

What you need to do:

Procedure:

1. Collect and wash two marble chips from the front counter. Record your observations about their appearance in as much detail as possible. Pat the chips dry with kimwipes (as much as possible they may remain damp which is ok as they will remain damp after each weighing) and weigh the chips. NOTE: Make sure you keep up with which chip is which so that you don't confuse their masses.
2. Using a graduated cylinder measure out 30 mL of 1.0 M HNO₃ or 1.0 M H₂SO₄ and transfer it to a 100 mL beaker.
3. Place one of the marble chips in the beaker with the acid and make observations and note the time you started the reaction. Swirl the beaker periodically to imitate the force of raindrops.
4. After 15 minutes use tongs to remove the marble chip from the acid. Rinse it off with DI water and pat it dry with kimwipes.
5. Reweigh the marble chip and make observations about any noticeable changes in its appearance.
6. Replace the chip in the acid for an additional 15 minutes and repeat the reweighing process.
7. Repeat step 6 twice more until you have observed the chip for an hour of total time.
8. Using a graduated cylinder measure out 30 mL of 3.0 M HNO₃ or 3.0 M H₂SO₄ and transfer it to a 100 mL beaker. Note: Use the same acid you used in the first part.
9. Repeat steps 3 through 7 for the stronger acid.