

- 1. USE A PIPETTE TO PUT 20 DROPS OF BLUE SOLUTION 1 INTO A SMALL TEST TUBE
- 2. USE A SECOND PIPETTE (DO NOT USE THE SAME ONE AS STEP 1) TO ADD 10 DROPS OF YELLOW SOLUTION TO THE SAME TEST TUBE
- 3. GENTLY SHAKE THE TEST TUBE TO MIX THE TWO SOLUTIONS TOGETHER
- 4. RECORD YOUR OBSERVATIONS/EVIDENCE IN YOUR DATA TABLE
- 5. POUR THE SOLUTION DOWN THE SINK, RINSE THE TEST TUBE, AND RETURN IT TO THE TEST TUBE RACK FOR THE NEXT GROUP

- 1. USE A SPATULA TO PUT A FEW CRYSTALS OF ALKA SELTZER IN ONE WELL OF THE WELL PLATE
- 2. ADD A FEW DROPS OF WATER TO THE CRYSTALS
- 3. RECORD YOUR OBSERVATIONS/EVIDENCE IN YOUR DATA TABLE
- 4. POUR THE SOLUTION DOWN THE SINK AND RINSE THE WELL PLATE WITH WATER SO IT IS CLEAN FOR THE NEXT GROUP

- 1. USE A SPATULA TO PUT A FEW CRYSTALS OF ASPIRIN IN ONE WELL OF THE WELL PLATE
- 2. ADD A FEW DROPS OF WATER TO THE CRYSTALS
- 3. USE A TOOTHPICK TO STIR THE SOLUTION TO HELP IT DISSOLVE
- 4. ADD TWO DROPS OF UNIVERSAL INDICATOR TO THE SOLUTION
- 5. USE THE pH BOX to determine the pH number of your solution.
- 6. RECORD YOUR OBSERVATIONS/EVIDENCE/pH NUMBER IN YOUR DATA TABLE
- 7. POUR THE SOLUTION DOWN THE SINK AND RINSE THE WELL PLATE WITH WATER SO IT IS CLEAN FOR THE NEXT GROUP

WARNING – READ THIS ENTIRE PROCEDURE <u>BEFORE</u> YOU DO ANYTHING – VERY DANGEROUS!

- 1. OPEN THE METAL CONTAINER AND PULL OUT ONE SMALL PIECE OF MAGNESIUM RIBBON
- 2. HANG THE RIBBON OVER THE RING OF THE RING STAND (YOU WILL HAVE TO BEND THE RIBBON A LITTLE)
- 3. USE THE BUTANE LIGHTER TO IGNITE ONE END OF THE RIBBON. BE CAREFUL WITH THE LIGHTER! NOTE: IT WILL TAKE AWHILE TO LIGHT AND YOU WILL HAVE TO HOLD THE LIGHTER CLOSE ENOUGH THAT THE BLUE FLAME OF THE LIGHTER IS TOUCHING THE RIBBON
- 4. ONCE THE RIBBON IGNITES, REMOVE THE LIGHTER, MOVE AWAY, AND USE YOUR PERIPHERAL VISION TO OBSERVE THE REACTION DO NOT LOOK DIRECTLY AT THE MAGNESIUM RIBBON!

5. RECORD YOUR OBSERVATIONS/EVIDENCE IN YOUR DATA TABLE

- 1. USE A SPATULA TO PUT A SMALL AMOUNT OF CaCO3 (CALCIUM CARBONATE) IN A GRADUATED CYLINDER (VOLUME SHOULD BE LESS THAN 1 ML)
- 2. ADD ENOUGH DROPS OF VINEGAR TO THE GRADUATED CYLINDER SO THAT IT IS JUST ABOVE THE VOLUME OF CALCIUM CARBONATE (MUST TOTALLY COVER THE CaCO₃)
- 3. RECORD YOUR OBSERVATIONS/EVIDENCE IN YOUR DATA TABLE
- 4. USE A BUTANE LIGHTER TO IGNITE A WOOD SPLINT.
- 5. SLOWLY AND CAREFULLY PUT THE LIT END OF THE WOOD SPLINT INTO THE GRADUATED CYLINDER AND MOVE IT TOWARDS THE SOLUTION
- 6. RECORD YOUR OBSERVATIONS/EVIDENCE IN YOUR DATA TABLE
- 7. POUR YOUR SOLUTION DOWN THE SINK AND RINSE OUT THE GRADUATED CYLINDER SO IT IS CLEAN FOR THE NEXT GROUP

- 1. USE A SPATULA TO PUT A SMALL AMOUNT OF BAKING SODA IN ONE WELL OF THE WELL PLATE
- 2. ADD A FEW DROPS OF WATER TO THE BAKING SODA
- 3. USE A TOOTHPICK TO STIR THE SOLUTION TO HELP IT DISSOLVE
- 4. ADD TWO DROPS OF UNIVERSAL INDICATOR TO THE SOLUTION
- 5. USE THE PH BOX TO DETERMINE THE PH NUMBER OF YOUR SOLUTION.
- 6. RECORD YOUR OBSERVATIONS/EVIDENCE/PH NUMBER IN YOUR DATA TABLE
- 7. POUR THE SOLUTION DOWN THE SINK AND RINSE THE WELL PLATE WITH WATER SO IT IS CLEAN FOR THE NEXT GROUP

- 1. ADD 10 DROPS OF SOLUTION 1 TO ONE WELL OF THE WELL PLATE
- 2. ADD 10 DROPS OF CALCIUM CHLORIDE SOLUTION TO SOLUTION 1
- 3. USE A TOOTHPICK TO STIR THE SOLUTIONS
- 4. RECORD YOUR OBSERVATIONS/EVIDENCE IN YOUR DATA TABLE
- 5. POUR THE SOLUTION DOWN THE SINK AND RINSE THE WELL PLATE WITH WATER SO IT IS CLEAN FOR THE NEXT GROUP