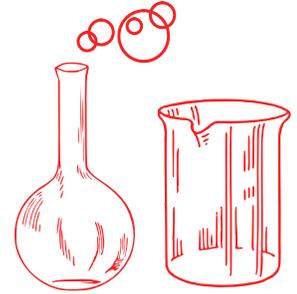


Kitchen Chemistry: PH Scale

Follow along with our STEAM-Powered Saturday video tutorial as we transform our kitchens into our very own chemistry labs! **Safety Note:** This experiment can get a little messy! Make sure to lay down some paper on your work surface before you get started.

Materials: Turmeric, water, small cups (for testing), a pen and paper.

You will also need some things to test! We used baking soda mixed with a little water as our basic substance and lemon juice as our acidic substance. Other things you can try testing are: vinegar, dish soap, milk, oranges, soda, ketchup.



Making Your Indicator



Start by making a "Turmeric Tea"! Add about two tablespoons of turmeric to a cup of hot water, and then stir with a spoon. **The "Turmeric Tea" will work as your indicator: it will turn red if a substance is basic, and will stay yellow if a substance is acidic or neutral.**

We recommend dividing your "Turmeric Tea" into several different cups, and then labelling the cup with the test subject to keep track of what you're testing.

Now that you have your indicator made, it's time to find some acids and bases to test! Take a look around your kitchen to find some good test subjects.

Hint: Acidic foods taste sour! Bases often feel rather slippery or slimy. Basic foods are might be hard to find, since they often taste bitter, so you might need to try testing things that aren't food.



Now it's time to test your subjects! Add your test substance to your indicator and see what happens!

Also try: Try making a turmeric paste instead of tea, by adding just a little bit of water. Paint the paste onto paper, or dip your paper into the mixture, then once it dries, use the paper as your indicator. Brush on some of your liquids, and see if they change color. It's sort of like color-changing paint!

Here is how our experiments turned out! What did yours end up like?