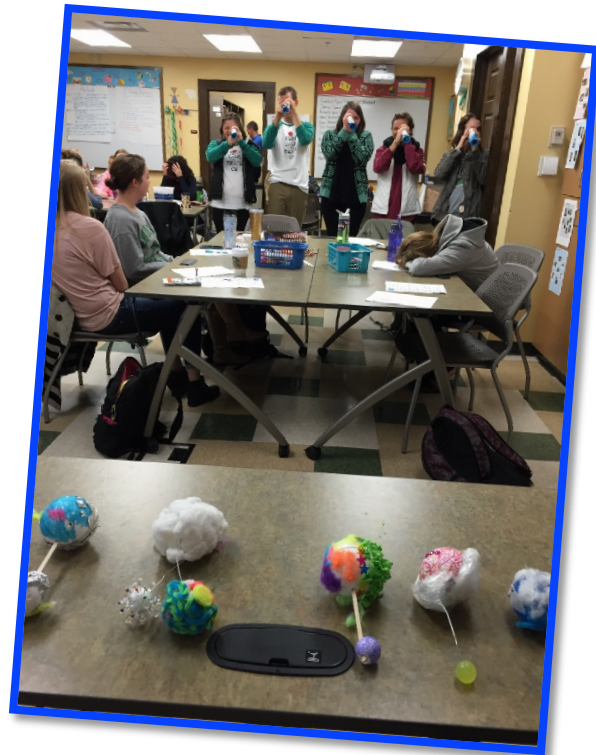


# NDSGC Materials List

## Strange New Planet

- [Worksheets](#) (students may also use a blank sheet of paper, splitting the page into 4 quadrants)
- Crayons/Markers**
- Astronomer and Satellite kit:**
  - PVC pipe telescopes (or paper towel tubes)
  - Rubber bands
  - Blue plastic wrap (available on Amazon [here](#))
- Planets:**
  - Styrofoam balls
  - Rubber cement
  - Elmer's Glue
  - Double-sided tape
  - Masking Tape
  - Duct Tape
  - Pom-Pom balls
  - Thumbtacks
  - Cotton Balls
  - Sequins
  - Glitter
  - Clay
  - Yarn
  - Pipe Cleaners
  - Markers
  - Crayons
  - Rhinestones
  - Aluminum Foil
  - Paint
  - Popsicle sticks/paper clips (to attach moons)



