Ultraviolet-Detecting Bead Bracelet Instructions

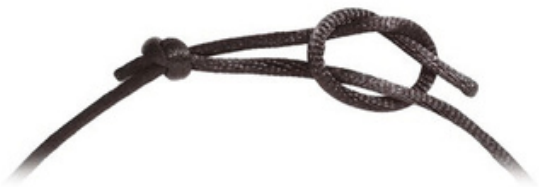
Cut 15 inches of cord for 1 bracelet

Move the beads to the middle of the cord and tie a knot on each side of the beads.

With the two ends of the cord, tie two sliding adjustable knots:

Take the first end and knot it around the second end.

Take the second end and knot it around the first end.



The finished bracelet looks like this:

How do the beads work?

What wavelengths of light cause a color change?

Infrared 2500 - 700 nm	Visible 700 - 400 nm	UV-A 400 - 320 nm	UV-B 320 - 280 nm	UV-C 280 - 1 nm
Infrared light makes our skin feel warm and can be detected by certain animals such as rattlesnakes.	Visible light can be seen by our eyes. It includes all the colors of the visible rainbow.	Too much exposure to Ultraviolet A can result in the same damage as UV-B, but to a lesser degree.	Ultraviolet B light is needed for Vitamin D synthesis in our body, but is a major cause of reddening of the skin, sunburn, skin cancer, cataracts, suppression of the immune system, and photo-aging.	Ultraviolet C light is extremely dangerous, but completely absorbed by the ozone in the earth's atmosphere and does not reach the earth's surface.

Beads are white 2500 - 360 nm	Beads are colors 360 - 300 nm	Beads are white 300 - 1 nm

The white beads will change to bright colors when exposed to sunlight, and return to white when out of the sun.
What causes the change?

The beads contain pigments which react with ultraviolet light from the sun, even on a cloudy day. They also change with indoor UV light sources.

The ultraviolet beads will cycle back and forth (to bright colors and back again) over 50,000 times.

For more information about UV-Detecting Beads, use this QR cod