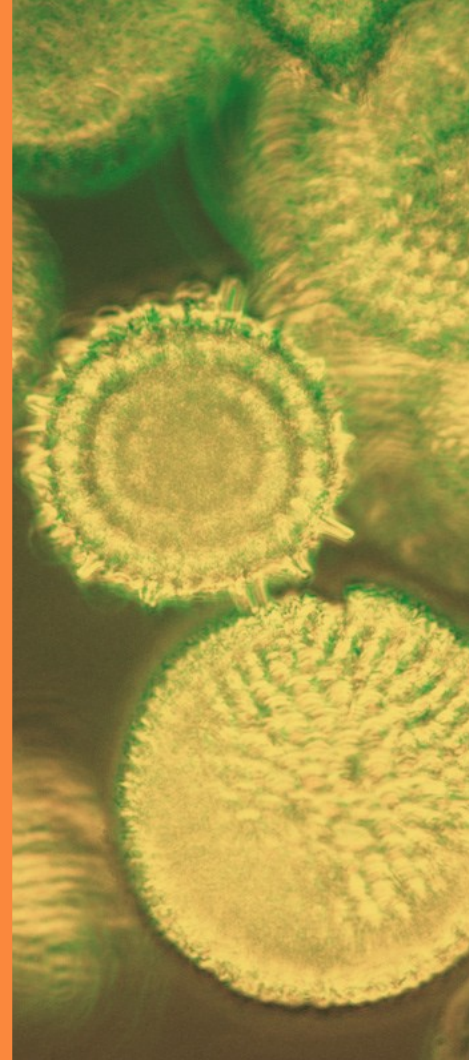


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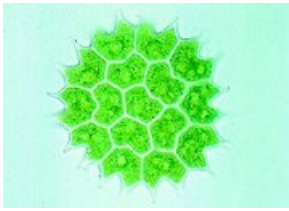
Ecology
MICROSCOPE SLIDES

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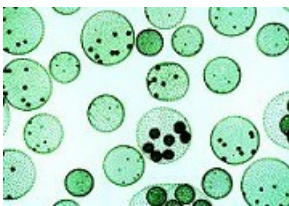
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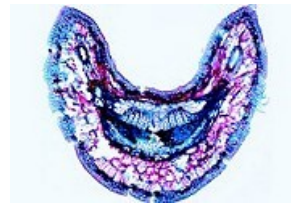
[Cat #: JL-1EM](#)**Microscopic Life in the Water Slide Set, Part 1****25 slides**

- 1 - Amoeba proteus, amoeba
- 2 - Ceratium hirundinella, dinoflagellates
- 3 - Euglena, green flagellate with eyespot
- 4 - Radiolaria, marine rhizopods
- 5 - Paramecium, nuclei stained
- 6 - Stylonychia, a common ciliate
- 7 - Spongilla, fresh water sponge, isolated spicules
- 8 - Hydra, w.m. or section
- 9 - Rotatoria, rotifers, mixed species
- 10 - Daphnia, water flea, a phyllopod
- 11 - Cyclops, a copepod
- 12 - Chironomus, gnat, larva w.m.
- 13 - Putrefaction causing bacteria from hay infusions
- 14 - Oscillatoria, a filamentous blue green alga
- 15 - Diatomeae, diatoms, mixed species
- 16 - Desmidiaceae, desmids, mixed species
- 17 - Spirogyra, green alga with spiral chloroplasts
- 18 - Eudorina, small colonies within gelatinous sheaths
- 19 - Cladophora, green alga, branched filaments
- 20 - Draparnaldia, main filaments and branchings
- 21 - Microcystis, irregular colonies
- 22 - Ulothrix, filamentous green alga with girdle-shaped chloroplasts
- 23 - Oedogonium, vegetative filaments
- 24 - Volvox, with daughter colonies and sexual stages
- 25 - Mesothaenium, rod-shaped desmids

