

2020-2021 Master Gardener Bulbs in the Classroom Kit
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Paper White Narcissus Guidelines

We at the Wabash Valley Master Gardeners are glad you have chosen to have your students experience the fun and beauty of watching a Paper White Narcissus bulb come to life in your classroom. It will generally take four to six weeks from starting the bulb in the classroom until it blooms. Please don't wait more than a couple of weeks before starting a bulb once you receive it.

These bulbs are ready to grow the moment you receive them. If you must wait to start them, keep them in a cooler space (55° to 60° F) to keep them fresh. When your class is ready to "plant" the bulb, put the loose pebbles in the jar, fill it with water to the top of the pebbles, then place the bulb, pointy side up, on the pebbles and just touching the water. Don't allow the bulb to sit in the water or it may rot. You will need to periodically add water as the roots "drink it up" or it evaporates.

** See cautions in bulb and plant handling at the bottom of the page. **

You may choose to use a wider, shorter container to grow several bulbs together. In that case, put most of the pebbles in the bottom of the container, then place the bulbs, pointy side up, on the pebbles. Put the remaining pebbles around the base of the bulbs to hold them upright once the flower stalks have formed. At least the top third of the bulb should be above the pebbles. Add water to the container until it is at least within ¼ inch of the bottom of the bulbs.

The time from dormant bulb to full bloom will vary depending on the bulb's environment, room temperature, water, light level, etc. Patience is key. Paper Whites, like most plants, will grow toward the light. They may need to be turned regularly to keep their stems going straight up if they start reaching toward the light. They grow faster in warmer temperatures. If your classroom is cooler, it will take them a little longer to complete the bloom cycle and they may not grow so tall, but they will also have a longer bloom time. Once the plant has finished blooming, it can be tossed, or potted. The plant will not survive our Indiana winters so it would need to be inside before the cold hits.

The distinctive odor of the Paper White flower comes from indole. Indole is present in the pleasant fragrances of jasmine, orange flowers and gardenias. It is also present in coal tar and animal fecal matter. This means that some people love the Paper White's perfume, others don't.

** This note is not intended to dampen your enthusiasm but rather a reminder of the need to teach your students to be respectful of nature and how to interact appropriately with it. A few people may develop contact dermatitis (skin irritation) when handling the Paper White bulb or plant. This can be avoided by washing your hands after you are finished touching the bulb/plant or by using gloves (even then, wash up). Do not touch your face or wipe your eyes before washing up! The jar provided with this kit will help keep the flower stalk from falling over and keeps the bulb out of easy reach. As with all science experiments and demonstrations, don't let students put anything in their mouths. Paper Whites, like daffodils and related members of the Narcissus genus, are poisonous if eaten. **

Sweet Potato Guidelines

We at the Wabash Valley Master Gardeners are glad you have chosen to have your students experience the fun of watching a sweet potato come to life in your classroom. It will develop roots, then stems and leaves (called slips) which will become new sweet potato plants. The slips can be removed from the potato and rooted in water themselves to develop more than one sweet potato plant from the same potato root. Send the slips home with your students so they can grow their very own sweet potatoes.

It generally takes a month from putting the potato in water until it begins developing slips. Your students will need to have patience with it. Start the process by piercing the potato evenly around the middle (see accompanying photo) with three toothpicks and using them to suspend the potato in the canning jar. The potato has a pointy stem end and a blunt root end; put the root end down in the jar. Fill the jar with water, covering half the potato or more. You should change the water at least weekly to keep it fresh and to replace that which evaporates or is used by the developing slips.

You can leave a slip on the potato or twist/cut it off when it is five or more inches long and put it in water to continue growing. If the slip doesn't have roots already, they will develop along the stem when the slip is placed in water. Periodically add water to keep the bottom third of the stem covered. (If your students are interested in planting the slips we can provide additional information in the spring.)

You can experiment with a potato by cutting it in half and rooting each half. This can be done before or after roots and slips have formed. Experiment with different lighting and warmth levels in the classroom. (Hint, sweet potatoes like it warm.) Record your observations. You might even have fun drawing faces on the potatoes before you put them in the jars.

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[Links for additional reading:](http://extension.psu.edu/enjoying-paperwhite-narcissus-in-winter)
extension.psu.edu/enjoying-paperwhite-narcissus-in-winter
extension.web.illinois.edu/veggies/sweetpotato.cfm

