HELLO VOLUNTEERS!

Thank you for volunteering for our COSI On Wheels program. **Astounding Astronomy** is one of six traveling assemblies/hands-on experiences for students in grades K-6. The students will learn about our solar system. Here are some things you can look forward to on the day of the event.

The day begins with a 45-minute assembly introducing the students to a variety of major astronomy related concepts. The COSI Educator is a "world traveler" who needs help from the students to find the best planet to take a vacation on. During the assembly the students will explore the unique characteristics of each planet in our solar system, the sun, comets, and why earth is the only planet that can maintain human life. This entertaining assembly is followed by hands-on activity sessions during which the students can further enhance their knowledge of astronomy.

The COSI On Wheels experience is designed to get children to ask questions and explore science. Your role during the day will be to help guide students during the hands-on sessions. You do not have to be a science expert to be a COSI On Wheels volunteer. We would like *everyone* to have fun and learn on the day of the program, including you. Be sure to dress comfortably because you may be on your feet for the better part of the day!

Prior to the first assembly you will be given an orientation so that you can become familiar with the activities, which are listed on the back of this letter. It is important to be on time for this orientation because we have only 45 minutes to get to know each other and learn all of the activities. COSI On Wheels has six different program topics, so we rarely bring the same program to a school two years in a row. Even if you have volunteered for us in the past it is important to attend the orientation to learn the new information about **Astounding Astronomy.**

Above all, you should know that you are a vital part of this COSI On Wheels experience. It is impossible for **Astounding Astronomy** to be a success without you. We at COSI, as well as the students and faculty at your school, appreciate your time, energy, and support. Be prepared for a day filled with science, learning, and FUN!

Sincerely,

The COSI On Wheels Team

Top 10 Things Every COSI On Wheels Volunteer Should Know

10) Get excited! The students get out of the experience what the volunteer puts into it. Your energy is contagious, as is theirs!

9) Wear comfortable shoes! You may be standing, stooping, bending, or leaning for long periods of time.

8) Layer, layer, layer! Sometimes the gym feels like you've just stepped off an airplane at the equator, while other times your lips turn blue from the frosty air. You can never tell what the temperature in the gym will be!

7) Bring water. You will be talking with the students all day, and it is quite refreshing to have something to wet your whistle throughout the day.

6) Ask questions! To the students, yourself, and the Educator. You are not expected to know all of the answers. In fact, it is a much more rewarding experience to have the students discover the answers through experimentation. You will be surprised at how a student will jump right into something to try to answer their own question.

5) Keep your hands clean. This can be a tough one, but make sure it is the students that are doing the experimenting, and the clean up!

4) Don't underestimate the abilities of the students. It's okay for them to try and fail, then try again.

3) Have fun! This is an informal setting with very active experiments. The kids love trying things for themselves while learning at the same time!

2) Learn! Regardless of your experience, there are plenty of opportunities to learn new things. This is a very fun way to expand your brain.

And the #1 thing you should know is……

1) Thank you, thank you, thank you! We could not do this without you. Your time and effort is very much appreciated and you have really made a difference in a child's life!

ASTOUNDING ASTRONOMY HANDS-ON ACTIVITIES

Alien Eyes:	Students will experiment with colored filters and learn how astronomers use them to understand astronomical objects. The filters help sort out details in the structure and composition of the objects being looked at.
Planetary Rotation:	Students will gain a better understanding of the forces that cause the planets to spin.
What's Holding You Down?:	Students will understand that objects weigh different amounts on different celestial bodies (for example planets, moons, stars, etc.).
Spec-tacular:	Students will identify the composition of distant stars using spectroscopy.
Time Warp:	Students will experience the relationship between a planet's distance from the Sun and the speed it travels in its orbit. Students will also learn that the length of time it takes to orbit the Sun (a year) differs from planet to planet.
Remotely Operated Vehicles:	Students will experience how scientists explore other worlds through remotely operated vehicles.
Under Pressure:	Students will observe the physiological effects on an object in a vacuum, and discover how that relates to the atmospheric pressure found on planets.
Seeing Stars:	Students will better understand the stars they see at night, and how astronomers use constellations to study space.
Mighty Minerals & Cool Crystals:	Students will use microscopes and magnifying glasses to observe the differences between different minerals and crystals.