HANDBOOK FOR VOLUNTEERS

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WonderLab’s Mission

WonderLab’s mission is to provide opportunities for people of all ages, especially children, to experience the wonder and excitement of science through hands-on exhibits, programs, and programs that stimulate curiosity, encourage exploration, foster lifelong learning, and explore the connections to the arts and everyday life. WonderLab strives to build curious and creative problem solvers inspired by wonder, who will shape a better future for southern Indiana and beyond.

WonderLab: Past and Present

WonderLab began in 1995 as a traveling outreach program of dedicated volunteers who brought hands-on science activities to schools and other organizations.

On January 10, 1998, WonderLab opened a small, interim museum on the north side of the Bloomington courthouse square. At the same time, fundraising began to build a permanent museum on the present site, which the City of Bloomington had donated the previous year for this purpose.

On March 18, 2002, WonderLab began construction of the new museum, near the corner of 4th and Madison streets. On December 28, 2002, the interim museum closed, and staff moved to the new museum to prepare it for opening. Volunteers helped with moving and unpacking, worked on exhibits, participated in focus groups, helped at previews, set up our computer systems, and helped with mass mailings. On Saturday, March 29, 2003, the new museum had its long-awaited grand opening.

WonderLab remains a grassroots organization staffed by many individuals who nurtured it from its beginnings and supported by nearly 700-900 volunteers each year. These dedicated people donate their time and expertise to WonderLab by working with visitors at the museum and outreach events, serving on the board of directors, providing legal, computer, graphic design and other services, helping with fundraising, and presenting special programs. In short, without volunteers, WonderLab as we know it simply would not exist.

The museum is 15,000 square feet, with 6,500 square feet devoted to exhibits. The second floor features three learning labs for programs, birthday parties, demonstrations and more. See Appendix A for more information about WonderLab.
Volunteering at WonderLab

Volunteers are vital to WonderLab. You will be part of a team whose goal is to work together to make sure every visitor has a positive experience at the museum and wants to come back to WonderLab again and again.

Working as Part of a Team

You are part of a team that includes other volunteers, called discovery coaches, and a floor manager. (The job description for discovery coach is in Appendix B.) The floor manager, who is your supervisor, is in charge of the entire museum. S/he will be wearing a blue WonderLab apron. The floor manager assigns volunteers to a floor in the museum and in some cases, to an area or specific exhibit. The volunteer assignments are posted on the bulletin board next to the aprons in the volunteer room. You will see an assignment (e.g., floor 2 or floor 1, Climber) beside your name.

You will report to your assigned floor or area. The floor manager will check in with you as soon as possible. (Sometimes the floor manager will be doing a demonstration when your shift begins.) The floor manager will give you any needed information about the day and training or instructions. For example, you may be asked to train the volunteer who is taking your place or to help clean up. The floor manager may ask you to switch to another floor during your shift. Otherwise, please stay at your assigned station.

- If you have questions about the exhibit, if you need more materials at your activity, if some of the equipment is not working well, or if a visitor has a question or problem you cannot handle, go to the floor manager.
- If you need to take a short break or move your car, be sure to check with the floor manager first.
- If you have problems/questions/concerns or terrific ideas/comments, bring these to any of our staff. Your opinions are essential in making the museum run well.

Working with Visitors

The first step in volunteering at WonderLab is to work with visitors in the museum. At WonderLab, the visitors are our customers. They expect a safe, clean, and welcoming environment, exhibits that are working well and are engaging, and friendly and helpful staff. We ask all of our staff and volunteers to meet and then to exceed these expectations.

WonderLab’s customer service values in order of priority are:
1. Safety
2. Courtesy
3. Appearance
4. Playful Discovery

Appendix C has more information about customer service.
Volunteering responsibilities. You do not need to know a lot about science to be a great WonderLab volunteer. All you need is a curiosity about science, a positive attitude, an interest in learning, and a willingness to work with people. You will have many opportunities for on-the-job training.

- Watch for unsafe situations and alert the staff to them immediately. You are extra "eyes and ears" in the museum (see page 9).
- Act as host. Know the location of rest rooms, elevators, learning labs, informational brochures, etc. Learn about WonderLab’s history, attendance, and programs. Direct questions you cannot answer to the floor manager, volunteer department, or visitor services staff.
- Be welcoming, friendly, attentive and approachable. Talk to visitors. For example, simply say "Hello" or "Welcome to WonderLab." See Appendix D for tips on looking approachable and ready to help visitors.
- Keep the exhibit areas tidy and inviting. Pay attention to see that everything is working properly. Inform the floor manager of any problems. Pick up items from the floor (e.g., parachutes, scarves, blocks). If your shift is over at the end of the day, please help clean the museum (e.g., pick up items from the floor, put things away, help sanitize, etc.)
- Be a role model. Explore and play with the exhibits so that it sends out the signal "Hey, try this! Wow! Look at this!"
- Encourage visitors to get involved with the exhibits and activities. For example, if you are working at the construction table, invite a child to join you. Encourage visitors to explore less obvious exhibits (e.g., tornado, fossil wall). See Appendix E for WonderLab’s guidelines for “messing around with science.”
- Ask questions. “What would happen if...?” “What did you just try...?” “What do you think is going on...?”
- Be a good listener. Try to figure out what is being asked. Answers such as, “That is a great question,” or “I don’t know, let’s see if we can figure it out,” are great responses. Let visitors share their discoveries with you. For example, ask, “What do you think is going on here?”
- Learn about the exhibits on your own. Read the signs! Watch others use the exhibits and get ideas from them. During slow times, explore the exhibits. Dig deeper and come up with challenges for yourself. Remember, we do not expect you to have all the answers.
- Build on your experiences. Read the articles in Appendix F.
- As needed, help train your replacement. You may need to train a volunteer who will be taking your place and make sure that the exhibit or activity you were supervising is working normally and has sufficient materials for the rest of the day.
**Interacting with preschool visitors.** WonderLab's youngest visitors may come in with a group (e.g., a daycare) or with a caregiver. They may stay in Discovery Garden, which is specifically designed for preschoolers, or they may be anywhere in the museum. These children are beginning scientists who are exploring and learning through play.

- Get down to their level. You may need to squat or sit to be eye-to-eye with young children. Eye contact improves communication plus is less intimidating. In the eyes of a child, you may be a giant.

