



# Songs in Space

"Sounds are but vibrations in the air . . . even so, see how they move the heart." —'Abdu'l-Bahá

**H**ave you noticed how listening to music can change your mood? Upbeat songs can make you laugh or get up and dance. Other tunes can be calming or help you feel closer to God. Music can be even more powerful when you sing or play your own songs.

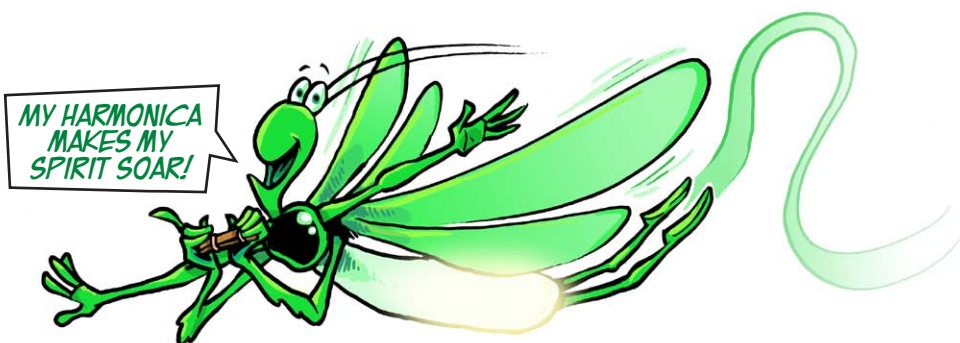
One fun instrument is the harmonica. It's so portable that an astronaut even played it in outer space! In 1965, a harmonica and some bells were the

first musical instruments in space. Inspired by an ancient Chinese instrument called the sheng, the harmonica was invented in the early 1800s.

Today, harmonicas are found in a variety of musical styles. Sound is created when a player blows out or breathes in. The air causes reeds inside the frame to vibrate. Make your own homemade version of a harmonica and experiment with sound.

## You'll Need

- Two jumbo craft sticks about  $\frac{1}{2}$ "– $\frac{3}{4}$ " wide (1.3–1.9 cm)
- two 3" x  $\frac{3}{4}$ " (7.6 x 1.9 cm) strips construction paper • white glue
- thick rubber band about  $\frac{1}{4}$ " (.6 cm) wide
- two thin rubber bands



## Make Your Own Harmonica

- 1 Lay one stick on top of the other. To make slider, wrap paper snugly around sticks. Secure with glue (keeping sticks free of glue).



- 2 Repeat with other paper strip. Sliders shouldn't overlap.



- 3 Remove bottom stick by pulling it out of sliders.



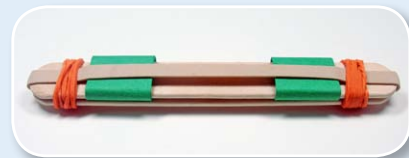
- 4 Stretch thick rubber band around papered stick. Sliders should be about  $\frac{3}{4}$ " (1.9 cm) from ends.



- 5 Place papered stick over other stick.



- 6 Wind small rubber bands around ends of both sticks to fasten them together. Make sure small bands don't touch sliders.



- 7 Move the sliders to change the pitch. Play with joy!

