

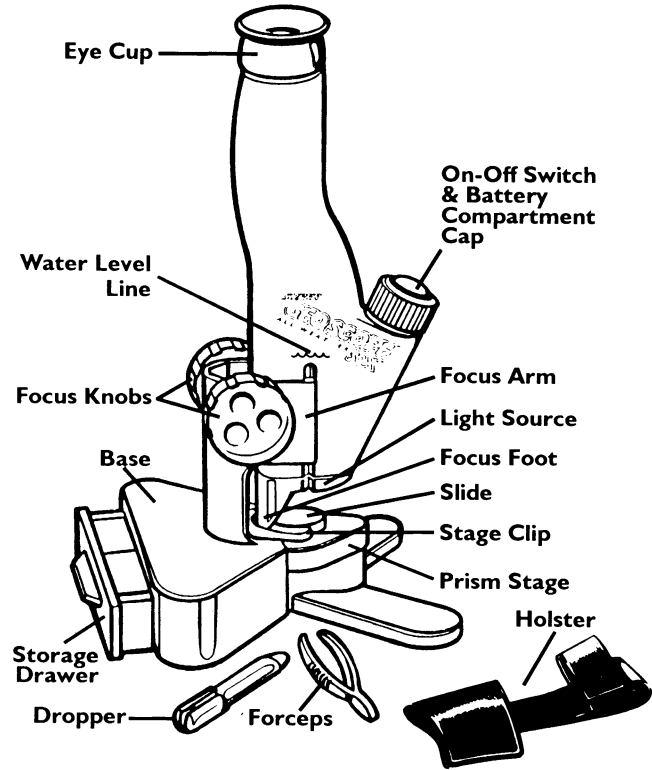
# **SUPER** **GEOSCOPE**® ALL WEATHER **50X**

Super GeoScope is an award-winning 3-in-1 table-top/hand-held/underwater microscope that can be used anywhere, anytime. It's an all-weather scope and its unique O-ring design makes it water-tight, allowing underwater observation of aquatic specimens. Computer-designed precision 50X glass optics provide an extra wide field of view and a bright, clear image. The built-in focused light source makes Super GeoScope completely portable.

You can use Super GeoScope three ways:

(1) In its table-top mode on its slide focus base and unique prism stage, (2) in its portable, hand-held mode with its convenient carrying holster, or (3) in its underwater mode, because of its patented O-ring and diving mask design.

The advanced ergonomic design makes Super GeoScope easy to grip, easy to focus and easy to view. With Super GeoScope it's fun to explore the wonders of nature, wherever they may be!



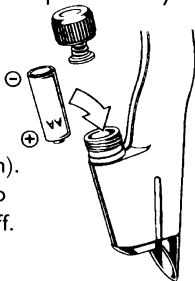
## Description of Features

### SUPER GEOSCOPE

**SOFT RUBBER EYE CUP:** All quality microscopes have this feature. It blocks out bright, distracting light when you look into the eyepiece. This helps make what you are viewing more clear and distinct. The eyecup also protects your eye from the hard edges of the eyepiece.

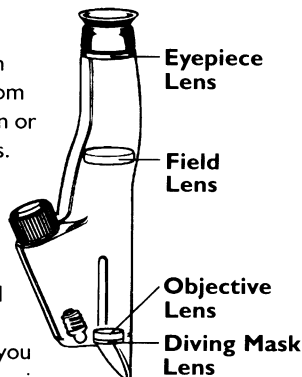
**BUILT-IN LIGHT SOURCE:** This is useful when you need extra light on the subject. The bulb has a focusing lens that projects a spot of light on the viewing zone just beneath the objective lens. Sometimes the lens in the bulb is a bit off-center. To correct this, remove the battery cap and turn the spring a little. Then turn the light on. Repeat until light is properly focused on the viewing zone. When necessary, replace the bulb by screwing it into the coiled end of the spring. Use Philips #112 (1.2 volt - 0.22 amp) or equivalent. Always keep the battery compartment dry to avoid corrosion.

