

Modeling the Solar System

Summary

Students will use a computer program to scale a solar system model. They will then create and build it.

Main Core Tie

Science - Earth Science

[Standard 1 Objective 2](#)

Time Frame

2 class periods of 45 minutes each

Group Size

Small Groups

Materials

A selection of balls (marble, golf ball, tennis ball, volley ball, soccer ball, playground balls)
index cards
markers,
metersticks
popsicle sticks or wooden skewers
glue or tape
computer per group
- [student worksheet](#)
(attached)

Background for Teachers

Time needed

: 30 minutes the first day, 40 minutes the second day.

Instructional Procedures

Place the selection of balls, marbles or other round objects in the front of the room. It will be nice if you can have a different one for each group. A 6 cm diameter ball will need 194 m of space for the whole system so do not choose balls much bigger than this unless you have a really large space to put it in.

Ask groups to choose a ball for their "sun" in a model solar system.

Provide an index card, ruler, marker and wooden stick for each group.

Read the instructions from the student sheet and allow students to calculate their "solar system". Each group will build a little different system. The sizes of planets will be different based on their scales.

When students go outside to build the systems, they should step off the meters. They can practice in the room if you provide a place where the floor has been measured in meter length steps.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)