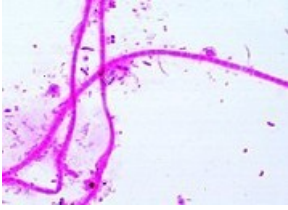
[Cat #: JL-2EM](#)**Microscopic Life in the Water Slide Set, Part 2****25 slides**

- 1 - Arcella, shelled ameba
- 2 - Vorticella, a stalked ciliate
- 3 - Colpidium, a common holotrich ciliate
- 4 - Spongilla, fresh water sponge, t.s. showing channels
- 5 - Planaria, fresh water flat worm, t.s. of body
- 6 - Tubifex, a fresh water oligochaete
- 7 - Plumatella, moss animal, section of colony
- 8 - Cyclops, nauplius larva w.m.
- 9 - Culex pipiens, common mosquito, larva w.m.
- 10 - Sphaerotilus natans, bacteria from putrid water forming chains
- 11 - Nostoc, blue green alga with heterocysts

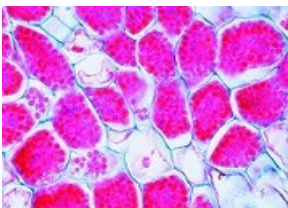
- 12 - Anabaena, filamentous blue green alga
- 13 - Gloeocapsa, small colonies within sheaths
- 14 - Rivularia, blue green alga with basal heterocysts
- 15 - Beggiatoa, a colourless alga showing lack of chlorophyll
- 16 - Zygnuma, filamentous alga with stellate chloroplasts
- 17 - Cosmarium, desmid showing the typical isthmus
- 18 - Chlamydomonas, biflagellate alga
- 19 - Haematococcus, unicellular red algae
- 20 - Hydrodictyon, water-net
- 21 - Chlorella, unicellular green alga
- 22 - Dynobryon, a golden alga forming colonies
- 23 - Mixed plankton, strewn slide No. I
- 24 - Mixed plankton, strewn slide No. II
- 25 - Mixed plankton, strewn slide No. III

[Cat #: JL-3EM](#)**The Woods Consequences of Environmental Pollution Slide Set****20 slides**

- 1 - Pine (Pinus), healthy leaves, t.s.
- 2 - Pine (Pinus) leaves damaged by acid rain, t.s.
- 3 - Fir (Abies), healthy leaves, t.s.
- 4 - Fir (Abies), stem tip damaged t.s.
- 5 - Beech (Fagus), healthy leaves t.s.
- 6 - Beech (Fagus), t.s. of leaves with destroyed epidermis and chloroplasts
- 7 - Rhytisma acerinum, tar spot of maples, consequence of single-crop farming
- 8 - Early leaf fall, caused by thawing salt
- 9 - Healthy lichen, indicator of clean air
- 10 - Damaged lichen, caused by air pollution
- 11 - Healthy wood of beech, t.s.
- 12 - Wood destroyed by fungus
- 13 - Polyporus, wood rot fungus, fruiting body t.s.
- 14 - Root nodules of Alnus, with symbiotic bacteria
- 15 - Spruce beetle (Cryphalus picea), larva t.s.
- 16 - Wood with normal annual rings, t.s.
- 17 - Wood with anomalous narrow annual rings caused by drought, t.s.
- 18 - Bark with larval galleries of spruce beetle, t.s.
- 19 - Pineapple-like gall on spruce caused by lice, t.s.
- 20 - Gall nut on oak caused by insects, t.s.

Cat #: JL-4EM**The Water Pollution,
Problems and Results Slide Set****20 slides**

