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Astronomy
Kindergarten
Creating a Solar System for Kindergartners

Objective/Purpose: This activity helps kids recognize how many planets there are, what they look like, how they compare to each other, how they orbit around the sun, and what orbit the planets travel on.
QCC: 20-Space/Astronomy

Materials/Time Considerations
1. A picture of the planets' orbits blown up (done by copier machine) to about 24 by 12 inches. (Picture can be found on http://www.enchantedlearning.com/subjects/astronomy/solarsystem/)
2. A picture of all the planets. (picture found on http://atozteachertuff.com/go/jump1.cgi?ID=1471) I recommend numbering the back of the paper where the planets are so you can later know what order they go in.
3. Crayons
4. Scissors
5. Baggies
6. Glue
8. The whole project will probably take about 40 minutes with kindergartners, I recommend breaking up the session in two

Background Information: The students had been learning about the solar system for a couple of weeks, so they had a basic knowledge of what planets were and what they looked like. I had a book on hand of each planet though so that when they were coloring the planets they could have a visual. Also the picture of all the planets that I had them color had planets numbered in order on the back of them, so that when they cut everything out we could put the planets in order (just made things a lot easier).

Preparation and Procedure:
This activity requires a lot of preparation for everything to go smoothly. The first part is optional. I wanted the kids to understand that the planets are in a dark sky, so when I blew up the planets' orbits I then transferred them by silver sharpie on to black paper. I did this by tracing the orbits that I had blown up onto the black paper. This does take a while, though I think it makes the end effect a lot better. Then I found a picture with all the planets, I also had to blow this picture up a little. I then numbered the back of the picture. The numbers on the back corresponded to where the planet was in the solar system (i.e. one being the first planet from the sun, two being the second, and so on). This was all the prep work. I divided this project up into two sections. The first day we colored all the planets and cut them (since the numbers were on the back we still knew in what order the planets were supposed to go). Here I used the book to give them examples of what each planet looked like. Then we placed the planets in the baggies for safe keeping.
Then the next session we glued the planets onto their orbits. The planet with a one on the back went on the first line; the one with a two went of the second line, and so on until all the planets were on the paper. Finally each student had created their own Solar System. Throughout this whole process be sure to ask question about what planets they are coloring and what make a certain planets different from the other ones.

Safety Issues: There are really no safety issues except for the scissors, which at this age you should not have to worry about it too much, my kids were fine.

Possible Questions/Assessment and Evaluation: Questions should be asked throughout this entire activity. Reviewing what they have learned, like what order the planets are in, what colors are they, what makes them distinctive, which ones are cold, warm, hot, and what do the planets revolve around. I like this activity a lot, because I have learned quickly that you have to keep kindergartners active and always doing something. This activity did just that and gave them a chance to review everything they had learned about the solar system.