- Tell children what to do rather than what not to do. For example say "Use slow feet, please" instead of saying "No running."

- The fewer words, the better! Young children often hear only the end of what you say, so stating clear guidelines is essential. For example, "Blocks are for building" rather than "Don't throw the blocks."

- Often, a simple declarative statement, "These blocks are fun," or "Here are some blocks," is more inviting than questioning, "Would you like to play with some blocks?"

- Some children will respond to a verbal invitation, but will not begin using the materials until the "stranger," (i.e., you) moves away. Watch the child for nonverbal cues!

- Provide words for what the child observes or does. For example, "You are balancing that one on top" or "These blocks are beginning to wobble."

Appendix G contains more guidelines for interacting with preschool visitors. Additional resources about how young children learn and the value of play are in the volunteer break room.

**Interacting with people with disabilities.** Occasionally, as a volunteer, you will encounter visitors or other volunteers who have disabilities. These disabilities could be physical, such as mobility, visual or hearing impairments, or cognitive, such as developmental or learning disabilities. Interacting with these individuals can be an intimidating and new experience. You do not need any special expertise to help people with disabilities have a positive experience at WonderLab. Appendix H contains guidelines for interacting with these visitors or volunteers. There is a handbook in the volunteer room with additional resources. When working with visitors or volunteers who have disabilities, you need to remember that for many, visiting, working or volunteering is their second priority, belonging is their first.

**Other Volunteer Opportunities**

In addition to working with visitors, you may be asked to help out with other volunteering roles:

- Help in the gift store. Welcome members and visitors; provide museum information; straighten shelves, stock items, etc. Minimum age: 18. Special training is required.

- Present Science-On-The-Spot activities (SOTS) in the gallery. (e.g., with live animals, on health and the human body, chemistry, etc.). Prior experience working in the museum with visitors, and for some SOTS activities, special training is required. Special training and practice is required for working with animals.
- Work at outreach events in Bloomington and nearby communities. Prior experience working in the museum with visitors and personal responsibility for transportation are required.

- Help with birthday parties. Set up the party room, prepare gift bags, greet guests, help with the science activity, and clean up after the party. Prior experience working with visitors in the museum and special training are required.

- Work behind the scenes. Help with mailings and other administrative projects.

If you wish to receive special training, please inform the volunteer department or the floor manager.

If you have other talents to share, just let us know. We will put you in touch with the appropriate member of our staff for follow up.

**Scheduling and Attendance**

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<tr>
<th>Volunteer shifts for volunteers working in the exhibit areas are:</th>
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<tr>
<td><strong>Tuesday – Thursday:</strong></td>
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<tr>
<td>• 9:15 am – 11:30 am</td>
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<td>• 11:15 am – 1:30 pm</td>
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<td>• 1:15 pm – 3:30 pm</td>
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<td>• 3:15 pm – 6:00 pm</td>
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<td><strong>Friday – Saturday:</strong></td>
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<td>• 3:15 – 5:00 pm</td>
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<td><strong>Sunday:</strong></td>
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<td>• 12:45 – 3 pm</td>
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<td>• 2:30 – 5:00 pm</td>
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*WonderLab is closed most Mondays.*

Note: volunteers who complete training to work at the gift store, birthday parties, programs, and outreach events will set their schedules with their supervisor.

**Signing up to volunteer.** All scheduling is done through the volunteer department.

E-mail your request to WonderLab’s volunteer coordinators at **volunteer@wonderlab.org**, or through VicNet, the self-scheduling tool, explained at training.
- You will get a confirmation of your volunteering time by e-mail within 48 hours if you sent in your shift request via email. If you have not received a confirmation, you may call (812) 337-1337, ext. 20.

- If you do not receive a confirmation, please do not come in to volunteer. We value your time!

Please plan to be at the museum for the entire shift. The starting time is when you need to be in the museum ready to help. Allow extra time for check-in. Please note that the front doors of WonderLab will not be unlocked until 9 am on Tuesday – Saturday and 12:45 pm on Sunday.

Maintaining a regular time to volunteer is most helpful for many volunteers and in overall staffing, and helps provide the best possible service to our visitors. Please inform WonderLab’s volunteer coordinator of the days and shifts (see page 7) that you can commit to volunteering on a regular basis. If you want to be “called in a pinch,” just let us know that, too.

Note: We ask new volunteers to complete a three-shift probationary period before they sign up for a regular shift.

**Changing or canceling your volunteering time.** If you cannot come in at your scheduled time, please notify the volunteer coordinator as soon as possible so that other staffing (if possible) may be arranged. Please do not come to WonderLab when you are sick.

- If you need to cancel fewer than 48 hours before your scheduled shift, please call the volunteer coordinators at (812) 337-1337, ext. 20, and leave a message (24/7). With VicNet, you can only cancel your scheduled shift via VicNet within 48 hours of your shift. After that, you must call or email the Volunteer Department.

- Notification of changes and cancellations more than 48 hours before the scheduled shift may be made by e-mail: volunteer@wonderlab.org.

**Checking In and Out**

- Enter through the front doors of the museum.

- Check in at the visitor services desk.

- Take the back stairs (or elevator) to the second floor volunteer room.

- Sign in on the iPad touch screen or (if not working) the clipboard located on the check-in table in the volunteer room. Enter volunteer pin number on the touch screen. This number will be next to your name on the daily volunteer assignment sheet.

- Wear a green WonderLab apron (located on hooks on the wall behind the door). The apron identifies you to museum visitors as someone working for WonderLab who can provide assistance.

- Find and wear your preprinted nametag (alphabetized by first name in the notebooks on shelves on the sign-in table). If you cannot find a nametag, please make a temporary one.
This will help others in communicating with you. Nametag holders are hanging on the hooks with the aprons.

- Check the volunteer assignment board (next to the aprons) and find the listing of your name and assigned area (e.g., floor 1, Climber).

- If the floor manager does not meet you at the beginning of your shift in the volunteer room, report to your assigned area. The floor manager will check in with you as soon as possible.

- During your shift, remember to inform the floor manager of any problems, if you need a break, if you will need to move your car during your shift, or if you need to leave early.

- At the end of your shift, tell the floor manager that you will be leaving.

- Return the apron and nametag to the volunteer room.

- Talk to volunteer staff about any ideas, concerns, or questions you may have.

- Sign out on the touch screen.

