PURDUE UNIVERSITY®

Purdue scientist is among the first to examine asteroid pieces from NASA's OSIRIS-REx mission.

STEM Career Highlight

YOUR Career in STEM...Starts Right Now

Michelle Thompson

Planetary Materials Scientist

Dr. Michelle Thompson is a Planetary Materials Scientist. Basically, she is a space rock detective. She questions and researches how rocks and dust change on "airless" worlds—places like the Moon and asteroids that don't have an atmosphere to protect them. She looks at real space rocks that were brought back to Earth by a robotic spacecraft. She used advanced technology, like transmission electron microscopes (TEM), to zoom in and see the tiniest details of these rocks. Michelle grew up in Canada. Her interest in planetary science began when she completed internships in NASA Johnson Space Center and the Royal Ontario Museum. Her work focuses on understanding the alteration of airless body surfaces, a process known as space weathering. Michelle uses experimental laboratory techniques to simulate airless body surface conditions and compares these results to the analysis of returned samples from the Moon and near-Earth asteroids.

Q: What are your hobbies?
I like to bake, swim, and walk my dog Cooper.

Q: Where did you grow up?
Cobourg, Ontario, Canada (small town east of Toronto!)

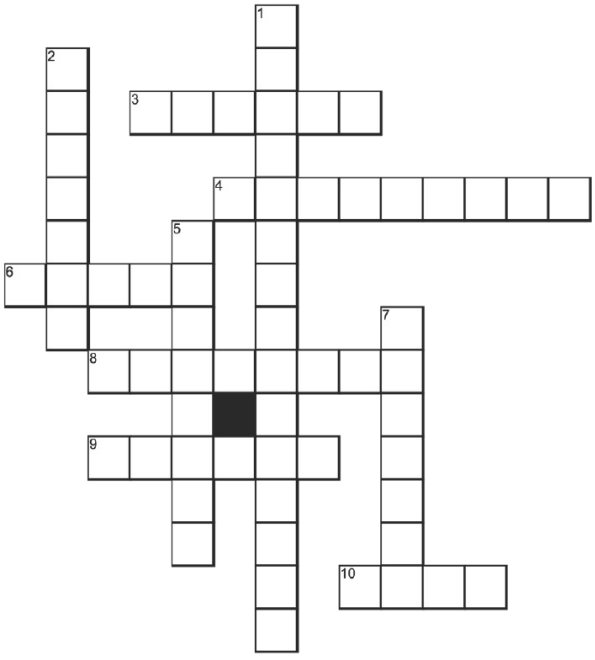
Q: What do you like the most about being a planetary materials scientist?
Studying samples that astronauts and spacecraft have brought back from other planetary bodies, I feel like a solar system explorer, discovering new worlds!

Across

3. The country where Michelle grew up.
4. Dr. Thompson's job: "space rock _____."
6. She looks at real space _____ that were brought back to Earth.
8. What TEM stands for (microscope type). (Transmission _____ Microscope).
9. One of her hobbies: Walking _____.
10. The name of the airless world Dr. Thompson studies, which orbits Earth.

Down

1. The process of alteration of airless body surfaces.
2. The Space Center in Texas, where she completed an internship. (J_____ Space Center)
5. She was one of the first scientists to examine _____ pieces from NASA's OSIRIS-REx mission
7. Dr. Thompson completed an internship at the Royal _____ Museum.



Find more careers: https://www.purdue.edu/science/K12/stemcareers.html