

# Strange New Planet

## Supplies

cardboard tube for each girl  
blue plastic wrap or cellophane  
black cloth

rubber bands  
4 planet models

Object: Demonstrates how planetary features are discovered by using remote sensing devices.

1. To make planet models use playdough or small balls ( about 4" across) in different colors. Decorate the planet with beads, artificial jewels, paint, foils, etc. Playdough can be molded into mountains, rivers, etc. The idea is to create features all around the planet.
2. You will need a large area to do this activity, the girls will need to stand at least 30 feet away from the table for the first step. A hallway works well. Set up a table with the four planets and cover with a black cloth.
3. Have each girl cover one end of a cardboard tube with 3-4 layers of blue plastic wrap or 2 layers of blue cellophane and rubber band in place. This will be their telescopes.
4. Divide the girls into groups of 4. Have the girls stand at 30-40 feet away from the table. Uncover the planets and let the girls look for 1 minute through their telescopes (blue plastic wrap towards the planets). Then cover the planets again. Let the girls talk about what they saw in their groups.  
Ask the girls if they know why they put the blue plastic wrap on the ends of their telescopes. It is to represent looking through an atmosphere.
6. Have the girls move half way towards the table and take off the plastic wrap from the telescopes. Again uncover the planets for one minute. Then cover the planets again. Let the girls talk about what they saw in their groups.  
The closer view without the plastic wrap is like viewing a planet from the Hubble Space Telescope. Note that you can see much more detail without the atmosphere in the way.
7. The next step will be a fly by. Have the girls walk past the uncovered planets. Make sure they move quickly and do not stop. Once they are past again cover up the planets. Note how much more detail you can get from a flyby in space. Let the girls talk about what they saw in their groups.
8. Ask the girls if there is any way we could get more information about the planets. They may suggest landing, using probes, and orbiting the planets. This time tell the girls they will be orbiting their planets. Tell them that each girl should look at one planet. Give each group time to orbit the planets. Then the girls can share what they saw within their groups.
9. Let the girls pick up and look at the planets more closely, gathering more information like a lander.