

More Ideas!!!



Poly-hydro crystals can be colored by adding a few drops of liquid watercolor paint or food coloring to the water.



You can also use the poly-hydro crystals to root cuttings from healthy plants.



Research the difference between dicot and monocot seeds. How is the way they germinate different?

Watch It Grow Pk/12 - Item No. LR623

CALL TOLL-FREE 1-800-243-9232

or **Mail Your Order** to: S&S Worldwide

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Item No. LR623
Age Group- 7 and up

HS#9505.90.6000
MADE IN USA

WATCH IT GROW PK/12

PLEASE READ ALL INSTRUCTIONS BEFORE STARTING



- Printed Sheets
- Cups
- Seeds
- Poly-Hydro Crystals
- Construction Paper

YOU WILL NEED...



Protected Work Surface

Scissors

Water

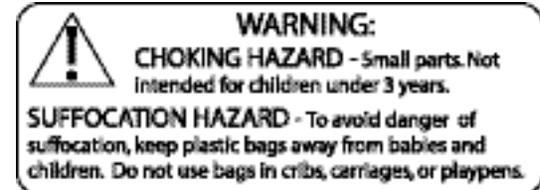
Container

Colander

PREP TIME: 5 min

PROJECT TIME: 30 min

Measuring Cup



INSTRUCTIONS



Prep Instructions:

To expand poly-hydro crystals:

Begin by filling bucket or similar container with approximately 1 gallon of water. Pour crystals into the water. Stir occasionally for the first hour, then leave overnight. Separate the crystals from the excess water using a colander.

Project Instructions:

- 1▶ Divide expanded crystals into 12 equal portions (approximately 6-8oz each). Scoop into cups.
- 2▶ Select at least 8 seeds. Press seeds 1/2" into the crystals. Diagram what the seeds look like on a printed observation sheet.
- 3▶ Continue to diagram and make notes on what is happening to your seeds for at least the next 8 days. Use a magnifying glass to closely observe the seeds. Look for subtle changes everyday. A good time to water your seeds is just after you've made your observations.

Seed Germination Experiment:

Use the scientific method to create experiments using your poly-hydro crystals and seeds. Remember to use one group as a control (no changes) and other groups should change one or more factors that affect seed germination. Some factors to try are:

Temperature - Place the experiment in a warm or cool area. How is the germination time affected? How would the natural warming of the ground in the spring affect the sprouting of seeds?

Water: Vary the amount of water used in your seed growing experiment. Try watering every day, every other day, or no watering at all. How does the amount of water affect how the seeds germinate?

Light: Try placing your experiment in a dark closet. Will the seeds sprout in the dark? Use the provided black construction paper to create a ring that fits around the cup. Do the seed sprouts grow toward the light? What if you place your experiment in direct sunlight.

What other factors affect the way a seed germinates? Using the results that your group has gathered, determine the best conditions for seed growth.