**Standards of Behavior and Appearance**

WonderLab is proud of its building, its exhibits, its programs--and especially its staff and volunteers. Therefore, we ask that both employees and volunteers present a professional family-friendly image to the visitors and the community. You are representing WonderLab to the public and to groups of school children. See Appendix I for important guidelines.

- Demonstrate friendliness, maturity, professionalism, positive attitude and a sense of responsibility.

- Wear your nametag and green apron so that the public and other staff can recognize and identify you.

- Wear clean, comfortable shoes and clothes that are in good condition with no holes, stains or other damage. (No exposed midriffs and undergarments while volunteering, please.)

- If you carry a cell phone, please do not use it to talk or text while volunteering. If you need to check your phone or make a call, please do so in the break room.

- Model appropriate behavior in the museum--children are watching you and listening to you!

- No WonderLab volunteer may accept personal gifts or tips for services rendered by him or her on behalf of WonderLab. Explain that you cannot accept the gift or tip, and advise the visitor to make a contribution to the Connecting to the Community Fund flask at Visitor Services.
Volunteer Benefits

- Volunteers receive a 20% discount to the gift store all year.
- We host several volunteer appreciation events each year which give volunteers a chance to meet each other, and bring their family and friends to WonderLab.
- We can give you a report of your volunteering hours at any time.
- We also supply letters of reference upon request to volunteers who have worked 30 or more hours. (Please give us a minimum of three weeks notice before these letters are needed.)
- Museum Rental Discount for WonderLab Volunteers: Active volunteers at WonderLab who have donated 100 hours or more in a calendar year qualify for a 15% off discount on museum rentals. The rental must occur during the 12-month period that follows, during which the individual remains an active volunteer. The volunteer is required to sign a rental contract and follow the current rental reservation policies.

These small benefits are a special “thank you” to volunteers.

Museum Rules

- Running in the museum is prohibited. Safety is our primary concern.
- Smoking is not permitted.
- Eating is only allowed in the museum lobby and in three designated uncarpeted areas on the second floor (the volunteer room, vending area, learning labs). Eating and drinking are not permitted in the museum exhibit areas.
- Children younger than 12 years old must be accompanied and supervised by an adult or other responsible person, age 18 or older. WonderLab is not responsible for unsupervised children. WonderLab volunteers should not “babysit” a child who is left unattended by a caregiver (e.g., who is in the bathroom or who leaves the museum to get something from the car).

If the rules are forgotten, remind the visitor. A simple non-threatening comment usually will suffice (e.g., “Please walk.” or “Use slow feet.”)

Report any inappropriate behavior, unattended children or other problems to the floor manager. If the floor manager is not nearby, then report this behavior to the visitor services desk (floor 1), to the volunteer department staff, or the administrative office (floor 2, near the fossil wall). Our staff is trained to handle such problems and can also contact the floor manager.

Emergency Procedures

In the event of any first aid, safety or emergency situation, you should immediately inform the floor manager, who will take charge. If the floor manager is not in sight, then go to the visitor services desk (floor 1), the volunteer department staff or administrative office (floor 2), whichever
is closest. Specially trained staff members will take charge. Volunteers should not administer first aid.

- Familiarize yourself with the locations of exits, evacuation routes, and fire extinguishers. Evacuation maps are posted on each floor of the museum.

- Please read the guidelines for emergencies in the WonderLab Emergency Action Plan (EAP), which is located in the volunteer/staff break room. You should be aware of these procedures, but you are not responsible for carrying them out.
APPENDIX A: USEFUL INFORMATION

WonderLab’s Quick Facts

Mission

WonderLab’s mission is to provide opportunities for people of all ages, especially children, to experience the wonder and excitement of science through hands-on exhibits, programs, and programs that stimulate curiosity, encourage exploration, foster lifelong learning, and explore the connections to the arts and everyday life. WonderLab strives to build curious and creative problem solvers inspired by wonder, who will shape a better future for southern Indiana and beyond.

Location

308 W. Fourth Street, Bloomington, Indiana 47404

Physical Description

Two-story, 15,000-square-foot building, with a 7,000-square-foot outdoor nature area.

Official Service Area

Bartholomew, Brown, Greene, Jackson, Lawrence, Martin, Monroe, Morgan, Orange, and Owen counties.

Professional Association

Member, Association of Science-Technology Centers (ASTC). WonderLab participates in the ASTC Passport Program, which provides reciprocal free admission for museum members at more than 250 other science museums around the world.

Organization

WonderLab is a private 501(c)(3) nonprofit organization.

Support

Main sources of income are earned revenue and contributions. WonderLab does not receive ongoing operational support from federal, state or local tax monies. WonderLab’s fund-raising sources include annual campaigns, membership drives, special events, grants, and interest income.

Admission

Members.................................................................................................................................................. Free
Child under 12 months.................................................................................................................................. Free
Child, age 1 -17........................................................................................................................................ $10.00*
Adult, age 18 and older................................................................................................................................. $10.00*

* effective 1-1-2020
Additional Museum Information

Birthday Parties

For a fee, people of all ages may have their birthday party at WonderLab, which includes admission to the museum, use of a private room, and a special WonderLab activity led by a staff member or volunteer. For more information or to schedule a birthday party, call (812) 337-1337, ext. 11. Flyers are located on the first floor on the wall near the drinking fountains.

Contributions to WonderLab

As a private, nonprofit organization, WonderLab relies on admissions, other earned revenue, donations and grants to operate. If someone is interested in contributing to WonderLab, please escort him/her to the visitor services desk.

Diaper Changing Stations

All restrooms have a diaper changing station.

First Aid Kits

First aid and bodily fluid kits are located in four areas of the museum, including the admission desk on the first floor and the administrative offices on the second floor. If first aid is needed, immediately inform the floor manager (wearing a blue apron) who will take charge. If the floor manager is not in sight, then go to the visitor services desk (floor 1), volunteer staff, or administrative office (floor 2), whichever is closest.

Gift Store

The gift store contains many interesting items ranging from $0.25 to $200. Purchases by cash or check are accepted. MasterCard, Visa and Discover are the only credit cards accepted.

Lost and Found

Lost and found items are kept at the visitor services desk.

