

Planting a Flower Clock

Overview:

Flowers have amazing adaptations to attract pollinators. Their scent, colors, and shapes have evolved to draw these vital critters towards them, since in the process of collecting nectar, they also move pollen from flower to flower to ensure seed production and distribution. Blooming at different times of the day is one of many clever adaptations. Some flowers open early in the morning, others open at night. Some flowers stay open all day long, and others are only open for part of the day. All these variations help them compete for the attention of pollinators who are hungry around the clock.

Fun Fact: The concept of a flower clock was first proposed in 1751 by famous botanist Carl Linnaeus.

Materials:

- In-ground garden space, raised beds or container gardens
- Variety of plants that bloom at different times of the day

Approximate Time to Complete: 1 to 2 hours for planning and planting; additional weeks to grow

Location: Outdoor

Ages: All ages

Season: Spring through Fall

Instructions:

1. Find a garden site with at least six hours of sunlight. Your Flower Clock Garden can be planted directly in the ground, in a raised bed or in one large or a collection of medium sized containers.
2. Select plants that bloom at different times of the day and will thrive in the amount of sunlight you have available. Examples include:
 - 2 a.m.: convolvulus
 - 3 a.m.: goatsbeard
 - 4 a.m.: spiderwort, flax
 - 5 a.m.: chicory
 - 6 a.m.: morning glory, daylily
 - 7 a.m.: African marigold
 - 8 a.m.: fringed pinks
 - 9 a.m.: marigold, tulip, and gazania
 - 10 a.m.: California poppy
 - 11 a.m.: sweet pea
 - 12 noon: goatsbeard, wild daisy
 - 4 p.m.: four-o'clock
 - 5 p.m.: evening primrose
 - 6 p.m.: moonflower
 - 7 p.m.: sweet white nicotiana
 - 8 p.m.: night-scented stock
 - 9 p.m.: sweet rocket

3. Decide on planting arrangement. By planting flowers that open at different times in a circle so that the blooming progresses throughout the day, you can create a living time piece. Planting for each hour of the day may be a bit ambitious, so you can always pick just a few time points and then also add a sundial. Sundials are fun accessories that use shadows to estimate the time. You can purchase a sundial or build your own.
4. Install your garden and enjoy. Use your garden as a way to demonstrate how historically people relied on patterns of nature in a practical way - giving kids a glimpse into the world before technological advances.