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# NDSGC Materials List

## Apollo 13 Mission

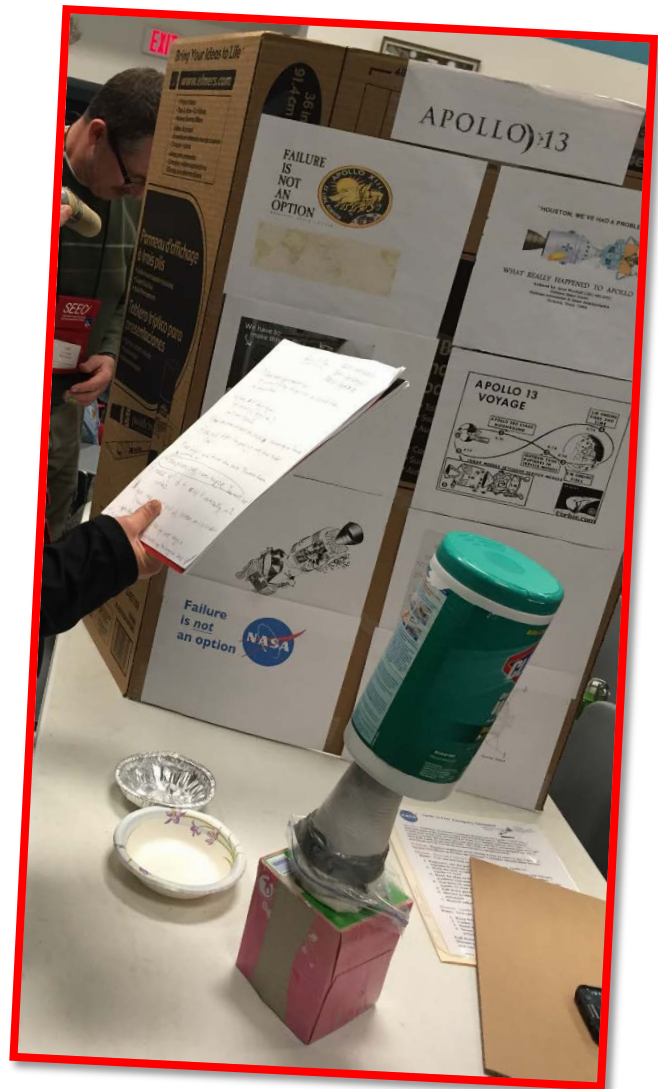


### Creating the Simulation Board

- Poster Board (you may decorate each side)
- (or) Walkie-Talkies

### Materials for Simulation (per group)

- Two pairs of socks
- Two cylinder canisters
- Two empty cubes (boxes)
- Duct Tape
- Masking Tape
- 2 Foil pie tins
- 2 large baggies
- 2 toilet paper tubes
- 1 PVC pipe for communication



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## Super Sleuths

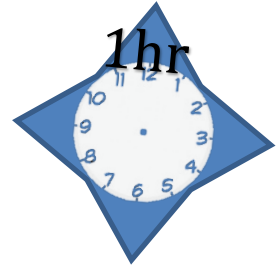
- **Asteroid Samples**
  - 4-6 film canister containers
  - 3-5 different types of glitter
  
- **Investigation Materials**
  - Magnifying glasses
  - Tweezers
  - 1 pad of sticky notes
  - Paper and pencil
  - 1-single hole punch
  - Transparent tape
  - 4-6 notecards
  - 4-6 paper envelopes
  - Tinfoil
  - Paper plates
  
- **Dr. Mike Gaffey's Meteorites** (be careful!)





# NDSGC Materials List

## Bristle Bot Rovers



- 1.5V Cell [Batteries](#) (Also available at [Digi-Key](#))
- [Motors](#) (available at Digi-Key)
- [Bristle](#) (head) of a toothbrush (break off or cut off of the handle)

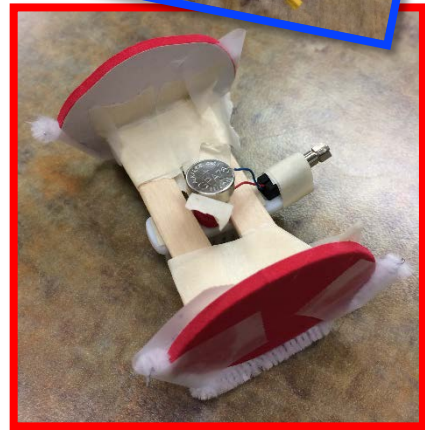
### Additions

- Rubber bands (different sizes)
- Paperclips
- Foam stickers
- Bendable straws
- Wooden craft sticks (different sizes)
- Binder clips (different sizes)
- Pipe cleaners
- Cotton Balls
- Clothespins (different sizes)
- Legos



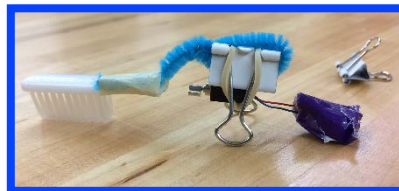
### Tools

- Duct Tape
- Transparent Tape
- Double Sided Tape
- Masking Tape
- Scissors
- Glue
- Glue dots
- Tweezers
- Pliers



