



HELLO VOLUNTEERS!

Thank you for volunteering for our COSI On Wheels program! **Current Conditions** is one of five traveling assemblies / hands-on experiences for students in grades K-6. The students will learn the complexities of predicting the weather and how weather phenomena form. Here are some things you can look forward to on the day of the event.

The students' day begins with a 45-minute assembly lead by a COSI Educator who introduces the students to major weather concepts. During the assembly the students will explore the formation of clouds and discover the strength of air pressure, explore how storms form, and make their own living storm right in the school. This entertaining assembly is followed by hands-on activity sessions during which the students can further enhance their knowledge of weather with your help!

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 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 and the scientific concepts behind them. COSI On Wheels has five different traveling programs, 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 the all-new stations for **Current Conditions**.

Above all, you should know that you are a vital part of this COSI On Wheels experience. It is impossible for **Current Conditions** 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!

CURRENT CONDITIONS HANDS-ON ACTIVITIES

A Bellowing Wind:	Students use a variety of air producing instruments to explore how air pressure variations cause air to move as wind.
Canister Cloud:	Using simple materials, students will watch a real cloud form inside of a canister to examine how and why clouds form.
Cloudspotting:	Students will examine the different types of clouds and what each means when it comes to predicting the day's weather.
Dicey Situations:	It's all up to chance! Students will roll dice to see if they can build a storm by rolling the right storm-building "ingredients" in order.
Measuring the Wind:	Students will investigate wind-measuring anemometer tools, and then use adjustable fan blades to build and test their own.
Prediction Puzzler:	Using maps and weather symbols, students will be tasked with constructing a major weather event with all the right elements.
Tornado Tubes:	By adjusting the directional flow and intensity of wind, students will create their own mini-tornadoes and discover why the country's infamous "Tornado Alley" is a hotspot for storms.
Weather in a Vacuum:	Students experience the phenomenon of air pressure by recreating the famous Mag de Berg hemisphere experiment to see just how air pressure affects our daily lives.
Weather Instruments:	As meteorologists-in-training, students can use the real tools of the meteorological trade to take atmospheric readings and record how the weather changes throughout the day.