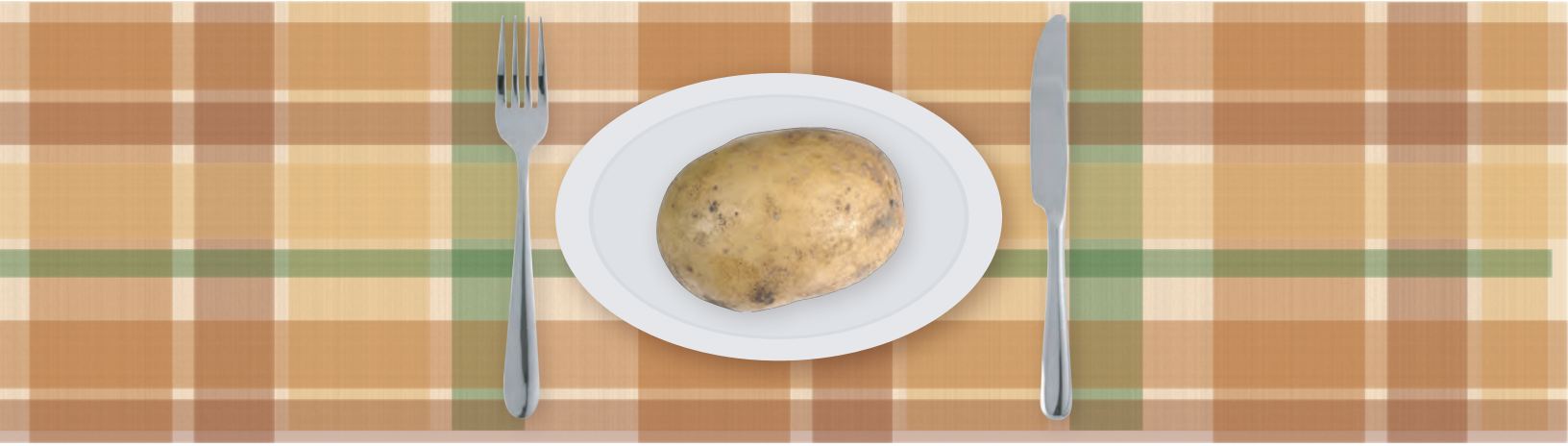


SPUD SCIENCE

Do you have any leftover potatoes from your Thanksgiving dinner?
Grab a handful of spuds and try these potato-tastic experiments!



POTATO VS. PLASTIC

Do you think a plastic straw is strong enough to poke all the way through a potato?
For this experiment, you will need one raw white potato and one plastic drinking straw (the non-bendy kind).

1. Hold the potato by one end so that no part of your hand is underneath the potato.
2. Use your thumb to cover over the end of the straw.
3. Hold the straw over the potato and keep the end covered with your thumb. Pull your hand straight up and plunge the straw straight down through the potato.

HOW DOES IT WORK?

Even though the straw appears empty, it's actually full of air! When you close the end of the straw with your thumb, you are trapping the column of air inside the plastic so it acts like a solid object, which can drive right through the potato.

BALANCING SPUDS

If you have a lot of leftover potatoes, try this experiment and get the whole table involved!
For each person you will need one raw potato, one sharpened pencil, and one fork.

1. Slowly press the point of the pencil through the middle of the potato.
2. Keep pressing until about 1 1/2" of the pencil sticks out the other side. Be careful not to poke yourself!
3. Press the fork into the bottom of the potato, make sure it is at a 45 degree angle and the handle is away from the pointed part of the pencil.
4. Gently place the tip of the pencil on the edge of the table so the potato hangs off the edge and the fork hangs underneath the table.

HOW DOES IT WORK?

When the potato is hanging off the table, most of the mass - the potato and the fork - is located below the balancing point - where the pencil point is against the table. Having the mass below this point makes it much easier to balance. Try sticking the pencil through at a different point. Does the location of the pencil make it easier or harder? What happens if you put the fork at a different angle?

STARCHY SPUDS

Which type of potatoes do you serve with dinner? You can try this experiment with raw potatoes, mashed potatoes, whipped potatoes, sweet potatoes, or any other potatoes you might have on hand. All you need are cotton swabs and iodine!

1. Place a small amount of each potato sample on a separate plate or paper towel.
2. If any of the potatoes you have are not peeled, cut into two pieces and try one sample with a peel and try one with the peel removed.
3. Place one drop of iodine on each of your potato samples and use a cotton swab to rub it around (use a new swab for each sample). Observe what happens.

HOW DOES IT WORK?

Iodine can be used as an indicator of a chemical compound called starch. Iodine is typically brownish orange, but when it reacts with starch turns dark blue or purple. All potatoes contain starch, but some varieties contain more than others. Look at your different potato samples. Are some samples darker than others? Do you notice a difference between cooked and raw potatoes? Did the samples with peels left on turn the same color?