

ORANGE CANDLE

Making a candle from an orange is not only a fun and creative project but also a great way to reuse kitchen scraps!

INSTRUCTIONS

(This experiment requires the use of a knife. Please supervise children.)

STEP 1: Cut an orange in half using your knife.

STEP 2: Cut around the edges and remove the triangle shaped bits.

Be very careful to leave the center 'stem'.

STEP 3: Now fill the orange with vegetable oil, leaving the stem sticking up. Use your fingers and add a little bit of oil to the tip of the stem.

STEP 4: Now use your lighter to light the orange stem. You have a lovely, orange scented candle!

SUPPLIES

Orange
Bowl
Knife
(with supervision)
Vegetable oil
Lighter

THE SCIENCE

When you pour cooking oil into the hollowed-out orange, you are providing the fuel for your candle. Oil is a hydrocarbon, which means it contains carbon and hydrogen atoms. These hydrocarbons are energy-rich molecules. When you light the wick, there is combustion, a chemical reaction that produces heat and light.

The stem wick serves as the conduit for the oil to travel to the flame. Capillary action, a process driven by adhesive and cohesive forces, causes the oil to move up the wick against gravity. The soaked wick absorbs the oil and transports it to the flame's location.

Orange Candle Observations

Use this worksheet to process and evaluate your work.



Do you think you can make a candle out of an orange? Why or why not?

Try to light the stem without adding oil. What happened?

After you added the oil, did you stem (wick) light?

How long did you candle stay lit?

What happened to the oil?