### Martian Regolith/Solar Panels

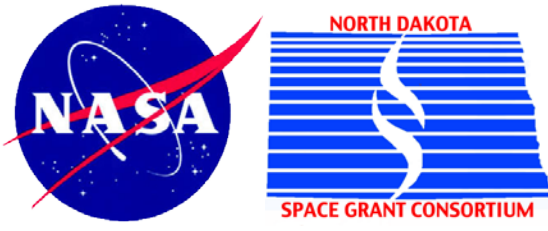
- Glitter
- Tinfoil



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# NDSGC Materials List

## Rockets to the Rescue



### Rocket Body:

- Cardstock Paper with Rocket Print

### Payload Materials:

#### *Each team receives:*

- 1 ft. of String
- 1 Sheet of Tissue Paper
- 3 Straws
- 3 Pipe Cleaners
- 4 Cotton Balls
- ~10 Rubber Bands (various sizes)
- Purchase raspberries (3 per team)**

### Tools:

- Duct Tape
- Masking Tape
- Invisible Tape
- Protractors
- Scissors
- Markers
- Safety Goggles

### Rocket Launchers:

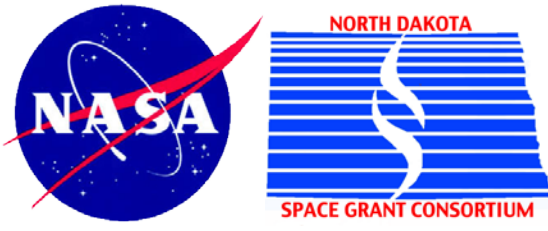
- PVC Pipe Launch Pads
- Hula Hoops
- Tape Measures
- Stompers (or 2 Liter Pop Bottles)



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# NDSGC Materials List

## Martian Rover Lander

### MRL Materials:

#### *Each team receives:*

- 1 ft. of String
- 1 Sheet of Tissue Paper
- 3 Straws
- 1 Paper Cup
- 2 Balloons
- 3 Pipe Cleaners
- 4 Cotton Balls
- 2 Binder Clips
- 2 Foam Stickers
- 2 Rubber Bands (various sizes)
- 1 Section of Netting
- 1 Spoon
- ~4 Paperclips
- Purchase Eggs** (1 egg per team)



### Tools:

- Duct Tape
- Masking Tape
- Invisible Tape
- Scissors
- Tin foil (for wrapping eggs)



### Drop Zone:

- Landing area (stairwell, ladder, something to stand on, etc.)
- Hula Hoops
- Tarp

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# NDSGC Materials List

## Martian Water

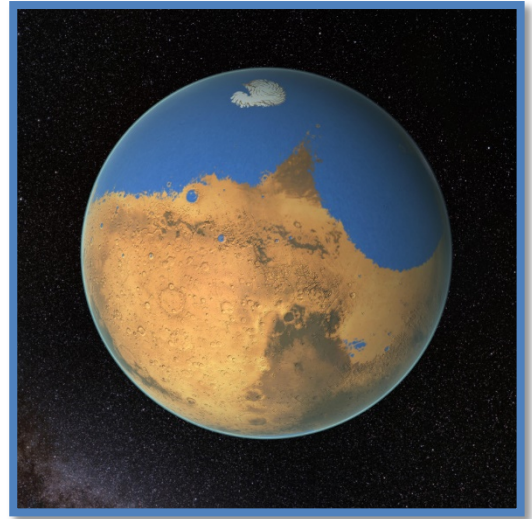


Clear Liquids (to be tested in containers numbered 1-7):

- Water
- White Vinegar
- Hydrogen Peroxide
- Corn Syrup
- Mineral Oil
- Clear Soda
- Alcohol
- Liquid Soap

### Testing Materials

- Salt (solubility)
- Pepper (surface tension)
- Sugar (solubility)
- Corn starch (solubility)
- Wax paper (surface tension)
- Aluminum foil (chemical reactions)
- Benedicts solution (chemical reactions)
- pH/litmus paper (acidity)
- Paper clips (surface tension)
- Baking soda (solubility, chemical reactions)
- Toothpicks (density, surface tension)
- Scales (mass)
- Graduated cylinder (volume)



