

The Geology
of...

Fluorescent Lights

(Overhead)



ITEM

ELEMENTS/COMPOUNDS

MINERAL SOURCE

Glass Tube

Silica, lime, soda ash

Quartz sand, calcite

Glass Coating

Phosphors

Antimony, manganese, europium,
terbium

Electrodes

Tungsten

Barium, strontium, calcium
oxides, wolframite

Glass Tube Filling

Inert gases

Argon, xenon, neon, krypton,
mercury vapor

Wiring

Copper, zinc, nickel

Chalcopyrite, galena, laterite

Plugs and Sockets

Copper, zinc, nickel

Chalcopyrite, galena, laterite

The Geology
of...

Paper, Pencils & Pens



ITEM

ELEMENTS/COMPOUNDS

MINERAL SOURCE

Paper Coating

Titanium dioxide

Ilmenite, rutile

Paper Fillers

Limestone, clay, magnesium,
barium

Calcite, kaolin, talc, barite

Paper Colors

Pigments

Lapis lazuli (blue), pyrite (yellow),
hematite (red), malachite (green)

Pencil 'lead'

Carbon, clay

Graphite and clay

Pen Tip

Tungsten

Scheelite, wolframite

Pen Ink

Fillers and plastics

Calcite, mica, talc, iron salts

The Geology of...

Computers



ITEM	ELEMENT/COMPOUND	MINERAL SOURCE
Monitor	Silica, metals, lead, indium-tin oxides, lead, iron, aluminum	Quartz sand, silver, indium, cassiterite, galena, hematite, bauxite
Plastic case/ Keyboard	Thermoplastic, calcium, titanium oxide	Petroleum, calcite, gypsum, titanite, rutile
Battery	Spodumene, cobalt, nickel, manganese, carbon	Lithium, cobaltite, laterite, rhodochrosite, graphite
Circuitry / Microprocessor	Silicon, copper, gold, silver, tin, aluminum, zinc	Quartz, chalcopyrite, gold, silver, cassiterite, bauxite, sphalerite
Wiring	Copper, zinc, nickel	Chalcopyrite, sphalerite, laterite
Plugs and Sockets	Copper, zinc, nickel	Chalcopyrite, sphalerite, laterite

The Geology
of...

Your Classroom



ITEM	ELEMENT/COMPOUND	MINERAL SOURCE
Desk	Copper, zinc, nickel	Chalcopyrite, sphalerite, laterite
Chalk	Limestone	Calcite
Doorknob	Iron	Hematite, magnetite
Plastic Chairs	Petroleum products, talc, limestone, silica	Calcite, quartz, wollastonite
Windows	Silica sand, feldspar	Quartz, feldspar
Television/ Smartboard	Aluminum, beryllium, copper, rare earth elements, spodumene, silica	Bauxite, bertrandite, chalcopyrite, europium, gallium, germanium, gold, indium, lithium, quartz, platinum, selenium