDROSPHERE • SOLID EARTH	Core, mantle, crust, lithosphere, ionosphere, biosphere, pelagic environment, lagoonal environment, arid environment, low velocity zone	• realms outside the earth's atmosphere (in Extraterrestrial Bodies)	includes terms from SEDI, SURF, PALE, MARI
Non-transportable / Fixed location objects	Endogenic structures STRT	Types and named instances of geologic structures which are predominantly inside the earth although they may have a surface expression. These are usually produced by endogenic processes,	• INTRUSIVE BODY • TECTONIC FEATURE • METASOMATIC FEATURE • SUBSURFACE RESERVOIR	disjunctive fold, lateral fault, magma chamber, volcano, horst, salt dome, hot spot, batholith, dyke swarm, ore bodies		includes terms from STRU

facet	Name of category	Description:	Top Terms	Examples of included terms:	Excluded terms:	Mapping to previous MLT categories:
Non-transportable / Fixed location objects	Extraterrestrial bodies EXTB	i.e. tectonics, volcanism, isostacy. Types and named instances of natural bodies that exist or originate from outside the earth, including realms and structural and topographic features of those bodies	• COSMIC DUST • SOLAR SYSTEM • COMET	Jupiter Planet, Iapetus satellite, intestellar space, Lunar craters, Mare, Comets, meteors, mars atmosphere	• classes of meteorite (in Rocks and Sediments) • artificial satellites (in Man Made Objects) • impact structures on earth (in Geomorphological Features)	half of terms from EXTR (not meteorites)
Non-transportable / Fixed location objects	Geomorphological features SUGM	Types and named instances of landforms and submarine topographic features. The feature must be observable on the earth's surface or sea bed but may have been formed by endogenic or exogenic processes.	• EOLIAN FEATURE • EROSION FEATURE • FLUVIAL FEATURE • FLUVIOGLACIAL FEATURE • GLACIAL FEATURE • IMPACT FEATURE • LACUSTRINE FEATURE • SEA-BOTTOM FEATURE • SHORE FEATURE • VOLCANIC FEATURE • BIOGENIC FEATURE • COLLAPSE FEATURE • CRYOGENIC FEATURE • DEPOSITION FEATURE • HYDROGRAPHIC FEATURE • MASS MOVEMENT FEATURE • PALEOGEOMORPHOLOGICAL FEATURE • WEATHERING FEATURE	drumlin, dune, intermontane basin, lagoon, atoll, hanging valley, volcanic cone, scree slope, impact structure, submarine canyon, mountain, braided channel, flood plain	• any feature which would not be understood by a geographer or geomorphologist (in Endogenic structures) • bodies of water or ice (in Waters)	includes terms from SURF
activities	Human activities HUMA	All activities undertaken by people that affect or are affected by the surface or subsurface environment	• INTERNATIONAL COOPERATION • MEETING	conservation, pollution, expeditions, legislation, land use, agriculture, policy, protection, conservation, mining	• methods employed in activities (included in Methods)	many from ENVI
anthropogenic origin	Instrumentation INEQ	• Tools used in the process of taking measurements • Equipment used in the laboratory	• OBSERVATION PLATFORM • INSTRUMENT	extensometer, magnetometer, geophone	• Field measurements (include in Survey results)	INST

facet	Name of category	Description:	Top Terms	Examples of included terms:	Excluded terms:	Mapping to previous MLT categories:
		or the field for research, mapping			• Maps (include in Survey results)	
anthropogenic origin	Man made objects MADD	Engineered structures, both surface or subsurface, small and large scale	• ARCHEOLOGICAL SITE • BUILDING • EARTHWORK • EXCAVATION • HIGHWAY • MARINE INSTALLATION • MINE • PIPELINE • RAILROAD • RESERVOIR • TAILING • TUNNEL • WATERWAY • WELL	highway, harbor, building, dam, Skylab	• Tools (include in Instruments and equipment)	most from ENGI
activities	Methods METO	All methods and models used both in the field and in the laboratory for exploration, research or testing. Includes mathematical, statistical, chemical, physical, and field methods. Also includes techniques.	• ANALYTICAL METHODS • DATA ACQUISITION • DATA PROCESSING • EXPERIMENTAL STUDIES • MATHEMATICAL METHOD • OBSERVATION	flotation, cone penetration test, magnetic method, spectroscopy, finite element analysis		METH
Transportable objects	Minerals MINR	Types and names of minerals	• ALLOYS • ARSENATES • BORATES • CARBIDES • CARBONATES • CHROMATES • HALIDES • HYDROXIDES • IODATES • MOLYBDATES • NITRATES • NITRIDES • ORGANIC MINERALS • OXIDES • PHOSPHATES • PHOSPHIDES • SILICATES • SILICIDES • SULFATES		• mineral ores (in commodities and Natural Resources)	all from MINS

