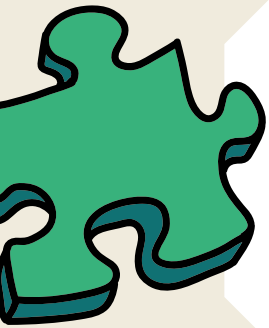




EXTRACT GLUTEN

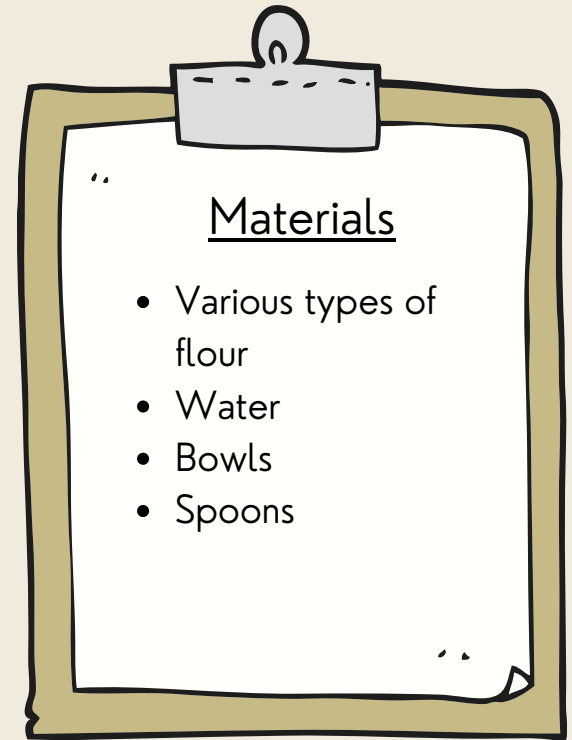
PHENOMENON:

Gluten is a protein in the kernel, or seed, of the wheat plant that is used to make flour.



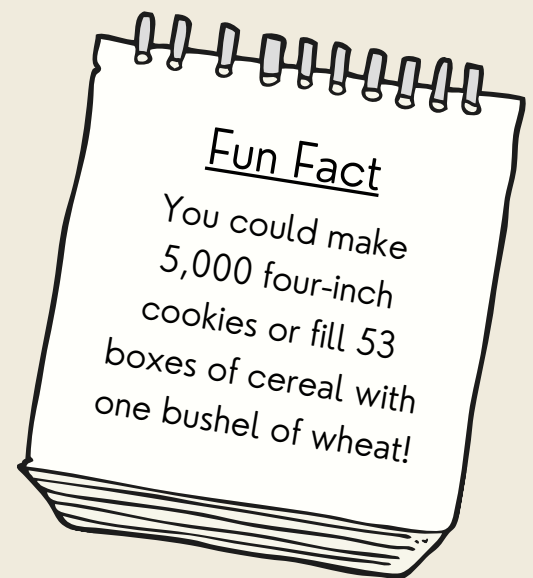
CHALLENGE:

Extract gluten from bread dough.



QUESTIONS TO CONSIDER:

- Add 1 cup of each flour into separate, labeled bowls.
- Slowly add about 1/2 to 3/4 cup water to the flour in each bowl, and knead each mixture until it forms a soft, rubbery ball of dough. Let the balls of dough sit for about 10 minutes.
- Add a few inches of water to each bowl. Knead the dough in the water. You'll notice the water turning milky as it washes away the starch in the dough. Keep pouring out the cloudy water that collects in the bottom of the bowl and add fresh water.
- When the water no longer becomes milky, there is no more starch in the dough, leaving nearly pure gluten.
- Repeat steps 3 through 5 for each of your flour types.



BEHIND THE SCENES:



Gluten allows wheat flour dough to change shape and to return back to its original shape. This helps the bread rise because it traps the CO from yeast and expands, making breads light and fluffy, ready to bake.