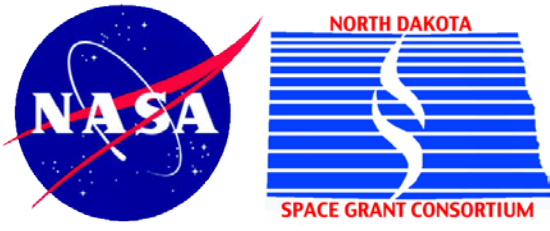
### Testing Equipment

- Hot and cold water bath
- Pipettes
- Beakers or glasses
- Plates

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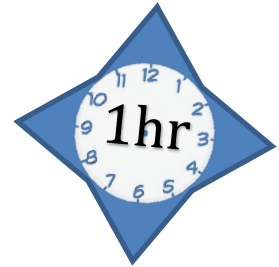
# NDSGC Materials List

## Washing Water

Up to 7 different materials for filtration layers

- Aquarium gravel
- Play sand (found at nurseries and improvement stores)
- Marbles
- Cotton Balls
- Coffee Filters
- Packing Peanuts
- Limestone (found at nurseries and home improvement stores)
- Activated carbon/activated charcoal (granules, found with aquarium supplies)

*Note: Activated charcoal is safe and non-toxic, but be sure to check MSDS (<http://www.msdssearch.com/msdssearch.htm>).*



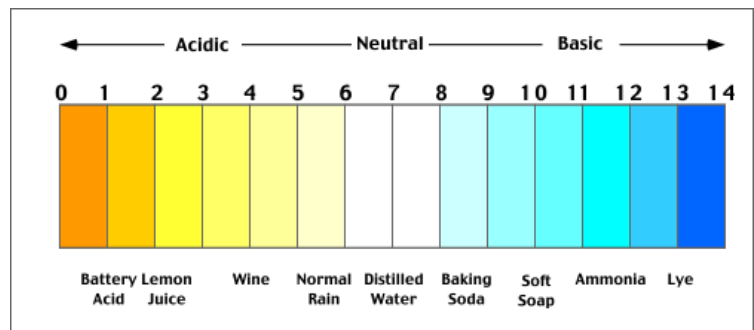
Grey Water

- Tap water
- Coffee grounds
- Italian salad dressing
- Soil
- Vinegar
- Salt
- Powdered Kool-Aid



Possible testing materials

- Alum
- pH paper (litmus paper)
- Plastic cups
- Plastic spoons
- Charcoal
- Soil

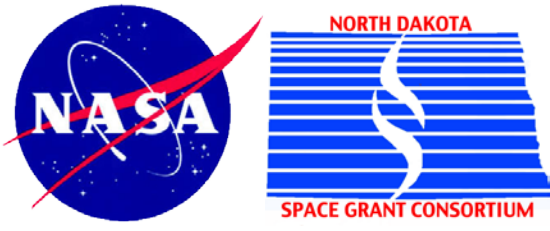


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# NDSGC Materials List

**On Target!**

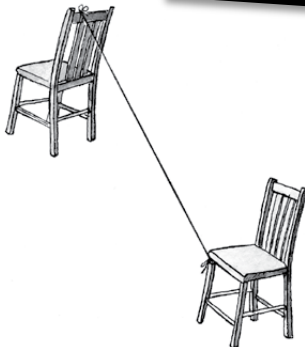


Materials per team:

- 9 feet (3m) of smooth fishing line or kite string
- Index card
- Marble
- Masking tape
- Paper clip
- 1 medium-sized paper cup
- Scissors
- Zip line: two chairs, table legs, pole, etc.*

Creating your target:

