

Space Weather (5-6)

Program Materials

- Scissors
- Scotch tape
- Masking tape (*possible substitutions: painters tape, duct tape*)
- Eyedropper (*possible substitutions: straw, spoon, turkey baster, pipette*)
- Hairdryer
- A means to easily, quickly, & safely obtain hot water (e.g. electric kettle, microwave, thermos of hot water; if those options are not readily available, adult supervision may be needed to help with heating water on a stove)
- Funnel
- Measuring cup
- Measuring tablespoon
- Kitchen scale (*possible substitutions: baby scale, Newton scale, grocery store scale*)
- (At least) 2 clean/food-safe bowls
- Drinking glass
- Balloon pump (*if student is unable to blow up balloons on his/her own*)
- Metal washers - to be used as weights (*possible substitutions: hex nuts, small rocks*)
- Meter stick
- 2 Liquid watercolors - need two different colors (*possible substitutions: markers, food coloring*)
- 2 Clear containers with volume of at least 6oz.
- (At least) 10 Tissue paper squares (for gift wrapping) at least 3" x 3"
- (At least) 10 Styrofoam plates (any diameter)
- 1 Balloon - any size
- 1 Felt sheet - any size (*possible substitutions: wool sweater, scarf*)
- 1 Aluminum can - empty
- Plastic hair comb (*possible substitutions: glass stirring rod, plastic straw*)
- 1 Aluminum foil sheet at least 6" x 6"
- Clear, plastic condiment cup with volume no more than 3oz. (approx. 90mL) (*possible substitutions: styrofoam plate, styrofoam bowl, plastic spoon*)
- Clear, plastic bottle with volume of at least 500mL (approx. 16.9fl. oz.)
- ½ cup of table salt
- 1 cup of 91-99% rubbing (isopropyl) alcohol (*possible substitutions: 70% rubbing alcohol may be okay but has less chance of success*)
- Choose (at least) 1 of the following (need 1 cup of each liquid): vegetable oil (e.g. canola oil, olive oil), baby oil, rubbing alcohol
- Choose (at least) 2 of the following: liquid soap (e.g. dish detergent, body wash soap, hand soap), fruit juice (any kind), soda (any kind), syrup (e.g. maple syrup, corn syrup)
- (At least) 30 pony beads, any color
- (At least) 30 perler beads, any color (perler beads can be found at any major craft store such as Michaels, Joann's, etc.)
- Pudding cup, any flavor
- Instant pudding mix, any flavor
- Powdered milk (*possible substitutions: coffee creamer*)
- 2 plastic, zippered bags
- Choose (at least) 1 of the following food combinations (will need at least 5 of each item): a) raisins and grapes, 2) freeze-dried apples and apples, 3) freeze-dried strawberries and fresh strawberries, 4) dried pineapple and fresh pineapple, 5) dried mango and fresh mango

- 1 CD (*possible substitutions - although results will not be as effective as with a CD: paper plate, styrofoam plate*)
- 1 Pop-top bottle cap (like the kind you find on a Gatorade squeeze bottle or on a typical sports water bottle)
- 5 Balloons (any size, although ideal size range would be between 9"12")
- 10 Plastic drinking straws (possible substitutions: 20 coffee stirrers)
- 2 Film canisters (possible solutions: 2 containers with "pop caps" such as Pringles cans, non-child proof medicine canisters with pop tops and not screw-on caps, tennis ball cans)
- 2 Cups (approx. 500mL) of vinegar
- 2 Cups of baking soda
- (At least) 10 Alka seltzer tablets
- 1 Empty water bottle
- (At least) 4 Balloons
- Plastic tablecloth or tarp - to minimize mess and cleanup (*possible substitutions: plan on conducting experiments/activities outside or in the garage*)

Shopping List for some items that may not be easily available at your local store!

https://www.amazon.com/hz/wishlist/ls/1D87W8LLUE5NG?ref=wl_share