SCIENCE

PLANET X

grades 4-6

Getting Started (Procedures & Materials)

There is no equipment needed for this activity, however an open space is necessary for planet formation and rotation. Take the students to a place with a lot of room and define the boundaries for the activity using lines on the floor or landmarks. Have the students spread out within the boundary, making sure that no two students are standing too close to each other. Explain to the students that they will be listening to you give instructions on how to move throughout the boundary. There will be a series of instructions and the students must listen closely to find out how to move. An example of how you might have the students move is to tell them to turn 90 degrees to the right and then take two steps forward. Explain to them that after each movement, any students who can reach out and touch each other without taking a step are to move together and stand next to each other. Once these students come together, they must also move together.

Once three students are standing together, any student who can touch that group by taking one step towards them in any direction will move and join that group. Once 5 students are standing together, any student who can take two steps and reach them will go and stand with that group and move along with that group. The game continues until all students have formed one large group or a planet. Explain to the students that this activity mimics the way gravity would work to form the Sun, Earth, and other planets. Tell them that they each represented particles of dust, and as they moved around they stuck to each other due to gravity. The larger the particles became, the more they attracted other particles. Eventually, all the particles moved together and, if there were enough of them, they formed a planet.

What is it? (Rationale)

The ultimate goal of this activity is to have the students create a planet using their bodies and learn about gravitational pull.

Adaptations

A. Variations to this activity would include having the children move in different ways.

B. You could also have students close their eyes and try to do it for a more difficult task.

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References

Kenneth Lowrey's Science Demos at: http://home.earthlink.net

DOMAINS ADDRESSED

Body Image
Laterality
Language

Balance
General Coordination

Flexibility

Best Effort
Cooperation