Memberships

Visitors and volunteers may purchase memberships at the admission desk. Flyers on memberships are located at the Visitor Services Desk, on the first floor on the wall near the drinking fountains and at the WonderLab web site (www.wonderlab.org).
Museum Rentals

For a fee, all of WonderLab is available for private museum rentals after 5 pm Tuesday through Sunday. During public hours, the lab rooms may be rented for exclusive use for business meetings, birthday parties, etc. For more information, or to schedule a rental call (812) 337-1337, ext 11 or email schedule@wonderlab.org. Flyers are located on the first floor on the wall near the drinking fountains.

Outreach Visits

WonderLab can bring its outreach program to schools and other locations typically within a one-hour drive from WonderLab. For more information and to receive the most recent fee schedule, advise visitors to call (812) 337-1337, ext. 18. Flyers on outreach events are located on the first floor on the wall near the drinking fountains.

Where do I park my car or bike?

Parking downtown when volunteering at WonderLab can be challenging. The City of Bloomington is constantly changing the rules.

For the most up-to-date information about parking downtown, please check the WonderLab website: wonderlab.org > Plan Your Visit > Parking.

You can also find information at the City of Bloomington’s website: bloomington.in.gov/transportation/parking/downtown.

There is also a bike rack in front of WonderLab, on the west corner of the building, on 4th Street.

Public Transportation

WonderLab is on two different Bloomington Transit (BT) city bus routes: Route 3 as it heads west, and Route 4 as it heads east. Copies of the BT bus schedules are available at WonderLab by the front doors. The BT fee is $1.00 in exact change for adults, $.50 for citizens 60 years and older and youths (grades K-12) with a reduced rate ID acquired beforehand; free transfers are available to the campus bus. Monthly and semiannual passes are available from BT. IU students have prepaid access on all BT routes by using their student ID cards as a pass. The downtown terminal (where all BT routes go) is located at the corner of 4th and Washington Streets. WonderLab is just two and a half blocks west of the downtown bus terminal. For more information and exact route information, call BT at (812) 336-RIDE (7433), or visit www.bloomingtontransit.com. BT schedules are located in the entryway to the museum.
**Restaurants**

A complete list of nearby restaurants, plus many menus, is available at the admissions desk.

**Restrooms**

The women and men's restrooms are located on the first floor of the building. There is a family restroom on the second floor across from the learning labs. Inform the floor manager when the bathroom needs attention (e.g., plumbing problem, lack of paper, etc.).

**School and Group Visits**

WonderLab is open Tuesday through Sunday for group visits. For more information or to schedule a visit, call (812) 337-1337, ext. 11. Flyers on school group visits are located on the first floor on the wall near the drinking fountains.

**Telephones**

A telephone is located at the admission desk. Volunteers may also use the phone in the volunteer room for brief, local calls.

**Vending Machines**

Vending machines (soda and snacks) are located on the second floor, across from the learning labs. Please keep food and drink on the tiled area.

**Volunteer Room**

The volunteer/staff break room is located on the second floor near the back stairs. The room features water, snacks, a refrigerator, toaster oven, and a microwave oven. Let the floor manager know if you need to take a short (5-10 minute) break, and make sure that someone else is watching your station. You may use the refrigerator if you wish, but make sure that you properly label and take the item home with you at the end of the day. You are welcome to use the cups and utensils, but please wash anything you use before you leave. Take a moment to look at the bulletin board. It is devoted to volunteer news.
APPENDIX B: JOB DESCRIPTION FOR DISCOVERY COACH

Title: Discovery Coach

Department: Gallery Operations

Supervisor: Floor Manager

Time Commitment: flexible, shifts range from 1.75 to 2.75 hours

Work Site: museum gallery

Job Summary: ensure that every visitor has a safe and enjoyable experience in the museum.

Responsibilities:

- Watch for safety and security situations.
- Act as a visible representative of the museum by interacting appropriately with visitors and supporting a welcoming environment.
- Encourage visitors to explore and experiment with the exhibits.
- Become knowledgeable about the exhibits and underlying science.

Qualifications: friendly, dependable, positive attitude, curious about science, comfortable working with children and adults, often in a loud environment; able to work well in a team environment

Training: one 1.5-hour session with opportunities for additional content and interpretive training. Volunteers are on a probationary period for three shifts.
APPENDIX C: WONDERLAB’S CUSTOMER SERVICE VALUES

In order of priority:

1. Safety
   - watch for unsafe situations - you are the extra eyes and ears
   - be alert - facing visitors
   - help sanitize surfaces at the end of day
   - pick up items on the floor that are a tripping hazard

2. Courtesy
   - smile
   - make eye contact
   - greet visitors “welcome to WonderLab”
   - be friendly & approachable
   - anticipate visitor needs
   - if visitors ask where something is (example, vending area or restroom), walk them to their destination if possible; never enter the restroom with a visitor

3. Appearance
   - wear nametag and apron
   - make the museum a welcoming place
   - check restrooms and report to floor manager if they need attention
   - keep moving where needed, no “clumping” with other volunteers
   - show visitors you are ready to help; no sitting with back to visitors
   - use appropriate nonverbal communication (refer to Appendix D)
   - if asked a question and you don’t know the answer, say “I don’t know, but I’ll find out;” then find the floor manager
   - tidy the gallery and reset exhibits; pick up blocks, etc.

4. Playful Discovery
   - send signals “this is cool”
   - create an atmosphere of play
   - learn when to step in, when to stand back
   - encourage creative use of exhibits, unless it could cause injury to body, building or exhibit
APPENDIX D: NONVERBAL COMMUNICATION

You never get a second chance to make a first impression.

- Communication is 70% nonverbal, 23% tone of voice, and 7% verbal.
- Appropriate nonverbal behavior tells visitors that you are ready to help them.
- Inappropriate nonverbal behavior can sabotage our visitor’s first impression and cause them to complain about our service.

The behavior in *italics* (below) will make a good impression on visitors. This is the behavior we expect from all volunteers.

