Supply List – STEM Interactive Week of 7/6 – 7/10

Monday: Math Monday's Activities Supply List

- 1. STEM journal
- 2. Printable Survey Activity Graphing Instructions (Recommended for grades 6 and 7)
- 3. Printable Survey Activity Digital Graphing Instructions (Recommended for grades 8 and 9)
 - Graphing program (Ex: Google Sheets or Microsoft Excel)
 - Survey program (Ex: Google Forms or Microsoft Forms)
- 4. Printable Try This CODAP Activity
- 5. Printable Try This Graphing Challenge (select one topic)
 - Caffeine Consumption by Age
 - Impact of Social Media on Teens
 - Most Used Social Media Apps
 - Superhero Movie Box Office Revenue
 - Wildfires in the US
 - Youth Sports Participation
- 6. Survey participants
 - (NOTE: Please get permission from your parent or guardian about accessing potential survey participants. If you would like teachHOUSTON STEM Interactive officials to take your survey, please email us at thstem@uh.edu).

Tuesday: Life Science Activities Supply List

- 1. Plant Student Handout
- 2. Plant Observation Journal
- 3. 2 Pinto beans
- 4. 1 Ziploc bag
- 5. 1 Paper towel
- 6. Spray bottle for holding water
- 7. 1 Clear cup (large enough to hold 8 Oz of water)
- 8. 1 Fresh stalk of celery with leaves
- 9. 1 Cup of water
- 10. Food color (any color)
- 11. Scissors or knife to cut celery

Wednesday: Earth and Environmental Activities Supply List

- 1. Paper
- 2. Card stock paper or index cards
- 3. Permanent markers
- 4. Tape (masking, packing, or Scotch tape)
- 5. Any container with edges (e.g., cookie sheet, paint tray, storage container lid)
- 6. Aluminum foil
- 7. Parchment paper, wax paper, white trash bag or any type of white plastic large enough large enough to cover a 30" by 20" area.
- 8. Small figurines/rocks/Legos (optional)
- 9. Toothpicks
- 10. Any type of bean, nut or grain
- 11. 1 bottle of food coloring or cooking oil
- 12. 2 different spices (any spice will work)
- 13. Any type of small seed or non-water-soluble spice
- 14. Spray Bottle or a container with small holes in it such as a water bottle or saltshaker

Thursday: Engineering Design Activities Supply List

The prototype for your shock-absorbent device can be built using common household materials **including but not limited to** the list presented below which provides some *ideas and suggestions* for materials that can be used.

Please use the Drop, Shock, and Roll Budget Handout to keep track of your expenditures.

- 1. Cardboard
- 2. Styrofoam
- 3. Straws
- 4. Craft materials (suggestions: craft sticks, foam paper, construction paper ribbon)
- 5. Pipe cleaners
- 6. Balloons
- 7. Note cards
- 8. Foil
- 9. Adhesives (suggestions: tape, glue, Velcro tape, masking tape)
- 10. 2 passengers (suggestions: marshmallows, marbles, small erasers)
- 11. Rubber bands
- 12. Plastic cup
- 13. Aerodynamic materials (suggestions: paper, plastic shopping bags)
- 14. Spring-like objects (suggestions: slinky, pen spring)
- 15. Sturdy, but light, materials to use as a foundation
- 16. Drop, Shock, and Roll Budget Handout
 - o PDF Version
 - Microsoft Word Version

Safety: Please perform the shock absorption device drop under adult supervision. Moreover, please have an adult present for the use of any sharp objects during the build process.

Friday: Physical Science Activities Supply List

For Friday, we'll be exploring basic electrical circuits and how energy can be transferred or converted in these systems. Electrical safety is paramount, so please use only the types of batteries listed. Do NOT attempt to use a wall outlet or extension cord of any sort as a power source. Most of the materials are used in multiple experiments.

- 1. Handout: Watt even is this? Worksheet
- 2. Handout: Dig Deeper Homopolar Motor Worksheet
- 3. 9 Volt or D cell battery
- 4. AA battery
- 5. Aluminum foil
- 6. Copper wire of various lengths
- 7. Various household items made of different materials (wood, metal, glass, plastic)
- 8. Light bulb from a small flashlight, bulb from holiday lights, or LED
- 9. Insulating Craft Dough & Conducting Craft Dough
 - a. Ingredients to make your own dough are:
 - i. Water (preferably distilled)
 - ii. Flour
 - iii. Sugar
 - iv. Salt
 - v. 3 tbsp cream of tartar or 9 tbsp lemon juice
 - vi. Vegetable oil
 - vii. Food coloring
 - b. Store-bought Play-Doh can be substituted for Conducting Craft Dough
- 10. 4 Galvanized nails or other small pieces of galvanized metal (zinc)
- 11. Alligator clips or similar wire attachment
 - a. You can make clips by wrapping the ends of copper wire around a paper clip.
- 12. 4 Pennies
- 13. 4 small food batteries (potatoes, lemons or limes)
- 14. Other Foods to try (Optional)
 - a. Orange (4x)
 - b. Banana (4x)
 - c. Carrot (4x)
 - d. Pickle (4x)
- 15. Hot glue or electrical tape
- 16. Small Neodymium Magnets
- 17. Utility knife or scissors (to remove insulated coating of the copper wire)