

Winter and Summer Sun

Explore the northern Sun in the winter and summer!



Materials Needed:

Winter and Summer Sun printable on cardstock, scissors, glue, tape, blue or white paper, crayons or colored pencils.

Note: For younger children, adults can assemble the craft. Children can help with each step, and then enjoy playing with the finished product!

Instructions:

Step 1: Print the included template on cardstock. Cut out each piece along the dotted lines. Solid lines are for folding.

Step 2: Fold the summer and winter strips along the solid lines. Apply glue on the gray rectangles and fold over to create a loop (see picture).

Step 3: Color the two circles representing the Sun. Glue one on top of the loop on each paper strip.

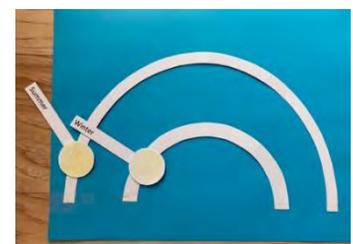
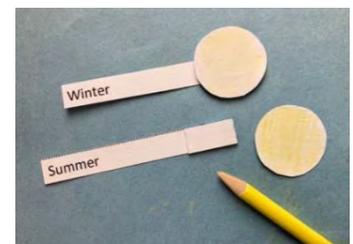
Step 4: Slide the smaller arch through the loop on the winter Sun piece, so that it moves freely. Slide the larger arch through the loop on the summer Sun piece.

Step 5: Tape the bottom of the arches onto a piece of paper about $\frac{1}{2}$ inch ($1\frac{1}{4}$ cm) from the bottom.

Step 6: Color the trees and house. Tape the sides of this strip so the bottom of the strip aligns with the bottom of the paper.

Play with your winter and summer Suns!

Hide the Sun behind the trees. Move each Sun back and forth to make it rise and set for the summer and winter seasons.



The Sun, Earth, and Seasons



Image: Pixabay.

Discuss the Sun with your child(ren). Have you noticed the Sun “stays up” later as spring arrives? Does the Sun stay lower in the sky during the winter? Why does summer feel warmer than winter? Look outside. Where is the Sun shining now?

Caution: Never look directly at the Sun! It can seriously hurt your eyes.

On Earth, we enjoy both daytime and nighttime, and celebrate the changing seasons throughout the year.

Earth spins on its *axis* (invisible line from the North to South Pole) every 24 hours. Each place on Earth is facing the Sun about half of the time and facing away the other half. We appreciate dark nights to sleep or watch the stars. We enjoy the bright daytime to work and play!



Image: Creativecommons.org.

Earth’s axis is tilted about 23 degrees, which is why we have seasons. As the Earth orbits the Sun throughout the year, different parts of Earth get the sun’s direct rays. While North Americans enjoy the summer sun, people in Australia are preparing for winter.



Image: Virginia State Parks, via Flickr.

Because of the Earth’s tilted axis, we see the Sun higher in the sky in the summer and lower in winter. The Sun appears to trace a higher path across the sky in summer than in winter. This effect is greater as you move toward the poles. In Alaska, we experience extreme changes in daylight throughout the year.

