Station 1:

Only the guide at this station will do this experiment while the kids watch. You need to explain first how you got these solutions made. Ask the kids what happens when you mix. Will it glow? How do you find out if it will glow (using UV light) and why UV light makes the fluorescence show (an explanation)

How To Make Glow in the Dark Slime

It's easy and fun to make eerie glowing slime.

It only takes one more ingredient to turn normal slime into glowing slime. This is a great Halloween project, though it's fun for any time of the year. Glowing slime is safe for kids to make.
Difficulty: Easy
Time Required: about 15 minutes
1 part of glue gel (either clear or pale blue) with 3 parts of warm water
3 parts PVA or glue solution to 1 part borax solution,

Here's How:

1. Basically, you make glowing slime by adding zinc sulfide or glowing paint to normal slime. I have a lot of slime recipes listed. As written, these instructions make a clear slime that glows in the dark. However,

you could add zinc sulfide to any of the recipes for slime with different characteristics.

2. The slime is made by preparing two separate solutions, which are then mixed. You can double, triple, etc. the recipe if you want more slime. The ratio is 3 parts PVA or glue solution to 1 part borax solution, with a little glow-in-the-dark agent thrown in (measurement isn't critical).
3. First, let's prepare the glue gel or polyvinyl alcohol (PVA) solution. If you have polyvinyl alcohol, you want to make a 4% polyvinyl alcohol solution. 4 grams of PVA in 100 ml of water is great, but the project still works if your solution is a different percent of PVA (just takes more or less). Most people do not have PVA sitting around their homes. You can make a glue gel solution by mixing 1 part of glue gel (either clear or pale blue) with 3 parts of warm water. For example, you could mix 1 tablespoon glue with 3 tablespoons warm water, or 1/3 cup glue with 1 cup of warm water.
4. Stir the glow agent into the glue gel or PVA solution. You want 1/8 teaspoon of zinc sulfide powder per 30 ml (2 tablespoons) of solution. If you cannot find zinc sulfide powder, you can stir in some glow-in-the-dark paint. You can find glowing paint at some paint stores or glowing paint powder (which is zinc sulfide) at craft or hobby stores. The zinc sulfide or paint powder will not dissolve. You just want it mixed in really well. Please read the label on the paint to make sure it is safe enough for your purposes.
5. The other solution you need is a saturated borax solution. If you are in a chemistry lab, you can make this by mixing 4 g of borax with 100 ml warm water. Again, most of us aren't going to be doing the project in a lab. You can make a saturated borax solution by stirring borax into warm water until it stops dissolving, leaving borax at the bottom of the glass.
6. Mix together 30 ml (2 tablespoons) of PVA or glue gel solution with 10 ml (2 teaspoons) of borax solution. You can use a spoon and a cup or you can just squish it together with your hands or inside a sealed baggie.
7. The phosphorescent glow is activated by shining a light on the slime. Then you turn out the lights and it will glow. Please don't eat the slime. The slime solution itself isn't exactly toxic, but it isn't good for you, either. Zinc sulfide can be irritating to the skin, so wash your hands after playing with this slime. It may be harmful if swallowed, not because ZnS is toxic, but because it can react to form hydrogen sulfide gas, which isn't great for you. In a nutshell: wash your hands

after using the slime and do not eat it. Do not inhale or ingest the glow-in-the-dark ingredient, whichever you choose to use.

8. Store your slime in a baggie or other sealed container to keep it from evsporating. You can refrigerate it if desired. The slime cleans up well with soap and water.

Tips:

1. I got a glowing paint called 'Glow Away' at Michael's craft store, for $1.99, that is good for many, many batches of glowing slime (or other glowing projects). It's safe, washes away with water, and is easy to mix into the slime gel. It was located with the tempera paints. Other products may work equally well, just be sure to check the label for safety information.
2. I use Elmer's non-toxic blue glue gel for this project, sold with school supplies, but there is a clear glue gel made by another manufacturer, plus there are red or blue glue gels with stars and glitter that you could use.
3. Where I live, borax is sold in stores right next to laundry detergent. If you don't see it there, try looking near household cleaning chemicals or on the insecticide aisle (note: boric acid isn't the same chemical, so don't make substitutions).