

INTERPLANETARY VOYAGE

Description

Using practical demonstrations and thought exercises, students will evaluate what is needed to conduct a space mission. Over the course of four sessions students will consider the various destinations of space missions, the technologies used in spaceflight, navigation methods, and optical instruments.

Activity One (Session 2): Make an Astrolabe

Goal: List the goal of the lesson here.

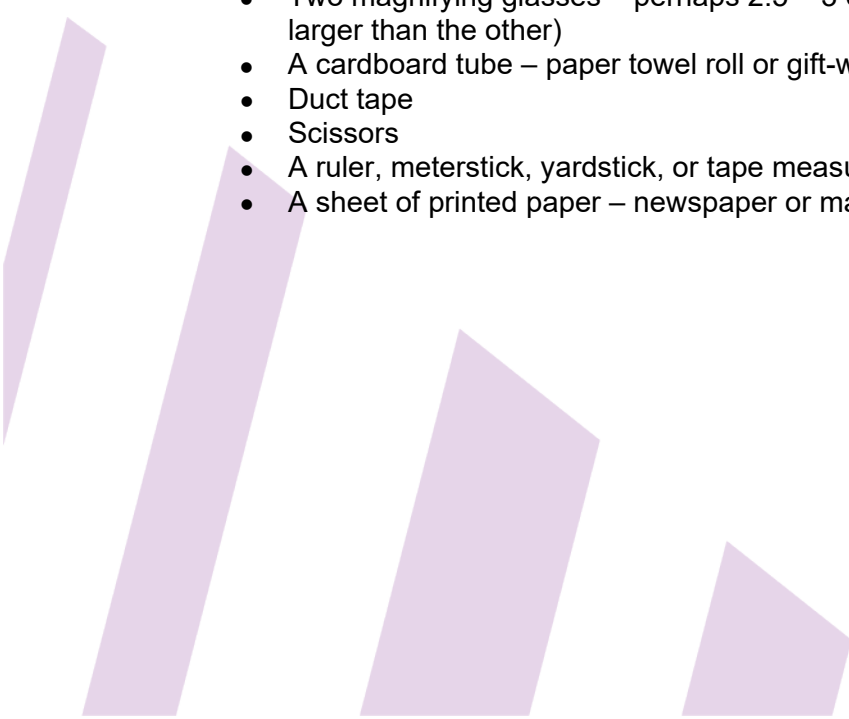
Materials:

- Thick corrugated cardboard (about 21.5 cm x 27.9 cm or similar)
- Scissors
- 20 cm of thin string or coloured fishing line
- Weight (washer, nut, lead sinker, or similar object that can be tied onto the string)
- Large drinking straw (at least 0.5 cm in diameter)
- Glue
- Transparent tape
- Small block of 1.27 cm (0.5") plywood or pressboard (optional)
- Printable Astrolabe template (will be provided)
- Compass (phone compass works fine)

Activity Two (Session 3): Build a telescope

Goal: List the goal of the lesson here.

Materials:

- Two magnifying glasses – perhaps 2.5 – 3 cm (1-1/5 inches) diameter (it helps if one is larger than the other)
 - A cardboard tube – paper towel roll or gift-wrapping paper roll (it helps if it is long)
 - Duct tape
 - Scissors
 - A ruler, meterstick, yardstick, or tape measure
 - A sheet of printed paper – newspaper or magazine will do
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Activity Three (Session 3): Build a Great Observatory (Optional Additional Activity)

Goal: List the goal of the lesson here.

Materials:

- Sharp paper scissors
- Razor blade knife
- Dull knife
- Sharp punch (such as an ice pick or nail)
- Cutting surfaces (such as a wooden board)
- Glue stick or rubber cement
- Cellophane tape
- 5 cm x 5 cm square piece of aluminium foil
- Two 20-centimeter pieces of 1/8-inch dowel rods
- Coloured sharp point marker pens (yellow and red)
- Blue and orange highlighter pens
- Printed paper model of the Hubble Space Telescope (will be provided)

Activity Four (Session 3): Build a Spectroscope (optional)

Goal: List the goal of the lesson here.

Materials:

- Empty paper towel roll
- Craft knife and/or scissors
- Blank or old CD
- Pencil
- Small piece of cardboard or cardstock
- Tape
- Paint