Cambridge

Activity Title:

Paint a Planet

Learning Objective / Activity Outcome:

To think creatively and design a paper plate planet

Link to Early Years Framework:

- ELG: Creating with Materials Safely use and explore a • variety of materials, tools, and techniques, experimenting with colour, design, texture, form, and function; Share their creations, explaining the process they have used.
- Understanding the World, ELG Past and present Talk • about the lives of the people around them and their roles in society
- ELG Fine Motor Skills Use a range of small tools, including scissors, paint brushes and cutlery.

- Resources
- Paper plates
- Paints •
- Glue, glue pots, glue • spreaders
- Glitter, sequins, other art materials

Cambridgeshire

STEM in the

Early Years

- Water pots
- Paint brushes

Starter:

Engage in an activity to help children place planets into a context; share with the children's pictures of planets, either real planets or imaginary ones; or read a story where characters visit another planet, such as the 'Smeds and the Smoos' by Julia Donaldson. Ask the children to talk about what the planet was like in the images. What colours did they see? What things might be there? Does anything live there?

New Learning:

Safely share 'The Planet Song - 8 Planets of the Solar System Song for Kids'.

Talk about what they heard, sing along if possible.

Show the children a globe or image of planet Earth. Tell them we live on a planet called Earth. Discuss what it looks like.

Tell them astronomers are scientists who look up into the sky at night to learn about space and planets and stars. They have so far found lots of planets, over 5000 of them! Although they can detect the planets are there, they are too far away for us to see what colours they are. So, we are going to be imaginative and create some planets of our own.

Shared Learning:

Model creating a planet by decorating a paper plate to make it an imaginary planet.

They could be painted, covered in glue and non-plastic glitter or coloured tissue paper. They could paint the paper plate blue for water, and then make green hand-print land. They could draw and create creatures to cut out and stick onto them – whatever they can imagine.





Independent Learning:		Differentiation	
		Support	Extension
Children will use the art materials to decorate a paper plate as a planet.		Adults to support children with using the art materials appropriately	Question the children about what their planet is like. Does anyone live there? What are they like?
Plenary:			
Ask children to share their planets and tell the group one thing about their planet.			
Careers in the Curriculum:			
Partner profile:	ioa		
Name:	Institute of Astronomy		
Web Address:	<u>www.ast.cam.ac.uk</u>		
Partner Summary:			
(What are the primary activities of the partner? What industry sector are they? Where do they operate? What are key products / outcomes?) The Institute of Astronomy (IoA) is part of the Faculty of Physics and Chemistry within the School of the Physical Sciences of The University of Cambridge. The IoA is a department of the University of Cambridge and is engaged in teaching and research in the fields of theoretical and observational Astronomy. A wide class of theoretical and observational problems are studied, ranging from the study and observations of extrasolar planets to supermassive black holes and quasars and of the evolution of the whole Universe, through theories and observations of the formation and evolution of galaxies and stars, X-ray sources and black holes. Much observational work centres around the use by staff of large telescopes abroad and in space to study quasars, galaxies, and the chemical constitution of stars. Instrumentation development is also an important area of activity, involving charge coupled devices and detector arrays for rapid recording of very faint light and the design and construction of novel spectrographs. The Institute comprises about 92 research staff (including academic staff, senior research fellows, postdoctoral fellows, and emeriti), 52 graduate students and 29 professional services staff. There are close links with the Cavendish Astrophysics Group (formerly the Mullard Radio Astronomy Observatory) as well as with the Department of Applied Mathematics and Theoretical Physics, all conducting complementary research programmes here in Cambridge.			

Career Roles Available:

(What are the main types of jobs available within the partner organisation?) Student, professor, research assistant, receptionist, technician, IT services.

Links to Curriculum:

(What subjects best reflect Partner activities? Which activities in schools) Science, Understanding the World, Art, and Design.

