1. **Which guide are the facilitators supposed to use—Bayer or PTA?**

Please use the PTA-provided guides. The Bayer guides were written for single family-use at home. We simulated each experiment to mimic a science night experience and created the PTA guides specifically to foster family engagement. The PTA guides also further clarify experiment instructions and necessary supplies to make hosting a science festival as easy as possible for your PTA.

2. **The facilitator guides are written for parent-child pairs, will they work with more children?**

Ideally, there is a 1:1 student-to-parent ratio, but 2:1 (students to parents) will also work. Just encourage your volunteers to alternate between the students and the parent as they follow the directions in the facilitator guide. More than two students to one adult would probably become overwhelming for the experiment table and for the volunteer to facilitate.

3. **Do we really need 60 funnels?**

Nope, that was a very unfortunate typo, 6 should be perfect!

4. **Do we really need 60 trash cans?**

Maybe. We estimated that, for each activity, one science festival would need 60 of the various waste receptacles (aka garbage cans). We based this number off a minimum of three waste pitchers and one trash can at each liquid-based site and at least three trash cans at every other activity. You will know your space, garbage can size and room setup best. We just wanted to make sure you have enough places to dispose of liquids and extra experiment supplies during your event.

If you’re able to have one or two volunteers whose responsibility is to remove waste from the experiment stations throughout the night, this number of bins is probably not needed.

5. **Why are there different-sized cups referenced in the facilitator guides?**

These activities were originally created to be completed at home. We have kept those guidelines so that you can share them with families to take home after your
event and they will still work. We tested the activities that called for smaller cups and they worked fine in the larger ones, so the provided starter packs will only have the 12 oz. cups.

6. **Do we need to buy 1/8th teaspoons and half measuring cups?**

   It was our experience that the experiments worked with eyeballing the correct amounts. In adding up cost, we did not want to burden each PTA with needing to purchase various-sized measuring spoons and cups. However, we wanted to leave the exact amounts visible. If you’re able to purchase (or gather) these items that’s awesome! If not, the experiment will still work with estimating.

7. **For Bubbling Lava Lamps, it looks like the supply list doesn’t match the activity, why it this?**

   Thank you for catching this error! This facilitator guide was updated on Feb. 5. Although the supply list was incorrect, we double-checked and the correct amount of supplies was sent out.

8. **Some activities call for whole wheat flour, can I use all-purpose instead?**

   Yes, the activities will work with either type of flour.

9. **Can scissors be kid-sized or do they have to be adult-sized?**

   Any scissor size should work. Just make sure you cut the bottles in half for Dancing Raisins before the event (This process is noted in the Facilitator’s Guide). When we practiced the experiments, this task was a little more dangerous than we expected even with large adult scissors.

10. **Are the counts listed for water/pop bottles all we really need? Are they reusable or do we need a set per family?**

    When we created the counts for bottles, we first looked at stations where things would be reusable and these stations received a suggested count of five bottles anytime a bottle was called for during the experiment (presumably supporting up to three families at a time with back up materials).
For any consumable material we counted the amount of that material that would be needed for one family pair to complete the experiment with about 10 extra for mistakes.

The water/pop bottle counts should be the exact numbers that you need for 50 families to complete the experiments. Unlike the garbage can/waste receptacle number, this was a very concrete process as we could track and scale up experiments as if they were recipes.