

Dance of the Solar System

Supplies

String or yarn or light rope

Optional - Instrumental music CD or tape and player

Object: To learn about orbits and the objects found in our solar system.

1. You will need a large space to do this activity. Cut the string or yarn in the following lengths: 2 meters, 3.5 meters, 5 meters, 7.5 meters. This represents the distance from the sun for the first 4 planets in our solar system.

2. Part 1 orbits: 5 girls at a time will take part in this part of the activity. One will be the sun she will hold one end of all the strings in her hand above her head. The other 4 girls will each hold the end of one string standing away as far away from the sun as possible. Have the girls stand in a straight line.

3. The object of this part is to show why the planets don't travel around the sun all lined up. Have the girls walk around the sun at the end of their strings counter clockwise. After the inner most girl has made two revolutions around the sun stop the girls. Ask why the girls why even if they are walking at the same speed they don't end up in the same place. Now tell the girls that objects further from the sun move slower than those closer in. Try another couple of revolutions. Then change the girls around till everyone has had a chance to be a part on the mini solar system.

4. Ask the girls what different objects are found in our solar system: planets, sun, moons, asteroids, comets (remind the girls that these are occasional visitors). Avoid meteors, you don't want girls crashing into each other.

- *planets spin while orbiting

- *comets have a tail that always faces away from the sun and come from outside the solar system, go around the sun and leave the system again

- *moons orbit planets

- *there are many asteroids in the asteroid belt

- *suns have solar flares

- *our solar system from the center out - Sun, Mercury, Venus, Earth, Mars, Asteroid Belt, Jupiter, Saturn, Uranus, Neptune, Pluto

5. Have the girls work together to decide who will be each part of the solar system. Remember that you don't have to make it just like our solar system if there are not enough girls. Encourage expression by the girls. Arms straight out from the side may be rings when a girl spins while orbiting. Arms back might be the tail of a comet. The sun may stick an arm or leg out and pull it back in for a solar flair. Have the girls get into position and then turn on the music and let them dance around the sun "dance."