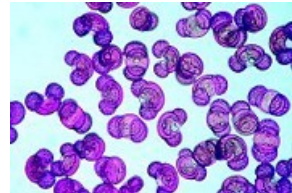
- 1 - Intestinal bacteria (*Escherichia coli*) from putrid water
- 2 - Putrefactive bacteria (*Spirillum*) from sludge poor in oxygen
- 3 - Putrefactive bacteria (*Sphaerotilus*) bacteria, forming long chains with sheaths
- 4 - Sludge bacteria (*Methanobacterium*) causing sewer gas
- 5 - Sulphur bacteria (*Thiocystis*)
- 6 - Wasserbluthe (*Microcystis*), blue-green alga "blooming" in stagnant water
- 7 - *Anabaena*, blue green algae, in eutrophic water
- 8 - *Spirogyra*, filamentous green alga in nutrient-rich water
- 9 - *Spirulina*, corkscrew-shaped algae occurring in bitter seas
- 10 - *Chlamydomonas*, one-celled green alga in eutrophic water
- 11 - *Cladophora*, green alga with branching filaments from moderately polluted water
- 12 - Diatoms, mixed algae from scarcely polluted water
- 13 - *Euglena*, common green flagellates occurring in stagnant eutrophic water
- 14 - Ciliates, different species from nutrient-rich water
- 15 - Rotifers (*Rotatoria*), small animals from putrid water
- 16 - *Tubifex*, fresh water oligochaete, living in the sludge
- 17 - *Carchesium*, bell-shaped stalked ciliate from moderately polluted water
- 18 - Water mould (*Saprolegnia*), harmful to plants and animals
- 19 - Skin of fish injured by chemicals, t.s.
- 20 - Skin ulcer of an amphibian, t.s.

Cat #: JL-5EM**Life in the Soil Slide Set****17 slides**

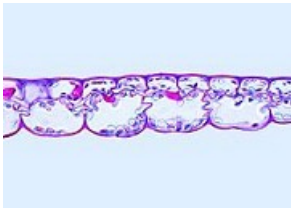
- 1 - Acidophile soil bacteria, solution of heavy metals
- 2 - Nitrite bacteria, forming harmful nitrogenous

substances

- 3 - Root of beech with ectotrophic mycorrhiza, t.s.
- 4 - Root of birch with partly endotrophic mycorrhiza, t.s.
- 5 - Root of lupin with symbiotic nitrogen fixing bacteria
- 6 - Netted venation, portion of rotted deciduous leaf
- 7 - Charlock (*Sinapis*), t.s. of stem. Green manure plant
- 8 - Soil bacteria (*Bacillus megaterium*), smear
- 9 - Hyphae of root fungi, t.s.
- 10 - Lichen, indicator of clean air
- 11 - Mushroom (*Xerocomus*), mycelium
- 12 - Root of willow (*Salix*), planting protecting against erosion
- 13 - Earthworm (*Lumbricus*) t.s., causing soil improvement
- 14 - Springtails (*Collembola*), w.m.
- 15 - Mite from forest soil, w.m.
- 16 - Constituents of humous soil
- 17 - Constituents of peaty soil

Cat #: JL-6EM**Air Pollution and Allergens Slide Set****15 slides**

- 1 - Pollen grains of different kinds of grass
- 2 - Pollen grains of different deciduous trees
- 3 - Pollen grains of different conifers
- 4 - Mixed house dust
- 5 - Dust mite from a living room
- 6 - Spores of different fungi
- 7 - Wood powder
- 8 - Asbestos powder (cancerogenous)
- 9 - Talcum powder
- 10 - Crystals of washing-powder
- 11 - Polyamide fibres
- 12 - Nylon fibres
- 13 - Mucous membrane of human nose, t.s.
- 14 - Healthy human lung, t.s.
- 15 - Human lung injured with dust particles, t.s.

Cat #: JL-7EM**Adaptation of Plants to Environment Slide Set****50 slides****Adaptation to temperature**

- 1 - Ilex, t.s. of leaf showing cuticula
- 2 - Aesculus, t.s. of leaf bud showing bud squama
- 3 - Fern, t.s. of subterraneous rhizome
- 4 - Beta, beet, t.s. of a subterraneous storage root
- 5 - Solanum, potato, t.s. of subterraneous tuber
- 6 - Allium, l.s. of a subterraneous bulb
- 7 - Ranunculus ficaria, t.s. of subterraneous tuber
- 8 - Taraxacum, dandelion, t.s. of tap root
- 9 - Dentaria, l.s. of germinal bulb

