



- <u>Etching</u>: the process of using a chemical to remove material from a surface.
- <u>Masking</u>: when certain areas are covered with material to resist the etching, so only the unmasked areas will be etched.



MATERIALS:

- Antacid tablet (e.g. TUMS)
- Clear tape
- Small cup
- Vinegar
- Spoon
- Timer
- Plate

PROCEDURE:

- 1. Take two pieces of clear tape, and wrap them around the top, sides, and bottom of the tablet, leaving a small gap (2mm) between them.
- 2. Look closely at the taped tablet. What material do you think will be etched away when the tablet is submerged in vinegar?
- 3. Place the taped tablet in a small cup, then pour vinegar into the cup until the tablet is fully submerged.
- 4. Set a timer for 5 minutes and watch the gas formation during the reaction.
- 5. After 5 minutes, remove the tablet with a spoon and place it on a plate.
- 6. Observe what parts of the tablet got etched; be sure to look at the top, sides, and bottom of the tablet. Does it match your prediction? Why or why not?