<table>
<thead>
<tr>
<th>Expected Behavior</th>
<th>Unexpected Behavior</th>
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<tbody>
<tr>
<td><em>Smile, look pleasant &amp; alert all the time!</em></td>
<td>Not smiling, scowling or frowning</td>
</tr>
<tr>
<td>Think Disney World...you are on stage!</td>
<td>...makes visitors feel they cannot approach you with a question, may cause visitors to complain about you.</td>
</tr>
<tr>
<td><em>Look all visitors in the eyes and smile!</em></td>
<td>Avoiding eye contact with visitors, or talking or texting on your cell phone</td>
</tr>
<tr>
<td>...shows you are ready to help them.</td>
<td>...indicates that you do not want to help them.</td>
</tr>
<tr>
<td><em>Greet the visitors.</em></td>
<td>Not greeting visitors at all</td>
</tr>
<tr>
<td>Say &quot;Hi&quot; or &quot;Welcome to WonderLab.&quot;</td>
<td>...makes visitors feel unwelcome.</td>
</tr>
<tr>
<td><em>Keep moving &amp; busy all the time!</em></td>
<td>Standing still for a long time or “clumping” with other volunteers</td>
</tr>
<tr>
<td>...shows visitors that you are doing your job.</td>
<td>...may cause complaints about your job.</td>
</tr>
<tr>
<td><em>Stand or sit up straight!</em></td>
<td>Slouching or leaning</td>
</tr>
<tr>
<td>...shows visitors that you are ready to help.</td>
<td>...indicates that you are inattentive and bored.</td>
</tr>
<tr>
<td><em>Stand with arms down or behind the back.</em></td>
<td>Standing with arms crossed or hands in pant or apron pockets</td>
</tr>
<tr>
<td>...shows you are ready to help.</td>
<td>...indicates you are not willing to listen or help.</td>
</tr>
</tbody>
</table>
**Expected Behavior**

*Face the room (when sitting or standing).*
If playing with an exhibit, look up toward the room every few minutes.

*Speak with a calm, caring, soothing tone.*
...shows you are competent and able to help.

*Get down to child's level. Stoop or squat to get eye-to-eye with child or visitor in wheelchair.*

*Give visitors the right amount of personal space.*
- Keep an “arm's length” distance when talking to visitors.
- Keep interactions brief.

**Unexpected Behavior**

Facing the wall ...indicates that you are doing your own thing and do not want to be interrupted. Do not get so involved with your own exploration that you do not look up to see if a visitor has a question, or needs your help, or if a situation is unsafe.

Sighing and speaking quickly ...
...indicates you are annoyed or impatient.

Standing upright, looking down at a child ...
...makes the child feel small and may be threatening.

Hovering or standing too close to visitors ...
...may make them feel uncomfortable.
APPENDIX E: GUIDELINES for MESSING AROUND WITH SCIENCE

WonderLab is full of exciting exhibits and activities that encourage experimentation. The museum is designed for visitors to go through on their own, but gallery staff and volunteers provide the personal connection to the exhibits that makes WonderLab such a special place.

You do not need to know a lot about science to be a great WonderLab volunteer. All you need is a curiosity about science, a positive attitude, an interest in learning, and a willingness to work with people. You will have many opportunities for on-the-job training.

1. **Encourage an Atmosphere of Play** – Science includes messing around with “stuff” and not being afraid to make mistakes.
   - Present a positive attitude. Be friendly, attentive, excited, and accessible. Represent WonderLab as a place that values curiosity and encourages playful experimentation.
   - Experiment for yourself. Get involved with the exhibits, try new things, and work on developing new skills.
   - Remember, it’s not about having all the answers. It’s about testing, observing, and discussing ideas and possible conclusions.

2. **Facilitate Discovery** – Enrich the visitor’s learning experience.
   - Ask questions that encourage further exploration. Use an inquiry approach, with questions that visitors can answer with an observation or experiment rather than vague “why” or “how” questions that shut down exploration.
   - Suggest exhibit challenges to assist visitors in their inquiry.
   - Communication – the sharing of ideas – is an important part of science. Be a thoughtful observer, a good listener, and build an engaging dialogue.

3. **Make it Relevant** – It all boils down to science. Science is used to explain the world around us.
   - Make a connection between the activity/exhibit, and the real world of the visitor’s personal experience.
   - Help visitors develop an appreciation for science as a tool that helps us understand the world around us.
   - Be supportive and help visitors build their confidence as self-directed learners.
APPENDIX F: STANDARDS OF BEHAVIOR

**Code of Conduct**

The following are strictly prohibited when acting on behalf of WonderLab:

- Possession or use of alcohol, tobacco and or illegal drugs (or be under the influence thereof)
- Bringing onto WonderLab property dangerous or unauthorized materials such as explosives, firearms, weapons or other similar items
- Use of abusive, obscene and discriminatory language
- Direct personal attack or harassment (visual, verbal, or physical) on another person
- Use of inappropriate language/humor
- Disrespect or rudeness to a visitor, staff member or volunteer.
- Inappropriate touching of a visitor, staff member or volunteer. (See guidelines that follow for physical contact.)

Any volunteer who violates this code is subject to discipline, up to and including removal from the volunteer program. For clarification or for guidance on behaviors not addressed here, contact the Gallery Operations Manager or Volunteer Director.

**Physical Contact**

Be aware that even well intentioned physical contact may be misconstrued by the child, an observer, or by anyone to whom this action is described.

The following types of interactions may be appropriate between museum volunteers and children while on WonderLab premises or conducting WonderLab business. All museum volunteers should take the lead from the child and the child’s caregiver as to what is appropriate:

- side hugs
- shoulder to shoulder hugs
- pats on the shoulder or back
- handshakes
- "high fives" and hand slapping
- verbal praise
- arms around shoulders
- holding hands while walking with young (preK) children
- sitting beside small children
- kneeling or bending down for hugs with young (preK) children
- pats on the head when culturally appropriate
- reciprocation of appropriate gestures initiated by a child
The following types of interaction are not to be used by WonderLab volunteers when interacting with children or with other volunteers while on WonderLab premises or conducting WonderLab business:

- inappropriate or lengthy embraces
- kissing
- holding children over five years old on the lap
- touching buttocks, chests or genital areas
- touching the knees or legs
- tickling
- wrestling and/or roughhousing
- giving piggyback rides
- picking up
- giving or receiving a massage.
- initiating or receiving any form of unwanted affection
- expressing compliments that relate to physique or body development
- entering the restroom with a visitor

If anything happens that you believe may put you at risk of accusation by anyone, please do not keep this a secret. The floor manager should be informed and appropriate action (if deemed necessary) will be discussed with you.

**Progressive Disciplinary Policy**

All volunteers are on a probationary period for three shifts. During this time, the floor manager gives the volunteer additional training and coaching on how to interact with visitors, staff and with other volunteers. If a volunteer does not behave according to the standards of behavior described here, WonderLab will follow a progressive disciplinary process with these steps, in order:

1. Coaching
2. Verbal Warning
3. Written Warning
4. Final Warning and Suspension
5. Recommendation of Termination

All steps will be documented in writing and volunteers will receive a copy.