**ON-OFF SWITCH/BATTERY CAP:** Unscrew cap and carefully insert one "AA" alkaline battery with the "+" contact down toward the bulb (see diagram). Tighten the battery cap. Push button to turn light on. Push again to turn light off.



**PRECISION OPTICAL LENSES:** There are four lenses inside Super GeoScope: eyepiece lens, field lens, objective lens and diving mask lens (see diagram). The objective lens is an achromatic doublet, which reduces color distortion. The diving mask lens protects the objective lens and allows the bottom part of Super GeoScope to be submerged in water. Additionally, rubber O-rings at the diving mask lens, eyepiece lens and battery cap help keep moisture out. Super GeoScope is designed to focus sharply on objects which are about one inch (2.5cm) from the diving mask lens. Closer in or further out will not be in focus.

**Lens Maintenance:** You have access to only two of the eight surfaces of the four lenses because they are sealed in the body. Never try to pry apart the two halves because you will ruin the unit. Keep the eyepiece lens and diving mask lens clean. The best way is to blow on their surfaces. That gets rid of loose dust and dirt which can scratch them. Then use a small amount of window cleaner on a cotton swab (Q-TIP®) to gently clean the lens surfaces. Dry them by evaporation or you can use lens tissue available at a camera shop. Treat the lenses well and they will last for years.



**FOCUS FOOT:** This makes it easy to focus in hand-held mode. Just place the end of the focus foot on the area of your specimen that you wish to view and when tilted perpendicular (at right angle) to the specimen, it's in focus!

## **BASE**

**FOCUS KNOBS:** Large knobs make focusing quick and easy. Focus arm keeps Super GeoScope at the correct 90 ° focusing angle. Super GeoScope is easily removable from the base, because there are no gears to break.

**PRISM STAGE WITH CLIP:** This special prism stage directs light from an outside source (such as a lamp or window) up through the viewing zone, just above the angled prism. Use this, with the built-in light source off, when looking through thin specimens such as leaves or prepared slides. Use stage clip to hold thin specimens. Keep the prism stage clean to prevent scratching & clouding the surface. An acrylic or plastic cleaner/polisher will help protect it.

**STORAGE DRAWER:** Use this handy drawer for the slides, forceps & water dropper. Keep it clean and dry to avoid unwanted moldy guest organisms. There is also enough room in the drawer for note paper & a small pencil, just in case you want to record an especially interesting observation.

## **ACCESSORIES**

**SLIDES:** Your GeoScope has two special circular slides. One side is flat and the other is concave (sunken inward). Use the concave side for just about anything but especially for aquatic specimens. Cover slips are not necessary because most organisms you look at will not be able to break through the "water skin" caused by surface tension. Keep your slides clean and dry when not in use.

**DROPPER:** Use the dropper for transferring tiny critters (for example: insects, worms or protozoans) from their aquatic environment to the concave side of your slides and for getting critters back into their home environment. You can also use this tool to flush off slides. To use, place the tip into water, squeeze the bulb, and then let go of the bulb to suck water in. Gently squeeze the bulb again to put drops onto slides.

**FORCEPS (TWEEZERS):** This little tool is very useful. It can be used to gently grasp specimens and place them into viewing position. The forceps can also be used to push specimens around, or to tease apart soil particles while looking for organisms.

**HOLSTER:** For carrying Super GeoScope while exploring. Fits on your belt through the loop on the holster. Place Super GeoScope into the holster and fasten the Velcro®-like strap.

## How to Use Super GeoScope

### Table-Top Mode

- Begin by looking for a specimen. See list for interesting things to look at. Slide Super GeoScope onto the slide focus arm with the focus foot towards the back of the base, as shown on the diagram. The two grooves in the Super GeoScope line up with guides on the focus arm. Place your specimen on the viewing zone of the prism stage (just above the angled prism).
- If your specimen is clear or very thin, such as a thin cross-section, use an outside light source, such as a light bulb or sunlight from a window, instead of the built-in light source. Direct the light to the prism stage so that it is reflected upwards through the viewing zone, and through the specimen.
- If your specimen is not clear, such as a rock, or if you wish to view its surface, such as a postage stamp, cat's hair, or fabric, use the built-in light source.
- Slowly turn the focus knobs until the image is in focus.
- Remember to turn the light off when not in use. If you are not going to use Super GeoScope for a long time, such as several months, remove the battery and tighten the battery cap.

