

SCOBEE To-Go

Exploring space in
your own space.



@SACSCOBEE

Edition 1

July 13-24, 2020

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our cool badge activities!

STEM-TASTIC THINGS TO TRY THIS WEEK:

Magic Monday: How many drops
of water can you put on a penny?

Terrific Tuesday: How many times
can you fold a piece of paper?

Wacky Wednesday: Build a bridge that
can hold rolls of toilet paper.

Thumbs-Up Thursday: Build a
boat that floats on water

Fun Friday: Make an amplifier
for a speaker

Share your projects with us at
[#scobeetogo](https://twitter.com/scobeetogo)

THE SCIENCE OF STUDYING LIFE ON OTHER PLANETS

Mars rovers such as Perseverance (launch July 2020) take and analyse soil samples. They then send the information back to scientists on Earth. A common soil test scientists do is look for chemical reactions. This can indicate the presence of organics or the chemicals that make up living things, Carbon, Hydrogen, Oxygen and Nitrogen. Chemical reactions occur when atoms move and chemical bonds are either created or broken to make a new molecule. A few signs of chemical reactions include, change in color, change in temperature, or a production of gas (bubbling, fumes or a new smell).

Let's test your soil!

Go outside and get two cups of soil. In one cup add vinegar. If it bubbles, you have a chemical reaction! This indicates you have alkaline or basic soil.

In the second cup add water and baking soda.
If it bubbles you have acidic soil.

If it didn't bubble in either test, you have neutral soil. Many organisms love to live in neutral soil.

You can look up pH testing to learn more about the importance of pH and the pH of things we use every day.

Share a photo of you and your soil experiments to [#ScobeeToGo](https://twitter.com/scobeetogo)



Engineer, Diana Trujillo, is working with Perseverance on the study of Mars. She grew up in Cali, Columbia and moved to the United States after high school to pursue her dream of working for NASA. She worked hard through college and is now is a NASA lead engineer on both the human and robotic space missions. Learn more at <https://youtu.be/sNybsayrvb8>.