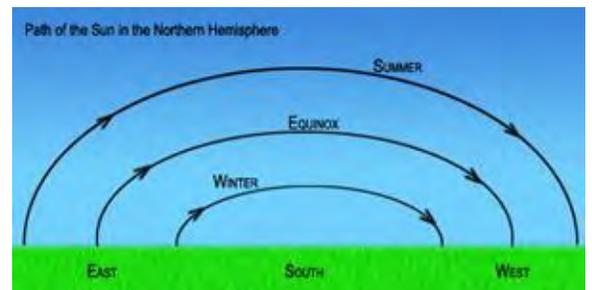
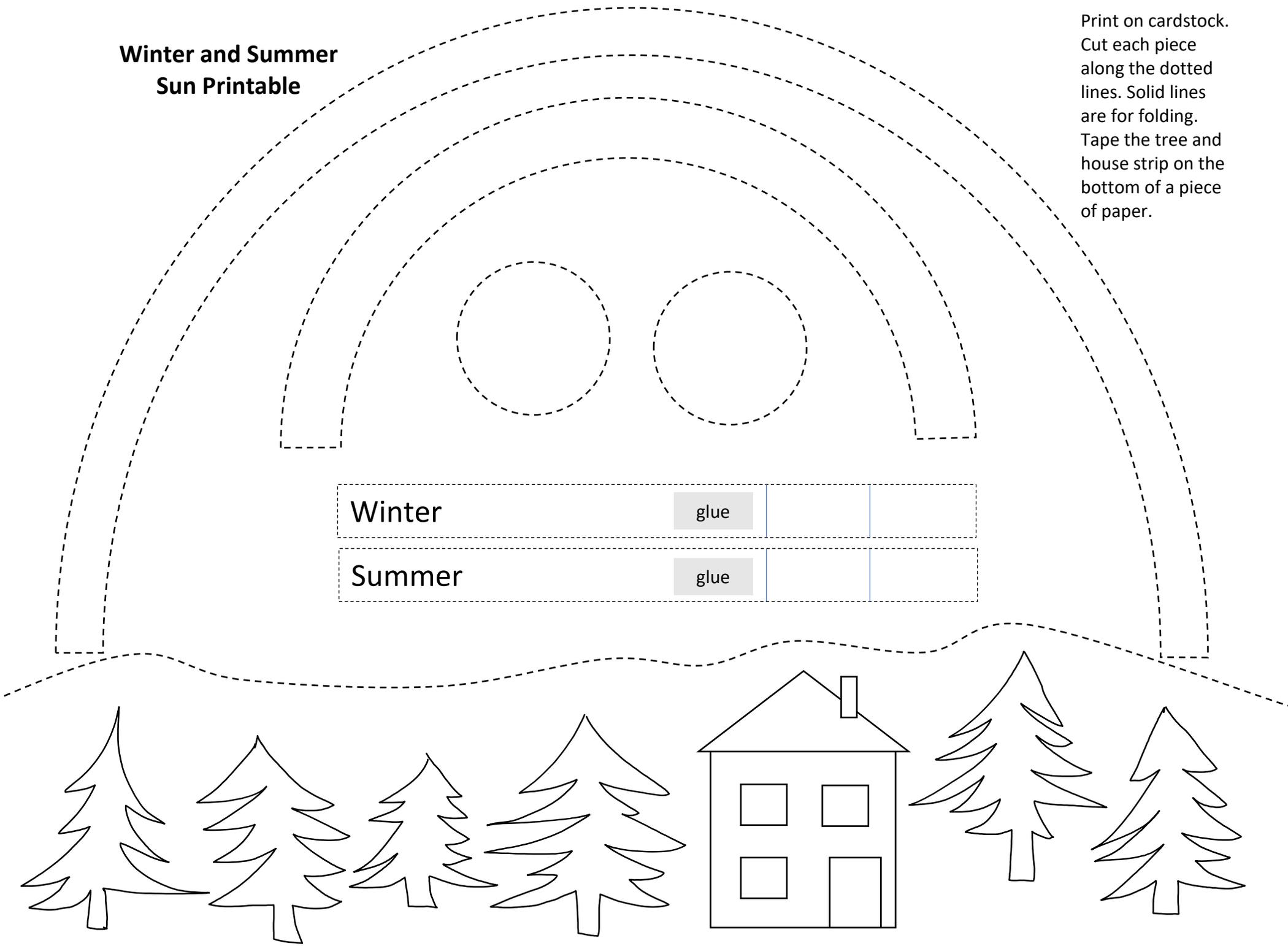


Image: Lunar and Planetary Institute SkyTellers.

Discover more about seasons:
spaceplace.nasa.gov/seasons/en/

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along the dotted
lines. Solid lines
are for folding.
Tape the tree and
house strip on the
bottom of a piece
of paper.



Winter

glue

Summer

glue

