

Family Day Art Activity:

Shine Your Sundials!



You have received a cast lead-free pewter sundial lovingly prepared by Sara Hanson from the Wow Mobile Metal Lab and Show, a traveling workshop, foundry and exhibition space in a converted city bus that brings the entire cast metal process to you!

See behind-the-scenes process of how the sundials have been prepared watching the video on the Virtual Family Day: Shine On! website on artsmia.org.

Follow the instructions for metal finishing and polishing to make your sundials truly shine!

Please be careful and work with an adult as the process involves using sharp objects.

Materials:

- Cast lead-free pewter sundial
- Hand file
- Wire brush
- Sandpaper
- String



1. Use the metal file to remove any uneven, sharp or bumpy metal around the outside of the sundial. (Placing the sundial at the edge of a table maybe helpful for some



2. Use the metal file to remove a small amount of metal on the surface of the numbers and letters to add highlights that bring more definition to them.



3. Use the wire brush to polish the pewter.



4. Use the sandpaper for finer detail polishing as you see needed. This can get into some smaller areas and works well for additional shine to the letters and numbers.

Instructions for making the adjustable sliding knot for the necklace:



1. Fold the string in half and put the folded end through the back side of the hole of the sundial.



2. Put the 2 ends through the loop.



3. Tighten down the loop onto the sundial.



5. Cross over the ends about 5"



6. Tie a sliding knot around each end of the string.



7. Slide the knots closer to create a large opening necklace and slide the knots further apart to create a smaller opening for around the neck.

The Sundial

There are many types of sundials - a device that tells the time of day when there is sunlight by the position of the Sun in the sky. This horizontal sundial consists of a flat plate, the dial, and the gnomon, the triangular blade that casts a shadow. As the Sun moves across the sky, the gnomon casts a shadow on the hour lines on the dial to indicate the time of day.

Find a location with as much exposure to the sun as possible. Point the gnomon directly north and place on a flat surface or hold flat. You can use a compass to find true north. The shadow will fall on the hour line reflecting the time of day. You may need to file or adjust the gnomon for more accuracy.

Have fun exploring the universe, sun and stars and learning about the past, present and future devices to reveal time and our shared experiences here on Earth!



Sara Hanson, founder of Mobile Metal Lab and Show

Lesson prepared for Virtual Family Day: Shine On!

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