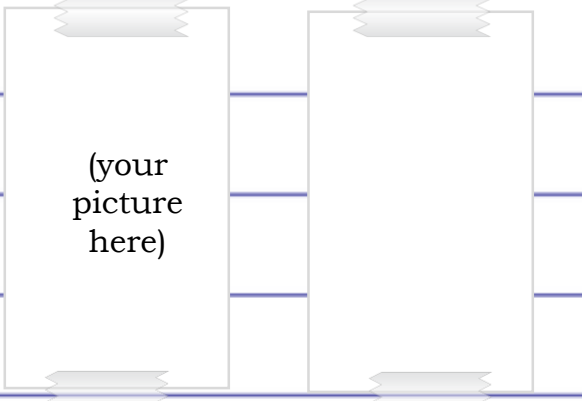


Liquid Investigation



What you need:

Red cabbage - boiling water - 2 bowls - a knife - eye dropper or pipette - clear, colorless liquids - clear cup

(This activity should be done with adult supervision)

What to do:

Preparation: Adults start by boiling the water.

1. Chop up two large handfuls of cabbage into small pieces (about 2 cups). Place the cabbage pieces into one of the bowls.
2. Have the adult pour about 1/2 cup of boiling water onto the cabbage and let that sit for 15 minutes.
3. When the cabbage is done soaking, pour the liquid into the second bowl. This is your **INDICATOR**.
4. Using a notebook or your STEM-At-Home mini notebook, draw a 3-column table like the one below. Be sure to include a space to record the starting color of the **INDICATOR**.
5. Pour the first liquid into a clear cup. Make a guess (or prediction) of what color the **INDICATOR** will turn when it is added to the liquid.
6. Using the eye dropper or pipette add 10-20 drops of the **INDICATOR** to the clear colorless liquid (you may need more if you have a large glass). Record your observations.
7. Repeat steps 5 and 6 for each of the liquids you have. Be careful to fully clean the cups between each test.

Record your observations:

- Did the color change as you expected?
- Can you figure the pattern to the color change? For example, is it related to the temperature of the clear liquid? How about the sugar content?
- Do you think there are other vegetables in your house that might be able to produce a different type of **INDICATOR**?

Observations

Starting **INDICATOR** color: _____

Clear Liquid	Indicator Color – Guess/Prediction	Indicator Color - Observation
