

# VOLUNTEERING

with



TOGETHER EDUCATING ALL CHILDREN IN HOSPITALS



TEACH aims to service the underserved through compassionate and exciting and interactive activities, which comprise of lessons and accompanying experiments, TEACH aims to lift the spirits of children facing medical challenges. With over 1000 volunteers and 31 hospital partnerships worldwide, TEACH's impact continues to grow.

- **Over 3600 children reached**
- **Over 1,000 volunteers (and counting!)**
- **Over 30 hospital partnerships worldwide**
- **75 different interactive modules**
- **An Online platform of TEACH video modules**

Reaching our community in an impactful way, while providing inpatient children with enriching educational activities. Volunteers get to practice inpatient interactions in a medical setting, and provide educational opportunities that are fun and engaging to those who are medically impacted and unable to go to school.



# VOLUNTEER 101

## MAKE A DIFFERENCE



## PATIENT IMPACT

TEACH is entirely run by volunteers, and the most important part of our team is YOU! By volunteering with us, you are committing to enriching the lives of children who are under extremely stressful situations. Many critically or chronically ill children miss so much schooling. Be a part of bridging the gap.

## HOW?

### RUN YOUR ORG

Is TEACH a student organization on your campus? RUN THE CLUB! Run the organization as a board member, or be the hospital lead! There are so many roles that makes volunteering with TEACH a SUCCESS, and it starts with YOU.

### IN HOSPITAL

Volunteer with your University through TEACH and earn valuable experience working with medically impacted children. Help create individual materials packets for student experiments to make prep easier.

### ONLINE

Create videos of our modules by doing the experiments for children to do with you! Our online platform is a great way to log volunteer hours by creating educational and entertaining content for your patients to enjoy when you are not on the floor!

# OUR MODULES



## Exploring Sound

### General Description

**General Description:** (Act outplay Queen's Icon: "We are the Champions, stomp twice, clap once. Get the kids to follow suit) BOOM BOOM CLAP. Did you hear and feel that sound?

**Narrative:** Have you ever thought about how sound works? Sound is energy that is made by vibrations. When any object vibrates, it causes the particles to move in the air. The air particles then bump into each other causing a sound wave, and ears hear the sounds. When these waves move fast, a high frequency is formed, and when these particles move slowly, a low frequency is produced. Sound waves are also known as pressure waves because the wave moves the particles along its passage. Sound waves can even be felt by different parts of the body. Sometimes you can feel the vibrations thunder makes while you are actually hearing it.

**Watch this video about sound:**  
Sound Vibrations: Lesson for Kids - Video & Lesson Transcript | Study.com

We will be doing two sound experiments today. One experiment will model your eardrum when you hear sound. We will also be making a water xylophone. How many sounds can you make? How many sounds can you hear?




### Scientific Terms

**Vibration** – Vibration is a mechanical phenomenon whereby oscillations occur about an equilibrium point.

**Sound wave** – A wave of compression and rarefaction, by which sound is propagated in an elastic medium such as air.

**Pressure wave** – A wave (such as a sound wave) in which the spread disturbance is a variation of pressure in a material medium.

**Frequency** – The number of waves of sound or energy that pass by a point every second.

### EAR DRUM SIMULATION ACTIVITY

**Procedure for Ear drum simulation:**

- Cut the plastic cup down to make it shorter.
- Cut the neck off the balloon so that you can stretch it over the cup.
- Once the balloon is secure on the cup, sprinkle salt over the top of the balloon.

**Activity:**  
Ask students what they think will happen when you turn on the music. Ask about how different tones and beats could affect the salt too!

- Crank up the music and watch the salt dance! Try different tempos or songs. Simply putting the cup next to the speaker will be sufficient. Try holding the speaker over the cup, and in various directions.

**Materials:** (For ear drum simulation)

- A plastic solo cup
- A dark colored balloon to see salt clearly
- Salt
- Scissors
- A portable speaker or phone

### WATER XYLOPHONE ACTIVITY

**Procedure for Water Xylophone Activity:**

- Compare glasses and plastic cups by filling each with water and tap to see which one makes a better sound. After determining that glasses sound better, build a water xylophone!
- Fill various glasses with water at different levels. Add food coloring to water. + BONUS Try adding 2 colors into the same glass to demonstrate color mixing (red+blue=purple)
- Tap the glasses with a spoon and a fork. Compare the sounds made by large and small spoons and forks.
- Tap adjacent glasses to see which glass had higher and lower pitches. Then, we arranged them from highest to lowest pitch.
- Look at two similar glasses and talk about how the water level affects pitch.