Some behavior, especially illegal activity, is not subject to a progressive discipline and may be reported to local law enforcement.

**Appeal Process**

Volunteers will have the opportunity to present information that may challenge management's use of disciplinary action to WonderLab's executive director.

*By my signature on the WonderLab Volunteer Application Form, I acknowledge that I have read and agree to abide by the guidelines in this document.*
APPENDIX G: GUIDELINES FOR INTERACTING WITH PRESCHOOL CHILDREN

“Young children are more scientists than are anything else.”
Herbert Zim

“If a child is to keep alive his inborn sense of wonder.... he needs
the companionship of at least one adult who can share it,
rediscovering with him the joy, excitement and mystery of the work we live in.”
Rachel Carson

WonderLab’s Discovery Garden is designed to provide a developmentally appropriate science environment for the youngest visitors, including exhibits such as building blocks, animals, bubbles, color, magnets, water, etc. Although Discovery Garden is specifically designed for preschool children, they will also fully explore exhibits in other parts of the gallery. Guidelines for working with preschoolers inside the Discovery Garden also apply the other areas of the gallery.

1. Volunteers in the Discovery Garden

- Ensure the safety of the children
- Keep Discovery Garden clean and picked up so that it is continually inviting to children
- Interact with children and adults in ways that keep the sense of wonder alive

2. Safety is the primary concern!

   a. Always check the area for unexpected hazards, upon arrival and periodically thereafter. For example, you should check the following:
      - Are the electrical outlets protected with covers?
      - Is there anything that children or adults could trip over (e.g., electrical cord)?
      - Are there any small pieces (i.e., choking hazard) in the area?
      - Is anything broken or coming apart?
      - Is there anything sharp?
      - Is there anything heavy that could accidentally fall on a child?
      - Does the space allow enough room for play and traffic flow?

   b. While the children are in the area, continually watch for potentially unsafe conditions. For example, you should check the following:
      - Are the supplies and materials being used safely?
      - Are the children interacting with each other in safe ways?
      - If anything becomes broken or unsafe, remove it immediately and inform the floor manager.

3. You should actively invite preschool-age children to use the exhibits in Discovery Garden.

   a. How you convey the invitation makes a big difference.
      - Several baskets of blocks, or interestingly arranged stacks, or the beginning of a unique structure, are all more inviting than just a jumbled pile of blocks.
      - A welcoming person playing with blocks is more inviting than a table of blocks by itself.
b. Because children will be coming to Discovery Garden at different times, it is very important that you straighten up the area throughout the day.
   • You can invite the children to help put blocks away when they are finished.
   • You should always sort the materials as you put them away.
   • Note that some children will respond to a verbal invitation, but will not begin using the materials until the "stranger," i.e., you, moves away. Watch the child for nonverbal cues!

4. How do you talk with a preschooler? These tips apply inside and outside Discovery Garden.

a. Get down to the child's level.
   • Stoop or squat to get eye-to-eye with the child.
   • To a young child, you may look like a giant.

b. The fewer words, the better!
   • Often, a simple declarative statement "These blocks are fun" or "Here are some blocks" is more inviting than the questioning, "Would you like to play with some blocks?"
   • Young children often hear only the end of what you say, so stating clear guidelines is essential. For example, "Blocks are for building" rather than "Don't throw the blocks."
   • Use the word "unbuild" to help children know what to do when they are finished building. Structures will topple, but we want to discourage random knocking over. Removing a strategic block from the bottom of a structure to see what happens is great scientific exploration when a child is ready for it. Your job is to be sure it is done safely.

c. Provide words for what the child observes or does.
   • Describe what the child is doing or what the blocks are doing. For example, "You are balancing that one on top" or "These blocks are beginning to wobble."
   • Let the child complete a thought. For example, "This building is very..." and wait to see if the child fills in a word.
   • State the problem and let the child suggest a solution. For example, "This block is leaning toward you. It looks as if this one may fall down. We need to fix something here."

5. The children are beginning scientists and should be encouraged in their investigations.

a. Most of their time should be in uninterrupted play and exploration.

b. Refrain from making "models" for the child to copy. We want children to do their own exploring. You may be building something when a child approaches, but then "unbuild" it before the child tries to make one like it.

c. It is OK for them to be "intelligently wrong" about something. If a child tells you that red and yellow make purple, don't jump to correct her. Instead help her to manipulate the colored pieces on the light table in order to reach a different conclusion. And remember that the new conclusion may not come that day!
APPENDIX H: GUIDELINES FOR INTERACTING WITH PEOPLE WITH DISABILITIES

- Remember that a person with a disability does not necessarily need help. If you see a situation where you think you might be able to be of assistance, ask. Do not, however, insist that the person accept your offer.

- If an individual requests your assistance or accepts your offer of assistance, ask him or her how you can best be of help. Then, assist the person with a minimum amount of attention.

- Circumstances influence a person's needs and necessary accommodations. Not only do an individual's needs change by circumstance, but people with the same disability may have different needs or different methods of getting the same needs met.

- When speaking to a person with a disability, speak directly to that person and not to a companion who may be present (nor to the interpreter, if the person is deaf).

- Talk to adults with disabilities in an age-appropriate and socially acceptable manner. Do not speak to people with disabilities as if they were children, and do not immediately put yourself on a first-name level of relationship.

- People with disabilities may have difficulty expressing their ideas. Wait for the person to finish his or her thought. Do not interrupt or finish thoughts for others. Never pretend to understand someone when you do not. Instead, ask the person to repeat what he or she said and check your understanding by telling the person what you heard.

- Let the person with the disability set the pace for walking.

- Relax. Do not be embarrassed if you use an expression that seems to be related to a person's disability, such as "See you later," or "I have to run along now." These expressions are common and are used by people with disabilities as well.

- A person's disability and/or functional limitations caused by his or her disability should be held in strictest confidence.

Note: More resources are in the volunteer room.

Source: Training Tough Topics, by Margaret Gilbride. Indiana Institute on Disability and Community
APPENDIX I: ARTICLES ON VOLUNTEERING
Playful Attention:
The Role of the Explainer

By Darlene Librero

You sit on the sidelines, watching as visitors move through your space in groups of twos and threes. Trickles of conversation, public but intimate, reach your ears. Exhibits clack, quake, heat up, and twist—the special character of each vying for visitor attention.

