A galaxy is a group of stars, gas and dust. Our solar system is part of the Milky Way Galaxy. This galaxy appears as a milky haze in the night sky. Have you ever wondered why the Milky Way resembles a hazy, cloud-like strip in the sky?

MATERIALS

- Paper hole punch
- Black construction paper
- Masking or painter’s tape
- Pen
- White paper
- Paper or science notebook

PROCEDURE

- Use the hole punch to cut out 50 circles from the white paper.
- Glue the circles very close together in the center of the black sheet of paper.
- Tape the black construction paper to a pole, tree, wall or other outside object you will be able to see from a distance.
- Stand so your nose is almost touching the black construction paper.
- Draw or write about your observations on a piece of paper or in your science notebook.
- Slowly back away until the separate circles can no longer be seen.
- Estimate or measure how far away you were when you could no longer see the separate circles.
- What do you notice about the circles seen from a distance as compared to close up?

DID YOU KNOW

Our eyes are unable to distinguish small points of light that are very close together. Rather, the separate points of light blend together. In our galaxy, the light from distant stars blends together to form the Milky Way haze. The Milky Way galaxy is home to all of the stars that are visible to the naked eye as well as billions of stars that are so far away our eyes are unable to distinguish each individual point of star light.

The Milky Way galaxy is a group of stars, including our own Sun. Our solar system is located about halfway from the center, on one the spiral arms. When we look towards the center of the galaxy, we see the milky haze in the night sky.

Show us how you’re being curious! Share your results with us.
K–2 GRADE EXPLORATION

Here are some questions you can explore together.

- Did the dots look the same up close and far away?
- How did the what you see change as you moved farther away?
- If we can’t see the individual stars in the Milky Way haze with our eyes, how do we know they are individual stars?
- What is the closest Star to Earth?

Put these in order from smallest to largest:

- Earth
- Universe
- Moon
- Milky Way Galaxy
- Solar System
- Sun
- Mars

RESOURCES TO EXPLORE MORE

NASA Space Place: https://spaceplace.nasa.gov/galaxy/en/