**Materials:** (For ear drum simulation)

- 5-6 Various size glasses and one plastic cup.
- Water
- Food coloring to change water color.
- A metal fork and spoon



### Resources

Make a Water Xylophone and start exploring Sound with kids! | Pink Stripy Socks  
Salt Vibrations: Sounds You Can SEE! - Frugal Fun For Boys and Girls (frugalfun4boys.com)

## TEACH MODULES

We have an easy to follow one page handout that explains the experiment and everything you need for success. In addition, modules will have lesson plan companions which have a more in depth approach to the module, with extension activities, scientific terms, and more. (coming to all modules soon.)

From this, create a video module of our handouts to upload to our online platform. This allows you the creativity and flexibility to volunteer in your own time.



## TEACH Together Educating All Children in Hospitals

### BACK TO SCHOOL APPLE VOLCANO LESSON PLAN COMPANION

ACCESS HANDOUT HERE: [Back to school apple volcano](#)

THIS EXPERIMENT WILL TAKE APPROX 30 MINUTES WITH EXTENSION ACTIVITY

Grade	Learning Objective	Resources and Links
PK-5	Students will learn about chemical reactions. <small>* Note: learning objectives should be used as a basic guide. As you work with children, adjust the learning objectives to meet their particular ages and capabilities. Experiments may be suitable for all grades/ages.</small>	<ul style="list-style-type: none"> <li>• Read aloud: <a href="#">HARRY AND THE HOT LAVA</a> By <a href="#">Chris Ricksman</a></li> <li>• You can watch this video before experiment, or as a closing: <a href="#">Chemical Reactions in Action</a></li> </ul>
6-8	Students will learn about chemical reactions, acids, and bases.	<ul style="list-style-type: none"> <li>• Science Max   CHEMICAL REACTIONS   Experi...</li> </ul>

**Scientific Terms:**

**Acids** have particles that create an element called hydrogen, and they can taste sweet, tangy, or tart. Bases have particles that create hydroxide, which has a very bitter taste. Acids and bases have different pH levels. A pH level is a measurement of how acidic or basic a liquid is.

**A base** is a substance that can gain, or "accept," a hydrogen ion when combined with another substance, such as water.

**Carbon dioxide** is a molecule that contains two oxygen atoms and one carbon atom. It can be found as a gas in the air, or as a solid in the form of dry ice, which is very cold. Carbon dioxide is produced from breathing and from burning certain substances called fossil fuels.

**Sodium bicarbonate** is an ionic compound made of one sodium atom ionically bonded to a bicarbonate atom.

BEFORE YOU BEGIN	
<b>TEACHER GUIDE</b>	This experiment focuses on learning about acids and bases in a fun way.
<b>SETUP</b>	An adult should cut the top part of the core out of the apple so that there is a hole in the center of the apple about halfway through. Put the apple inside the container so that the bubbly explosion will be kept within the container

Activity	Key Points/Questions You can ask
1. Before you start the <a href="#">experiment link</a> about key points and ask questions.	Ask students to make a hypothesis about what they think we are doing in today's experiment. Tell them that a hypothesis is an educated guess.

# I'M IN! NOW WHAT?

## Things to Note:

Be proactive and get involved. Many of our volunteers are in medical school, nursing school, or aspiring hospital teachers. Speak with a TEACH liaison on campus about how to get started. Familiarize yourself with roles, responsibilities of being a TEACH volunteer with the Children's hospital you will be working through.

## A Day in the Life of Volunteering:

Your hospital and or student organization will have specific schedules, rules, and guidelines to follow when volunteering. Reading over the module and preparing to teach it is the first step to having a successful teaching experience. All of our module lesson companions have YouTube links to videos and read aloud that can enhance your lesson experience, so bringing an electronic device to use is recommended. When in doubt, ASK. All of our modules have resource links to look over the experiment you are performing. All module supplies are sent to the hospitals we partner with. Make sure you have supplies ready and on hand before your visit. Most importantly HAVE FUN. The children you will be interacting with are going through a really hard time. Be the joy to their day, and make a difference. We are so excited to have you be a part of such an incredible movement; welcome to TEACH.



If TEACH is not yet a part of your University or Hospital, Please CONTACT US to get started by clicking the link below, or email [Isaac.Snyder@teach4kids.org](mailto:Isaac.Snyder@teach4kids.org)

