



Mosaic Making: Stepping Stones

Overview	Students will make decorative mosaic stepping stones that when put all together will create a functional garden path, as well as add an artistic touch to their garden.
Objectives	Students will: <ul style="list-style-type: none">design and create their own mosaic stepping stone using concrete and tesserae
Time	3 hours
Materials	<ul style="list-style-type: none">stepping stone molds (flexible plastic is best, but any plant saucer or old metal pie pan will do)quick-setting concrete mixbucket for mixing concretetrowel for mixing concretespray lubricant such as WD-40spray bottle filled with waterconcrete sealertesserae (marbles, tiles, broken pieces of china taking care with sharp edges, stones, etc.)newspaper or drop clothsafety gear:<ul style="list-style-type: none">* dust mask* rubber gloves* eye goggles
Instructions	<ol style="list-style-type: none">Give students the opportunity to look at examples of mosaic artwork in books and online galleries to get inspiration and ideas for different mosaic stepping stone designs (see Resources).Guide them in designing a template for what they would like their stepping stones to look like. The designs could be abstract or could feature mosaic images of flowers, herbs, animals, or insects from the garden.

3. Once all of your students have drawn templates for their projects, they are ready to select all the tesserae pieces needed to make their designs and arrange on their template.
4. Distribute protective latex gloves, masks, and goggles to all students. Cover your work area with newspaper or a drop cloth. If you spill concrete on an area that is not covered, wipe it up with a damp cloth or sponge as soon as possible.
5. Using a garden trowel, mix the quick-setting concrete in a bucket following the instructions on the package. You will need to pour enough water into the concrete mix so that the mixture becomes the same consistency as cake batter. If it is too thick, add a small amount of water. If it is too runny, add more concrete mix. Depending on the age level of your students, they may be able to help with this step, but it is important that they take working with concrete seriously and wear all protective gear including gloves, masks, and goggles.
6. In a well-ventilated area or outdoors, spray the stepping stone molds with a spray lubricant such as WD-40.
7. Pour the concrete mixture into the molds and gently tap the molds on the ground to remove any air bubbles.
8. Allow the mixture to set for 10 to 15 minutes, then students can embellish their stepping stones with the tesserae they have selected to make their mosaic designs. Ensure that they push the tesserae pieces into the concrete so that they are flush with the surface of the stepping stone.
9. Once the students are done making their designs, put the stones somewhere indoors and out of the way to dry.
10. At this point, you'll want to clean up your work area as quickly as possible so that the concrete does not have a chance to dry and harden on your tools, tables, or floors. Use a damp cloth to wipe down surface areas, and dispose of any leftover concrete in a bag in the garbage. Rinse tools in a utility sink, running the water hard down through the pipes afterwards to ensure that all the concrete material has been washed away.

11. Let the stepping stones dry for 48 hours, spraying occasionally with water to prevent cracking.
12. After a couple of days of drying, turn the molds upside down and gently tap them around the edges. Once removed from the molds, concrete sealer can be applied.
13. Put them back in a safe, indoor place to cure, or dry completely, for about a week.
14. Place the mosaic stepping-stones in your garden. Your students can choose whether to make a functional garden path or place the stones as decorative pieces throughout the garden.

Taking it Further

Colorful mosaic designs, like the flowers in your garden, will help attract various types of small animals like birds and butterflies. Students can then observe, study, and draw these animals as they visit the garden.

Resources

Books

Stepping Stone Mosaics: 32 Ideas for Making Garden Stones by Kindra Werner

Garden Mosaics: 19 Beautiful Mosaic Projects For Your Garden by Emma Biggs and Tessa Hunkin