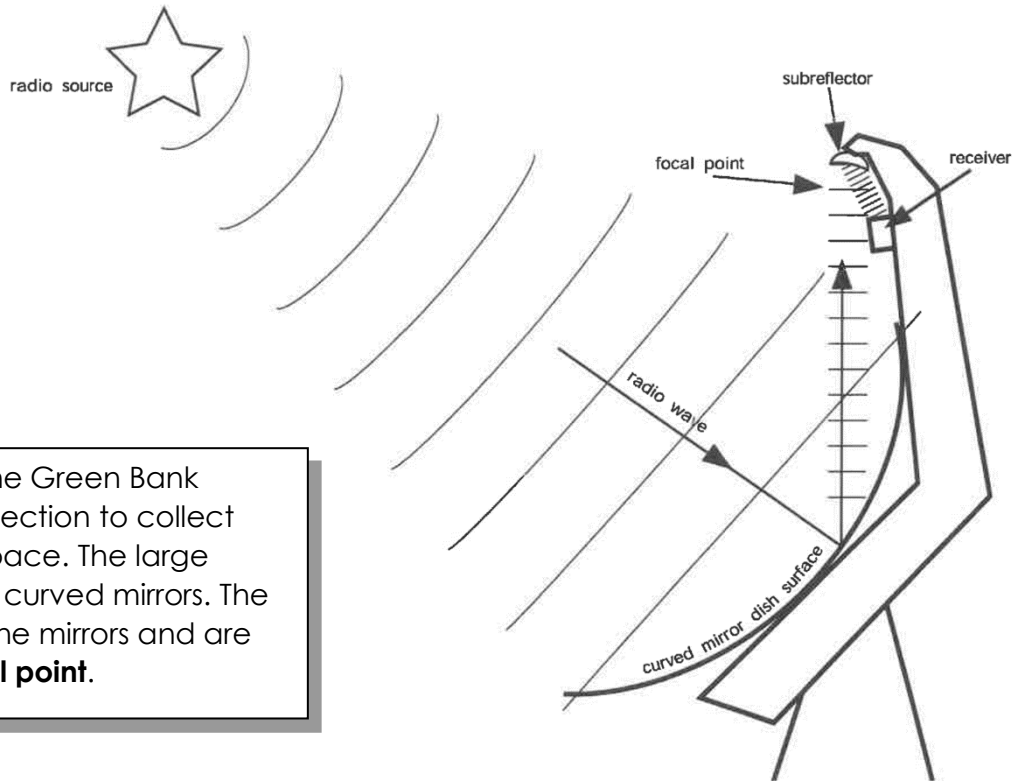
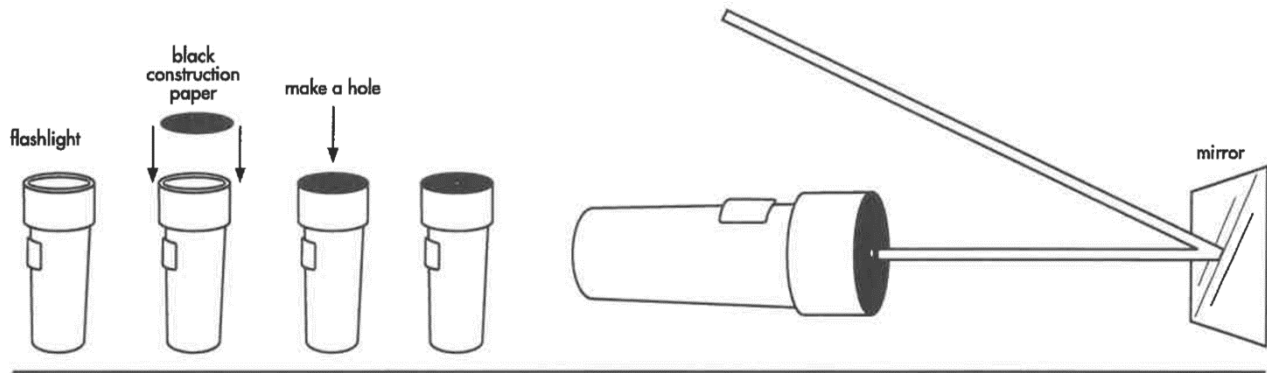


# Bending Waves

You will need: Flashlight, black construction paper, mirror

Visible light, and all of the other forms of electromagnetic energy, bounce off of shiny surfaces. This is called **reflection**. To visible light, a mirror is a shiny surface. Use the mirror with a flashlight in a darkened room to see reflection in action!

**Cover the flashlight** with black construction paper so that no light escapes. **Make a pinhole** in the paper (be careful with sharp pins!). Now **shine your flashlight at the mirror** and look for its reflection. What happens to the reflection when you move the flashlight to the left? To the right? What if you change the angle of the flashlight? The angle of the mirror?



The telescopes at the Green Bank Observatory use reflection to collect radio waves from space. The large dishes are like huge curved mirrors. The waves bounce off the mirrors and are focused at the **focal point**.