

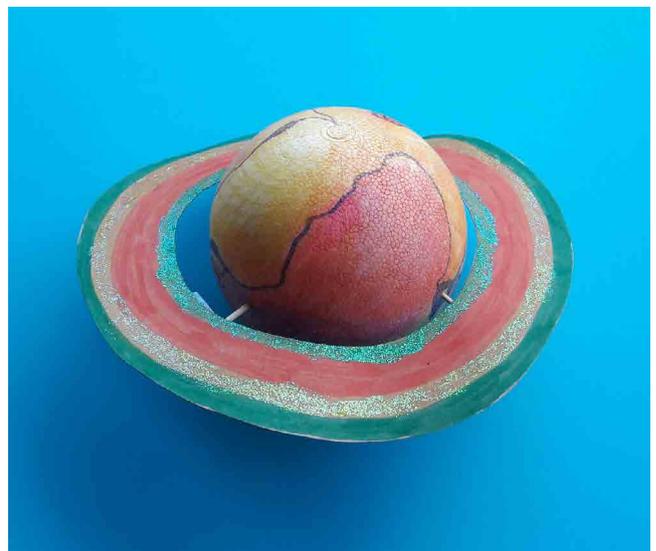
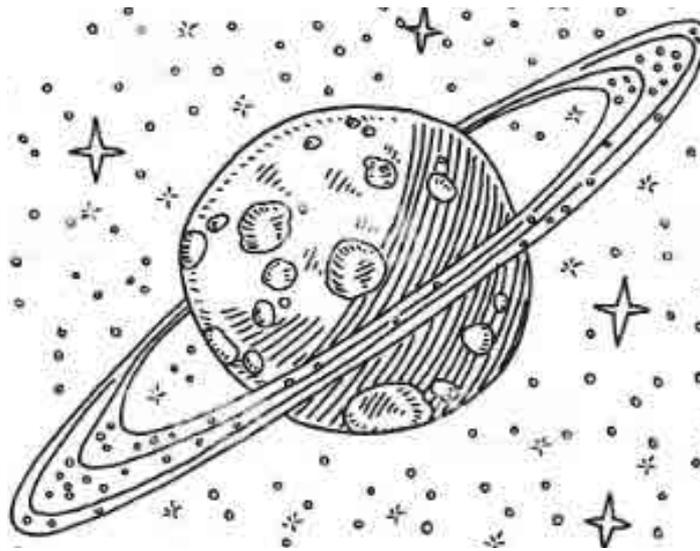


Activity 1: The Ringed Planet

Why does Saturn have rings? Scientists have ideas about why Saturn has rings, but no one knows for sure. If you could travel close to Saturn's rings you would see millions of smaller ringlets. The rings, which make Saturn one of the most interesting planet to look at are made of millions of house-size chunks of ice, along with fine dust and big boulders that dance gracefully around the planet.

To Do: Make a model of Saturn using any ball-shaped unused object you may find around the house.

In the instructions supplied in the following page we used a styrofoam ball.



HOW TO MAKE THE PLANET SATURN



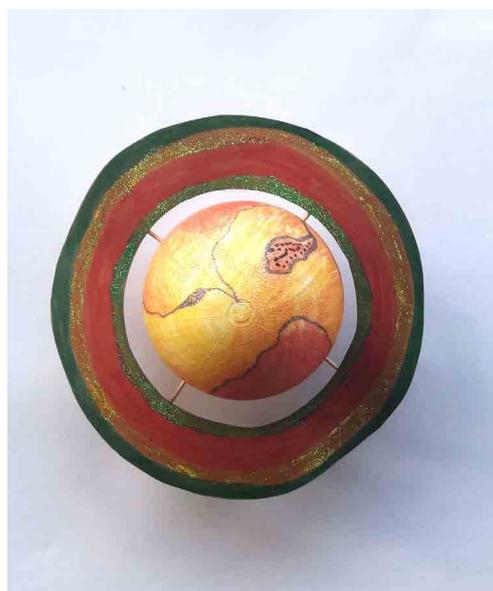
Paint a styrofoam ball to look like your idea of Saturn. You may look at the planet in books and posters for inspiration.



Insert 4 wooden toothpicks around the outside of the ball like in the picture above.



Trace, cut out and paint Saturn's ring on both side. Ask an adult to help you with working out the size and proportion needed.



Position the paper ring onto the four toothpicks.



Turn the piece around and tape the ring to the toothpicks.