One young woman, mesmerized, engages with an exhibit on the other side of the room. You observe for a while before deciding to join in. Smiles come before words, and when words do come, they describe what each of you is feeling or what you think you've experienced.

Others, hearing the conversation, offer their observations. For a few minutes, the hunter is contagious, and then it's over.

You walk away, each of you with something you didn't have before...

At the Exploratorium, the Explainers never leave the floor. They stroll, wait near exhibits, wait at exhibits, appear aloof perhaps, or engage in conversation with each other. But all the time, they watch.

They notice out of the corner of their eye the boy at the Bernoulli Blower who never seems to get enough of chasing the floating ball. They see the girl building the Voussoir Arch Bridge with blocks almost as big as she is. In the moment, Explainers must choose whether to be part of a visitor's experience or not. The decision is theirs to make.

To be keen, alert but at ease, is the disposition of the Explaner. The job requires a balance of discreet observation and creative engagement. As a team or one-on-one, Explainers communicate an atmosphere of play. They suggest exhibit challenges that assist visitors in their inquiry. They reinforce a safe environment in which visitors can experiment, try new things, comment on their observations, or ask questions. They embody what they encourage others to practice—playfulness, curiosity, thoughtfulness, reflection.

New Explainers are offered a cycle of training, then space to grow from their floor experiences, then more training. In each interface with the public, there are questions to be asked: Do I construct ideas and concepts, or do I leave construction to the visitor? How much do I lead this interaction? Every experience evolves toward a different answer.

Off the floor, there are regular Explainer meetings, ongoing training in content and facilitation, and opportunities to participate in developing demonstrations and planning public programs. Explainers get to discuss various aspects of their experiences on the floor and explore how they as a team can add to the museum's vitality.

Over time, new skills are developed through this pattern of learning and facilitation experiences. Most Explainers become quite good at interacting with visitors. Everyone learns that it's not about having all the answers; it's about being thoughtful and discussing ideas, perceptions, and possible conclusions. By modeling learning styles, floor staff help visitors build confidence in their own learning.
A shared vision

The job is demanding, and an individual’s commitment to interact can run aground for many reasons:
- The high level of museum floor stimulation can be distracting.
- Processing exhibits with visitors on the floor takes a lot of energy; continually using one’s working memory is literally exhausting.
- Inadequate breaks from walking the floor may make Explainers tired.
- Being out of contact with visitors for more than 15 minutes at a time may leave Explainers concentrated on their own internal consciousness, rather than on visitors’ activity.
- Attendance is cyclical (by season, time, day); if lower than average, it may lead to a drop in excitement.

These challenges can all be remedied with a careful management style that includes allowing floor staff to relish the exhibits themselves and to develop other floor-related projects.

Support for Explainers needs to come not just from their immediate supervisors but from the museum as a whole. There must be a concerted effort to foster exchange between floor staff and other departments. Mutual trust grows as people get to know each other better.

Having an opportunity to participate in critical operational and program-planning discussions connects floor staff to the museum’s creative process and, in turn, allows for a more dynamic exchange between Explainers and visitors.

Darlene Libero directs the Explainer Program, part of the Center for Teaching and Learning, at the Exploratorium, San Francisco. For more information, see Ellen Klages’ 1995 book, When the Right Answer Is a Question: Student Explainers at the Exploratorium.

IN THEIR OWN WORDS

Recently, I met with a group of the Exploratorium’s Explainers to discuss their experiences and observations. Here are some of their responses.—D.L.

On approaching visitors or being approached

When at an exhibit I try to look available, and not busy. You can do that by having open body language and leaving space for the visitor—also by having an inviting expression, such as a smile. Another way to invite visitors is, when you’re looking around, you make eye contact with them. Then they will start to approach you.

—Janet Lan and Sophiee Mean

The main reason I approach people at the Air Rings exhibit is because there is no graphic on it. Another reason is if they look clearly confused. Most people think it’s mercury, but it’s just air and water.

—Andrew Minow

Sometimes, from training or classes in school, I’ll learn interesting facts or concepts related to an exhibit. The graphics can’t cover everything, so I’ll often approach a visitor who is looking at something—say, Sophisti-cated Shadows or Touch the Spring—and offer up an interesting tidbit.

—Joanna Tong

Sometimes I see visitors at an exhibit and they haven’t quite figured it out yet, but they are reading the sign.... When this happens, I stand nearby, in case they have a question.

—Zoe Clark

Facilitation vs. telling

I choose to take visitors through a process when I explain because I feel they learn more. They figure out the idea of the exhibit with a little push from me. If I tell them straight up, I feel it won’t stick to their mind. It’s more fun to work through something from me and the visitor.

—Stephen Tong

Playing with exhibits attracts visitors’ attention. They are interested to see the exhibits at work and what function they perform. The real shocker is when they find out you’re in high school. This ... encourages other people to play with and learn more about the exhibits in the Exploratorium.

—James Fisher

On staff support

There are usually people in the shops, and they’re really helpful if I have questions about exhibits or maintenance problems. In the mornings, either before the museum opens or shortly thereafter, I see shop staff walking around, and they’ll often take the time to stop and talk with me.

—Joanna Tong
Young People and Learning

Children ages 3–5
- Are curious, active, eager to explore.
- Explore their surroundings in their own way, often doing things over and over.
- Learn most through playing with real things.
- Sort things by what they are used for, or by how they look or feel.
- Often use trial and error to solve problems and explore questions.
- Believe that they are the center of the world and that others see things as they do.
- Tend to focus on parts, not the whole; on now, not a sequence of events.

Children ages 6–8
- Continue to be curious, active, eager to explore.
- Begin to use logic to solve problems and answer questions in “hands-on” situations.
- Still use trial and error often.
- Apply past discoveries and experiences to new situations.
- Are developing an understanding of measurement including length, amount, and time.
- Use stories and information from books to build on their own experiences.
- Often confuse cause and effect, and what’s real and imaginary.
- Are developing independence. Want to do things for themselves.
- Often talk to themselves as they play.
- Are working on skills like pouring liquids, working zippers, using crayons, paint brushes and other simple tools.