Adaptation for gaining light

- 10 - Galium, w.m. of leaf showing climbing hairs
- 11 - Cucurbita, l.s. of stem showing sieve tubes
- 12 - Viscum album, t.s. of leaf
- 13 - Orchis, epiphytic, t.s. of aerial root
- 14 - Dischidia, t.s. of pitcher leaf showing root

Adaptation to unusual modes of nutrition

- 15 - Rhizophora, mangrove, t.s. of adventitious root
- 16 - Philodendron (Araceae), t.s. of aerial root
- 17 - Liana, climbing plant, t.s. of root
- 18 - Cuscuta, dodder, t.s. of host showing haustorium
- 19 - Viscum album, mistletoe, l.s. showing parasitic root in host
- 20 - Orchis, t.s. of root showing endotrophic mycorrhiza
- 21 - Alnus, alder, t.s. of tuber showing actinomyces in symbiosis
- 22 - Drosera, w.m. of leaf showing glandular hairs
- 23 - Drosera, t.s. of leaf showing glandular hairs
- 24 - Pinguicula, t.s. of leaf showing gland cells
- 25 - Utricularia, w.m. of bladder
- 26 - Nepenthes, t.s. of pitcher showing glands
- 27 - Dionaea, Venus flytrap, t.s. of leaf

Adaptation to water: Hydrophytic plants

- 28 - Elodea, w.m. of a submersed leaf without stomata
- 29 - Elodea, t.s. of leaf
- 30 - Nymphaea, t.s. of aquatic stem showing air vascular system
- 31 - Hippuris, t.s. of stem showing regular placed air chambers
- 32 - Nymphaea, t.s. of leaf showing air chambers, a typical floating leaf
- 33 - Potamogeton, t.s. of leaf
- 34 - Taxodium (Cypressaceae), t.s. of root for respiration
- 35 - Potamogeton, t.s. of aquatic stem showing air chambers

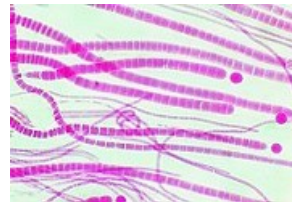
Adaptation to damp habitats: Hygrophytic plants

- 36 - Ruellia, t.s. of leaf showing raised stomata
- 37 - Polypodium (fern), t.s. of leaf showing

- modification of epidermis (water pit)
- 38 - Urtica, nettle, w.m. of stinging hairs (one cellular)
- 39 - Myosotis palustris, w.m. of leaf showing hairs for water reservoir

Adaptation to dry habitats: Xerophytic plants

- 40 - Hedera, t.s. of an evergreen leaf
- 41 - Nerium, oleander, t.s. of leaf showing sunken stomata
- 42 - Dune grass, t.s. of rolled leaf
- 43 - Verbascum, t.s. of leaf showing branched hairs
- 44 - Elaeagnus, squama of leaf or stem, w.m.
- 45 - Orchis, epiphytic, t.s. of aerial root
- 46 - Aloe, t.s. of succulent leaf
- 47 - Sedum, t.s. of succulent leaf
- 48 - Pelargonium, t.s. of succulent root
- 49 - Cactus, t.s. of succulent stem
- 50 - Cactus, t.s. of succulent leaf