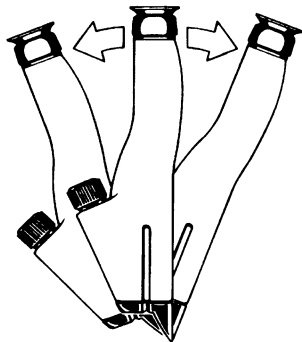
### Hand-Held Mode

- Hold and focus Super GeoScope, as shown on diagrams.

### Underwater Mode

- Before putting Super GeoScope under water, be sure the battery cap is tightened all the way, so that it is water-tight.
- Submerge only the bottom portion of Super GeoScope, to the water level mark (just below the battery cap). Do not immerse the entire Super GeoScope into water.
- The subject is in focus when it is about 1 inch (2.5cm) from the diving mask, or just touching the end of the focus foot. Remember that the subject must be at right angle to Super GeoScope in order to be in focus.
- Look at underwater plants, insects, rocks, crustaceans (like cray fish), clams, coral, and more. Search for multi-tentacled hydra or tiny copepods. Two-thirds of Earth is under water, so you can imagine how many fascinating aquatic specimens are there for you to observe!

**Hand-Held Mode**



**Tilt to Focus**

Interesting Things to Look At

**OUTSIDE**

- Small Bugs
- Tree Bark
- Moss
- Leaves
- Grass
- Sea Shells
- Sea Weed
- Window Screens
- Flowers
- Spider Webs
- Fish Scales
- Sand
- Soil
- Rocks
- Stucco
- Brick
- Wood
- Pond Water

**INSIDE**

- Blue Jeans
- T-Shirt
- Wool Sweater
- Carpet
- Magazine pictures
- Edge of Newspaper
- Your skin
- Dust
- Salt (Add a drop of water)
- Sugar
- Food
- Stamps
- Coins
- Dollar Bill
- Hair
- Fingernail
- Jewelry
- Nylon Stocking

## WARRANTY

Super GeoScope carries with it a limited one-year warranty from the date of purchase to the original purchaser and is not transferable. This warranty applies only if the product is purchased by you in the U.S.A.

This product is warranted against defects in workmanship and original defects in material. This warranty does not cover damage which occurs in shipment or which results from alteration, accident, neglect or tampering in any way. Any attempt to take this product apart invalidates this warranty. The unit may be repaired or replaced at the discretion of Uncle Milton Industries, Inc. Should service be required, please package the unit carefully with a copy of the original purchase receipt with proof of date of purchase and return it prepaid to:

Uncle Milton Industries, Inc.  
Attn: Customer Services  
5717 Corsa Avenue  
Westlake Village, CA 91362



We hope you become an avid explorer of the world of wonders surrounding you. Look for our other fascinating products in our distinctive packages. Remember to treat the planet with respect as you go about your daily activities.

Other great Super Science™ and Uncle Milton™ products:

GeoScope® 30X  
Creature Seeker™  
Bug Jug™  
Light-Up Critter City™  
Ant Farm®  
Ant Farm® Bonus Pack  
Giant® Ant Farm®  
Mini Ant Farm®  
Antville™  
Ant Farm® Village™  
Star Theater™ Halogen Planetarium Projector  
Star Station™ Celestial Globe  
Fossil Hunt™  
Rock & Mineral Hunt™  
Pocket Museums™  
Hydro Greenhouse™ Table-Top Hydroponic Grower  
Smarty Toys™ line of fun educational toys  
Mobile Mania™ line of craft kits  
and more!

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