bitesizeactivities Sidewalk Constellations

Activity Description

Materials

Rocks of various sizes Sidewalk chalk (optional)

Throughout history, people have identified constellations in the night sky, creating pictures with stories behind them! These constellations weren't just a source of entertainment and story telling, but often were used for other useful things as well.

Stars can be used to help tell direction, such as using the North Star to determine North, South, East and West. Because of the revolution of the Earth around the Sun throughout the

course of a year, certain stars and constellations are only visible during certain seasons. This helps tell what time of the year it is but can also be useful in agriculture by helping farmers determine when to plant their crops.

Investigate some constellations using the interactive telescope (linked below) and some stories behind them!

Procedure

- 1. Choose a constellation you want to create. If you need ideas, you can look them up on the Internet. We used skyandtelescope.org/interactive-sky-chart/
- 2. Head outside and search for rocks, varying in size, shape, and color to represent the stars in the constellation you have chosen. Note: not all stars are the same size, or even the same color!
- 3. Arrange your rocks into one of your favorite constellations on an empty spot along the sidewalk.
- 4. If the constellation has a star that is bigger or brighter than the others, use a bigger rock to illustrate that!
- 5. If there are smaller, dimmer stars in the constellation, use the smaller rocks for them.

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Extensions or Adaptations

- Create your own constellation! Arrange the rocks into a pattern of your choice.
 Come up with your own story behind the constellation and share it with your other investigators!
- Connect-the-rocks using your sidewalk chalk to show what picture you want people to see when they look at your constellation. Add a scene that relates to your story around it!