facet	Name of category	Description:	Top Terms	Examples of included terms:	Excluded terms:	Mapping to previous MLT categories:
			• SULFIDES • TUNGSTATES • VANADATES • HALOGENIDES			
	Miscellaneous MISS	people, types of publications, organizations	• MATERIAL • OBJECTIVE • THEORY	lexicon, Darwin, IUGS		many from MISC
Transportable objects	Non-mineral, non-biological rock components RCMP	Constituent parts of rocks other than individual mineral names or organism parts	[not yet elaborated and not edited]	sparite, micrite, bitumen	• mineral components of rocks (in Minerals) • biological components of rocks (in Organisms, Parts and Traces)	
Transportable objects	Organisms, Parts and Casts PALT	Organisms, alive or dead, and their parts and casts	• ANIMALIA • BACTERIA • FUNGI • PLANTAE • PROTISTA • PROBLEMATICA • VIRUS	fossils, skeletons	• biogenic materials (in Rocks and Sediments) • ichnofossils (in Textures and Structures)	most from PALE, PALS, some from STRA
Events	Processes and phenomena NAPR	Natural physical, chemical, mechanical processes and events including geologic hazards	• EFFECT OF SINGLE PHENOMENON • PROCESS	eruptions, erosion, precipitation, tides, wind, waves, solar energy, damage, seismic risk, self-organization, structural controls, biogenic effects		varies
attributes	Properties PCPR	Natural and artificial properties and characteristics of materials including physical and chemical properties; measurable and observable parameters	• AGE • CHEMICAL PROPERTY • COMPOSITION • PHYSICAL PROPERTY • GEOMETRICAL PROPERTY • HYDROLOGICAL PROPERTY • MATHEMATICAL PROPERTY • PROCESS PROPERTY • PROPERTY CHARACTERISTICS	density, colour, hydrophobicity		PHCH
Transportable objects	Rocks and	Types of igneous, metamorphic and	• IGNEOUS ROCK	dolomitic limestone,	• types of rock matrix	SEDS, IGNS,

facet	Name of category	Description:	Top Terms	Examples of included terms:	Excluded terms:	Mapping to previous MLT categories:
	Sediments ROSD	sedimentary rocks, including types of meteorite.	• METAMORPHIC ROCK • SEDIMENT • SEDIMENTARY ROCK	H-chondrite, host rock, I-type granite, ironstone	(in Non-mineral, non-biological rock components)	IGMS
theoretical issues	Scientific disciplines, theories, notions, principles SCDC	Description and discussion of general disciplines, concepts, theories, or principles	• ARCHEOLOGY • ASTRONOMY • BIOLOGY • HISTORY • HYDROLOGY • MATHEMATICS • PHILOSOPHY • TAXONOMY • AGRONOMY • CHEMISTRY • ECONOMICS • ENGINEERING • GEOSCIENCES • INFORMATICS • MEDICAL SCIENCES • PHYSICS	• Disciplines -- economic geology, engineering geology, extraterrestrial geology, geochemistry, hydrology, geology, marine geology, mineralogy, paleontology, petrology, sedimentology, sedimentary petrology, solid-earth geophysics, stratigraphy • Principle – uniformitarianism • Theories – Gaia hypothesis	• Specific properties related to a discipline (include in Properties) • Specific process related to a discipline (include in Processes and Phenomena) • Application of principles (may be included in various categories)	
Transportable objects	Soil Systematics SOSS	Types and classifications of soil, soil horizon and soil moisture	• SOIL • SOIL PROFILE	aterite, capillary water, alluvium, loess, permafrost		most from SUSS
theoretical issues	Stratigraphy systematics, orogenic phases, and facies names STFA	Formal names for divisions of geologic time including biozones, chronozones, etc., rock units, orogenic phases and regional facies	• CHRONOSTRATIGRAPHIC UNITS • OROGENY • TEXTURES AND STRUCTURES • GLACIATIONS • LITHOSTRATIGRAPHIC UNITS • MAGNETOSTRATIGRAPHIC UNITS • METAMORPHIC FACIES • PALEOGEOGRAPHIC REGIONS • SEDIMENTARY FACIES	Archean, Appalachian Phase, Hercynian Orogeny		many from STRS

facet	Name of category	Description:	Top Terms	Examples of included terms:	Excluded terms:	Mapping to previous MLT categories:
anthropogenic origin	Survey products SURV	For products resulting from field measurements	• MAP • MODEL • AUDIO VISUAL MATERIAL • CATALOG • DIAGRAM • DIGITAL INFORMATION SYSTEM • IMAGE • PHYSICAL SAMPLE • WRITTEN MATERIAL	log, spectra, isobath, inventory, accelerogram, geologic map	• Field methods (include in Methods) • Laboratory results (include in Properties)	includes terms from most previous categories
attributes	Textures and Structures TEXS	Rock and soil textures, fabrics and sedimentary structures i.e. • descriptors of the relationship between different parts of a rock or soil (i.e. the internal structure) • descriptors of the external form of the bedding, bedding plane markings and deformations that are formed during or immediately after deposition of a sediment and prior to diagenesis • descriptors of the grains of minerals that form the rock or soil (such as shape, size, degree of crystallinity) • descriptors of the contact relationship between these grains.	• FABRIC • SEDIMENTARY STRUCTURE • INCLUSION • TEXTURE	jointing, imbrication, hypocrystalline texture, cross-bedding, flute casts, convolute bedding, slump structures, mud volcanoes, ichnofossils	• structures formed after diagenesis (in Endogenic Structures) • fossil casts (in Organisms, Parts and Casts)	includes all from TEST (all from TEXS and SEST in Utrecht versions of MTG categories)
Non-transportable / Fixed location objects	Waters HYDR	Types of water, ground water, and surface water bodies, including ice bodies	• ATMOSPHERIC PRECIPITATION • GROUND WATER • ICE • SEA WATER • SURFACE WATER	ice field, glacier, groundwater, lake, waterfalls, artesian water, geothermal water, flood water	• soil pore water (in Soil Systematics)	some from SURF, some from GEOH