- Pan
- Flour
- Spray chalk



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# NDSGC Materials List

## UV Astronauts



### Space Suit:

- Roll of tinfoil
- Roll of clear plastic wrap
- Apollo Cloths
- Gemini Cloths

### Astronaut:

*Each student receives:*

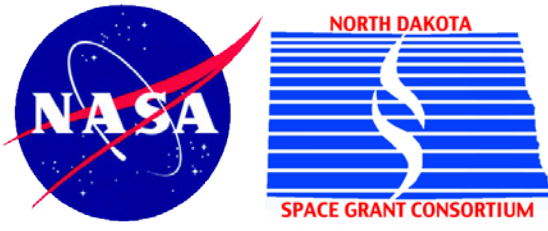
- Three 4-inch pipe cleaners
- Three colorful beads
- Two clear, UV beads



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# NDSGC Materials List

## Deep Sea Diver

The following are the materials included in the bins for the SciGirls Deep Sea Diver activity. Materials were purchased at Target, Walmart, the Dollar Tree, and Michaels.

- Dixie Cups
- Condiment Cups
- Duct Tape
- Transparent tape
- Paperclips
- Styrofoam balls (different sizes)
- Party Balloons
- Water balloons
- Beads
- Pom poms
- Foam fish
- Bendable straws
- Wooden craft sticks (different sizes)
- Pennies
- Mancala Pieces
- Plastic spoon
- Rubber bands (different sizes)
- Sponge
- Binder clips (different sizes)
- Pipe cleaners
- Cotton Balls
- Scissors

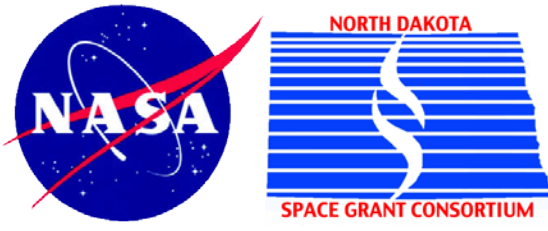


**You'll need access to water**

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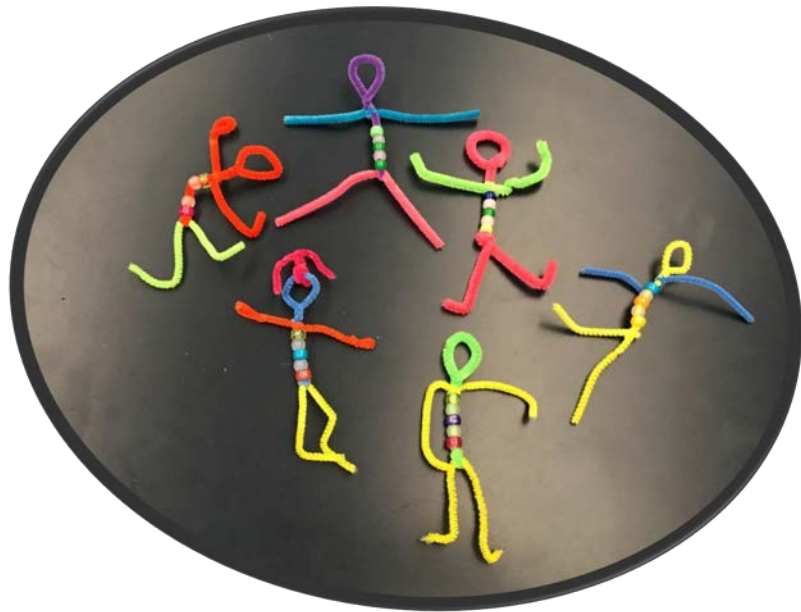
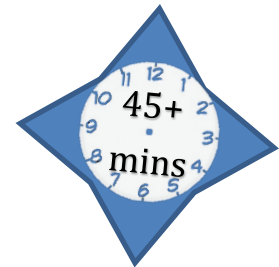


# NDSGC Materials List

## UV Astronaut

The following are the materials included in the bins for the UV Astronaut activity. Materials were purchased at Amazon, Walmart, the Dollar Tree, and Michaels.

- 2 UV beads
- 3 non-UV beads
- 3 pipe cleaners
- Scissors
- Gemini Cloth
- Apollo Cloth
- Clear Plastic Wrap
- Tin Foil



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