Children ages 9–12
- Tend to be more selective about what interests them.
- Are developing the ability to think about and solve problems in their heads.
- Still learn best through “hands-on” experiences. Do experiments, collect and organize data.
- Can begin to evaluate their own thought process and approach to solving problems.
- Understand cause and effect.
- Use measurement and mathematics to solve problems.
- Are able to see relationships among objects and ideas.
- Make and test simple predictions.
- Are more aware of other people’s views.
- Are becoming more independent. Can plan and carry out activities and return to them the next day.
- May be very talkative. A growing vocabulary helps them express ideas. Discussion is part of their learning.
- Are becoming more skillful with tools such as scissors, pencils, hammers, and sewing needles.

Use information from books and resources.
- Can plan and stay with a project over a period of days or even weeks. More willing to practice a skill until mastered.
- Accept and learn from the views of others.
- Begin to develop ethics and awareness of the larger community.
- Learn to use science equipment like simple microscopes, thermometers, and scales.

Sharing Math with Children: A Guide for Caregivers

North Carolina Museum of Life and Science
PO Box 15190
Durham, NC 27704

Supported by the National Science Foundation
Grant #9909566
Keep your hands in your pockets. And wait until they ask.

This book is about the process of learning and communicating science in museums and other public places. It celebrates the people who enrich my life: volunteers, exhibit builders, staff behind the scenes, visitors, friends and family, and certainly every teacher and student I've ever learned from. This preface is about transforming yourself from a person who likes people and enjoys learning into a facilitator and informal teacher—a mentor.

No One Learns the Way You Do

The very hardest thing to learn is that no one else learns in exactly the same way you do. You must learn to recognize and appreciate a wide variety of learning styles. Younger children learn most effectively by manipulating objects. For them, pouring two liquids together is a much more potent experience than watching someone else or seeing a picture in a book. You can help children notice details when you ask them to describe what's happening. Logical
reasoning begins to grow in children around age 9 or 10, but even some college students don't reason in a fully formal manner in science and math classes.

Although children want to get their hands on and into anything that catches their attention, many adults need to know the context first. You may hear an adult ask, "What's this all about?" Adults want to know if they're going to get wet before they dive in! You'll need to encourage them to enjoy an unexpected experience without feeling foolish.

Recent educational research shows that the richest experiences allow us to learn in multiple ways simultaneously. Our body movements teach us about size, shape, viscosity, and density. We respond to the beauty of a tuning fork's note and might want to write a poem or a song about the experience. There are strong social aspects of learning in the presence of others, yet we learn about ourselves by struggling alone to understand a new concept. Learning new words and describing what we see helps us make verbal sense of the world. Mathematical and symbolic representations give another perspective.

**Getting Ready**

When you prepare to teach a formal class, you read, think, study, work problems, read more, talk with colleagues, make a syllabus, tear up the syllabus, and think more. At some point you can't get any further until you meet your students. You must find out why they are there, figure out how they learn best, and learn what they already understand. Teaching in a formal setting is about building long-term relationships.

But museums and science centers are not just like schools. Visitors usually come when they want to, they come with people they know and like, and they stay only as long as they wish. The range of ages, attention spans, experiences, and interests of museum goers can astound you. You have less than a minute to catch their attention and invite them to join your endeavor. They occasionally walk away from you in mid-sentence.

Despite these differences, getting ready to work with visitors is a lot like preparing to teach. You've participated in training sessions that include reading, talking together, setting up apparatus, role playing with others, cleaning up, and trying to remember where everything goes. But it isn't enough, and you're nervous. "What if they ask a question I can't answer?"

Yes, that will happen, but you just have to dive in and see what happens. Just as a formal teacher needs live students to guide the development of a course, you need visitors to guide the discourse about the phenomena you'll explore together.
Asking Questions

What do you think of these comments?

“When I ask a question, I want an answer, not another question!”

“A good question brings out what you already know but may not be aware of.”

“If I can’t remember what visitors ask me about this activity, I must be talking too much.”

When you focus on asking questions rather than starting a monologue, you begin to build a relationship with a visitor. In many ways, an answer closes the conversation. When you offer a factual answer to a curious question, you make yourself the expert. But when you answer a question with another question or suggest an experiment to try, you give responsibility back to the visitor. You’re trusting the visitor to be able to figure it out, and you’re making a commitment to stick with the interaction.

Lots of Questions

Volunteers here at the Science Museum of Minnesota have shared many pearls of wisdom with me. I’ve learned wonderful conversation techniques from them. We’ve grouped these techniques into four kinds of questions. Each category is important to investigations in science; the categories increase in complexity through the following list. If visitors are eagerly asking you questions, respond with a question at the same or a more complex level.
What do you notice?

You ask a visitor to observe and describe the experiments happening right now. These questions help young children and developmentally disabled or reluctant visitors to get involved. Getting kids to report verbally helps them slow down enough to notice details. Observing is a very important task in science, and it takes practice.

Examples:
“What do you see happening in the bottle?”
“Where is the sound coming from?”

What’s the pattern?

Ask visitors to think back and compare two or more current results or describe a sequence of events. You increase the level of involvement with visitors while keeping their risk of “wrong answers” low. Successful interactions build trust.

Examples:
“What colors did you find in these two black markers?”
“What happened after you set the pan of alcohol on fire?”

How is this like...?

This kind of question involves comparing past and present results or applying experimental data to previous life situations. Give plenty of thinking time for this deeper investigation.

Examples:
“How do you know the gas is CO₂?”
“How does this remind you of a swing set?”

Then what?

This most complex sort of question asks visitors to predict results, evaluate complex data, synthesize, and summarize. It can be very satisfying for adults and kids with longer attention spans.

Examples:
“What would happen if you switched the wires around?”
“What do you think is going on here?”

That last question works in almost every circumstance because its threat level is very low. Try to avoid questions like “What do you know about this?” They can be a direct frontal attack on a visitor’s self-esteem. Questions with “yes” or “no” answers often close the door to an inquiry. Rhetorical questions are ones for which you don’t expect an answer or that you know the visitor can’t answer. For example, “Isn’t this a nifty device?” or “How cold is it in there?” can be a good icebreaker, but listen for visitor annoyance. A response like “How should I know!” ought to tip you off!

You’re communicating on a wonderful level when visitors propose an extension of an experiment. “Try it and see what happens” is a great response unless the suggestion is clearly unsafe or you don’t have the apparatus needed. Let them try even if you know what happens, even if it makes a mess.