Supply List for NASA STEM Workshop

Please note that each of these activity guides, with their full description and materials and directions, is available at http://clearinghouse.starnetlibraries.org/143-universe-of-stories. There are a variety of additional activities that can be used for space science programming at the same site.

The materials below do not reflect all possible modifications that you may want to make.

This material list does not include all optional visuals, signs, and directions that you may wish to print or project. It also does not include assorted files such as background information sheets that you may want to print for yourself.



Activities available in the "Universe of Stories" collection: clearinghouse.starnetlibraries.org/143-universe-of-stories







General materials:

- Pencils and/or colored pencils
- Tape
- Markers
- Scissors

Sorting Games: How Big? How Far? How Hot?

Per group of 3-5 participants:

- One set or multiple sets of the cards printed from the activity.
- Card sets can be laminated for multiple uses, and/or printed on cardstock.

Jump to Jupiter

Per entire group:

- One set of scale objects (1 grapefruit, 1 wooden bead, 1 pony bead, 2 peppercorns, grains of sea salt, table salt, sugar, and sand)
- Printed signs or posters for each planet (options available within the activity guide)
- (Optional) stakes or sign holders
- Measuring tape or yard stick
- Additional optional materials such as printed Jump to Jupiter poem from activity

Looney Lunar Phases

Per participant:

 6 Oreo cookies (can substitute round cheese crackers, other craft materials, or simply draw phases)

- Plastic spoon or knife
- Napkins
- Either printout of Cookie Moon Phases or Calendar Moon Phases from activity
- (Optional) printout of Phrases for Phases from activity

Teen Moon: Moon Ooze

Per participant:

- 2 small, disposable plastic or Styrofoam bowls with 2-3 thick slits cut into the bottom
- 1 plastic spoon
- 1 Rice Krispies Treat
- 1/4 cup chocolate syrup
- Sink or hand wipes

Crater Creations

Per entire group:

- 1 to 3 large pans or boxes (such as an aluminum baking pan)
- Sand or similar material to fill bottom 2-3 inches of pans
- Flour for another 1-2-inch layer on top
- Cocoa or chocolate powder mix and sifter to sprinkle a very thin layer on top
- Plastic or trash bags underneath to protect carpet (alternatively, you can conduct this activity outside)
- Impact objects, such as marbles or small rocks

Let's Make a Supernova

Per participant:

- 1 tennis ball
- 1 ping-pong ball

Big Dipper Star Clock

Per participant:

- Printout of star clock pattern from activity
- Brad / paper fastener

My Trip to Mars

Per entire group:

- 6 poster boards
- Printed Poster Scenarios from the activity
- 2-4 regular or large dice

Per participant:

Printed Mission Instructions

Touch Down

Per team of participants:

- 1 piece of stiff cardboard (small paper plate or a cardboard coaster will work)
- 1 medium paper or plastic cup

- 2 regular marshmallows
- Assorted materials to help cushion the lander: 3 rubber bands, 8 straws, 10 minimarshmallows, 3 index cards, 3 feet of tape

Strange New Planet

Per group:

- Craft items to make 1-2 models of planets: 4-6-inch Styrofoam ball, multicolored modeling clay (*not* air-dry clay), multicolored felt, and quilters pins. (Please note, we will provide materials for you to make your own planet model during the workshop).
- Cloth or sheet to cover the "planets"
- Paper tubes, rubber bands, and blue cellophane for each group of participants
- (optional) miniature flags/ stickers for participants to plant on the planets
- (optional) copies of observation sheets for making notes

UV Kid activity

Per participant:

- 2 chenille sticks (pipe cleaners)
- 2-4 pony beads
- 2-3 UV beads
- Craft materials to design and test "protection" such as construction paper, aluminum foil, sunscreen, sunglasses, plastic wrap, cloth scraps, etc.

Health in Space

There are a variety of activities in this module; options modeled in the workshop:

Beans in Space

Per entire group:

- 2 opaque cans (such as coffee cans)
- 31/2 cups dried beans
- Packing materials

Measure Up!

Per pair of participants (or 1-2 sets to just demonstrate)

- Measuring tape or ruler and string
- Timer or stop watch

Sponge Spool Spine

Per participant (or one set to just demonstrate)

- 1 chenille stick (pipe cleaner)
- 3 wooden spools
- 1 cellulose sponge, thin and unused, cut into 4-6 inch pieces
- 1 ruler
- Clear container filled with water