

## Experiment 2

### Solar system target bowls

#### What you need

- tennis-ball-size balls
- a large sheet of paper
- marker pens
- chalk or masking tape

#### What you do

- 1 Before the session, draw out a target with the Sun at the centre and the orbits of Venus, Mars, Saturn and Neptune. The outer circle (the orbit of Neptune) should be around 1.5 m in diameter. Place the target at one end of your space, then mark a line about 5 m away from the target.
- 2 Challenge the Scientists to stand behind the line and roll a ball towards the target. The aim is to get as close to the Sun as possible. You could play individually, or in teams (with sets of balls of the same colour so you know which ball belongs to which team). Award points or prizes to those who get closest to the Sun!



## Black hole

#### What you need

- chalk or masking tape
- music

#### What you do

- 1 Draw some galaxy shapes on the floor with chalk (or mark them out with masking tape), making them large enough for four or five children to stand in at the same time. Give the shapes galactic names, such as Andromeda, Milky Way, Centaurus A, Whirlpool and Sombrero, and write these next to the galaxies. (Make sure you get roughly the right shapes for the galaxies you're drawing. Check online for examples.)
- 2 Play some music and encourage the Scientists to dance around. When you stop the music, the Scientists should choose a galaxy to stand in. With your back to the playing area, call out the name of a galaxy. This galaxy gets swallowed up by a black hole and the Scientists in it are out! Keep playing until you have a winner. (You could play non-competitively, where those swallowed by a black hole sit out the next round, but then start playing again.)
- 3 You could also play some of the games on the NASA website: [spaceplace.nasa.gov/menu/play/](http://spaceplace.nasa.gov/menu/play/)

## Experiment 3

### Blindfold search

#### What you need

- a ball pit filled with balls
- blindfolds
- various objects to find
- a stopwatch

#### What you do

- 1 Before the session, collect together a range of different objects such as a torch, some sunglasses, a toy car or a toy camera. Mix these into the ball pit.
- 2 Invite the Scientists to form pairs, and blindfold one of the pair. Guide the blindfolded player into the ball pit. Shout out the name of the objects in the ball pit. The sighted player has to guide their partner to where that is, so that they can pick it up and remove it from the pit. Keep going until all the items have been found. Time each pair to see who can finish in the shortest time.
- 3 Alternatively, have two ball pits with the same objects, and play one pair against another.