Cat #: JL-8EM**Microscopic****Organisms of Freshwater Slide Set****25 slides**

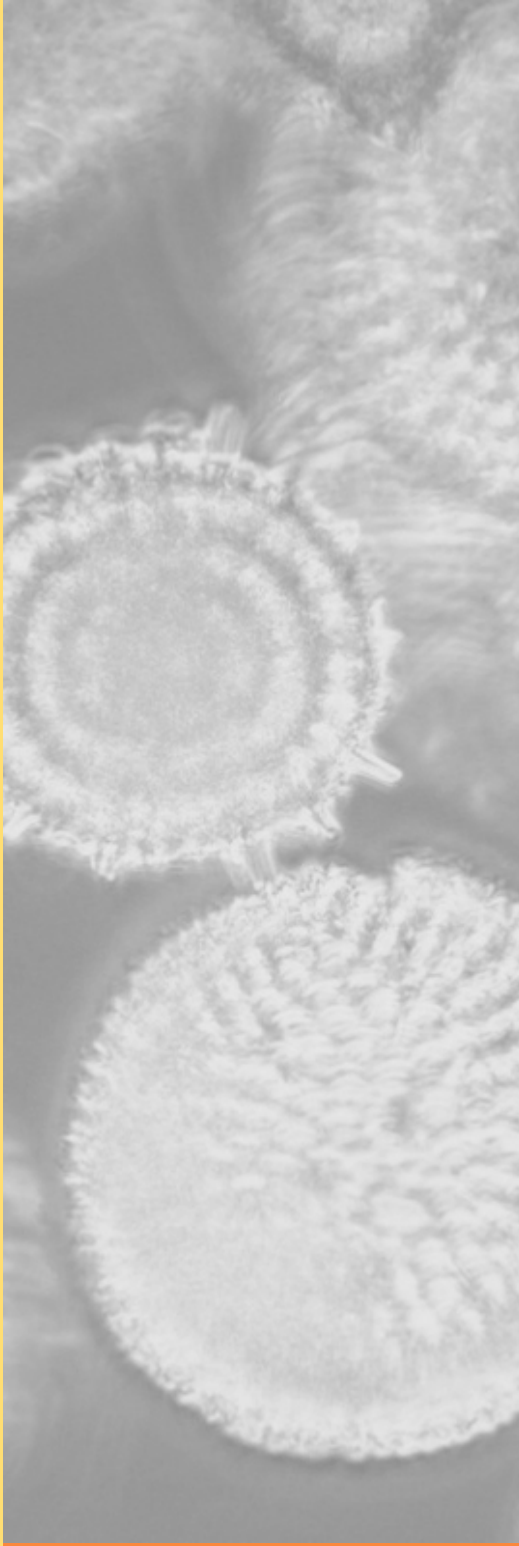
- 1 - Amoeba proteus, w.m.
- 2 - Arcella shells, w.m.
- 3 - Euglena viridis, w.m.
- 4 - Ceratium hirundinella, w.m.
- 5 - Paramecium, w.m.
- 6 - Vorticella, freshwater, w.m.
- 7 - Plankton showing Difflugia and Rotatoria
- 8 - Hydra, w.m. (Pelmatohydra)
- 9 - Freshwater sponge, w.m. of gemmulae
- 10 - Daphnia, w.m. of freshwater flea
- 11 - Cyclops, w.m.
- 12 - Pandorina morum, colonies of green algae, w.m.
- 13 - Volvox, w.m.
- 14 - Chlamydomonas, green algae, w.m.
- 15 - Hydrodictyon, water net, w.m.
- 16 - Cladophora, branching filaments, w.m.
- 17 - Oedogonium, w.m.
- 18 - Planktonic algae, Eudorina, Pediastrum, Microcystis
- 19 - Vegetative filaments, Spirogyra, Zygnema, Mougeotia
- 20 - Desmids, various species
- 21 - Diatoms stained for protoplasmatic structure
- 22 - Batrachospermum, w.m. red alga
- 23 - Chroococcus, w.m.
- 24 - Anabaena, w.m.
- 25 - Bacteria from putrefaction smear

[Cat #: JL-9EM](#)

Microscopic Organisms of Seawater Slide Set

15 slides

- 1 - Silicoflagellatae
- 2 - Radiolaria, strewn slide of cleaned shells
- 3 - Foraminifera, strewn slide of cleaned shells
- 4 - Peridinium, marine dinoflagellates
- 5 - Vorticella, marine ciliates
- 6 - Noctiluca, a luminescent flagellate
- 7 - Marine plankton, mixed species
- 8 - Pluteus larvae of sea urchin
- 9 - Eggs of sea urchin, different phases of development
- 10 - Sagitta, transparent marine worm, w.m.
- 11 - Caprella, a marine amphipode, w.m.
- 12 - Zoea, development stage of a marine decapode crab, w.m.
- 13 - Obelia, w.m. of medusa
- 14 - Campanularia, w.m. of colony
- 15 - Hydractinia, w.m.



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