



GOO WORMS

Presented by



WHAT YOU WILL NEED:

- Clear container
- Warm water

We are using *Steve Spangler's Insta-Worm kit, which includes:

- Worm Activator Solution (calcium chloride solution)
- Worm Goo (sodium alginate)

*You can purchase Insta-Worms here:

<https://www.stevespanglerscience.com/store/insta-worms-1042.html>



Overview and Objective

Worm Goo, sodium alginate, is a long chain of molecules which is called a polymer. When it comes in contact with the Worm Activator solution, the calcium ions in the solution instantly link together the long alginate chains.

This creates a solid polymer strand, or Goo Worm, because the cross-linked polymer is insoluble in the solution. Test it yourself!

Process:

1. Pour 8 oz. of warm water into a clear container.
2. Prepare calcium chloride solution by stirring 1 tsp of the Worm Activator solution into the water until fully dissolved.
3. Squeeze the Worm Goo into the solution in a steady stream, moving your hand in a circular motion.
4. Watch as the Goo instantly becomes an elastic worm. Play with the worms and even test breaking them!

What have you found?

What do you notice about the inside of the worm? It's still goeey inside! You can dip the ends of the broken worm in the solution and it will seal the ends instantly.

Take it further!

Other test ideas: make skinny worms, make a worm egg, leave the worms in the solution for a longer time, leave a worm out to dry for several days, or experiment with food coloring!

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