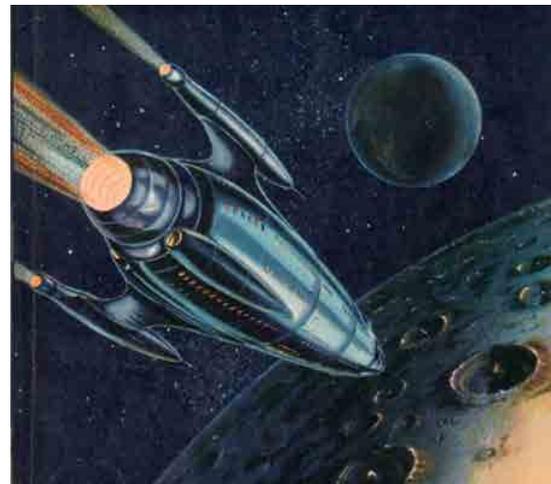
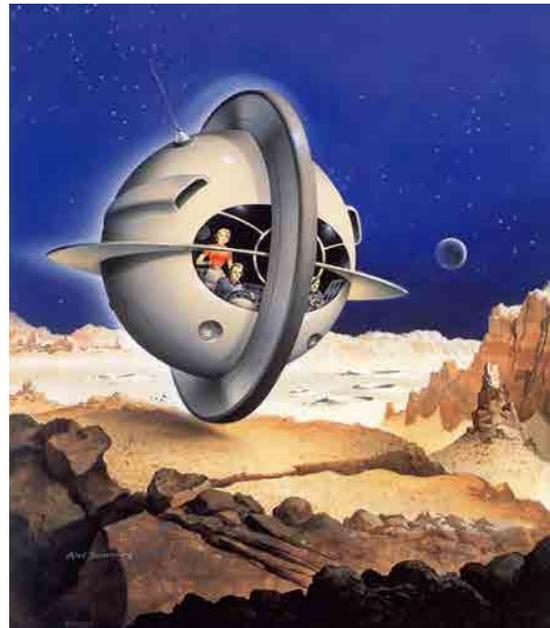
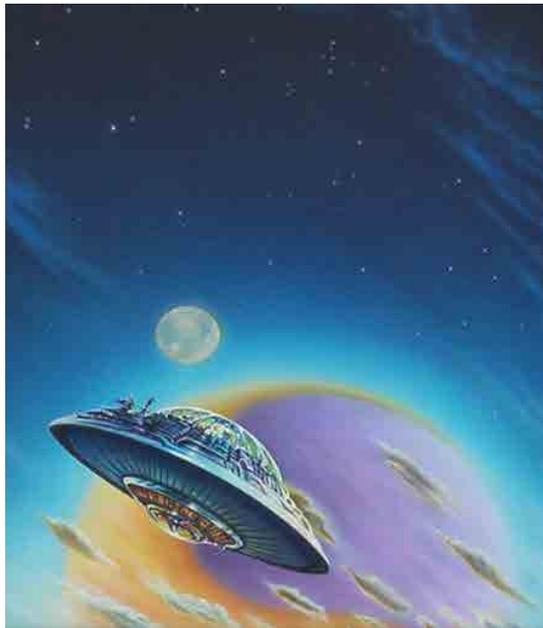
Partially open up a paper clip and insert the straight end onto the ball. This will allow you to hang the planet where you choose.

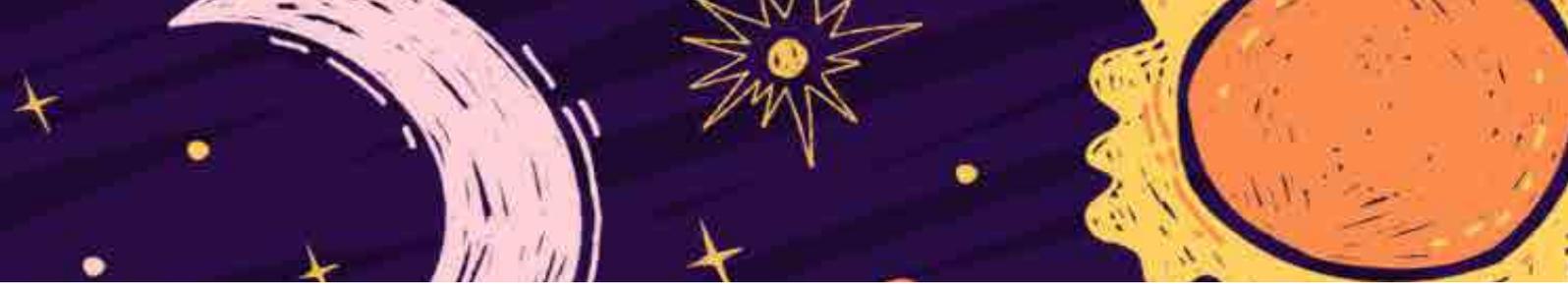


Activity 2: Getting There

Saturn is very far away from Earth and it may take up to two years to get there and two to come back. Imagine you can build a travel pod of which you are the pilot and you are bringing some friends with you for a few laps through Saturn's rings. Each ring contains a maze of millions of floating chunks of ice so you will need a strong and smart travel pod.

To Do: Design a travel pod that takes you to Saturn then try to make one with recycled material you may find around the house.

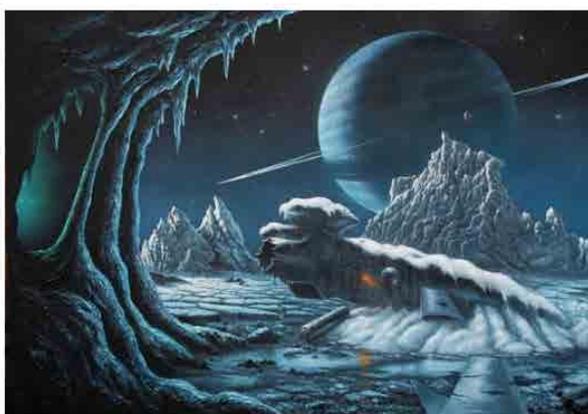
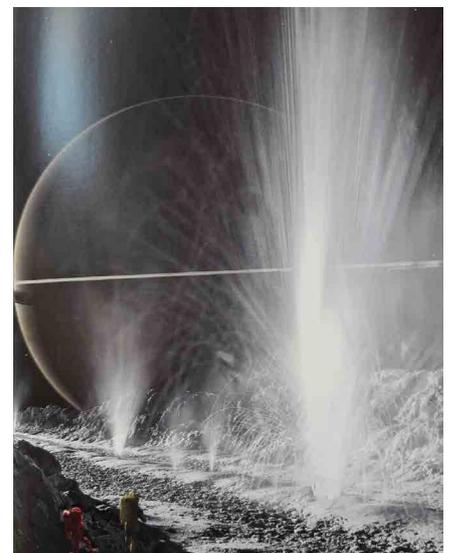
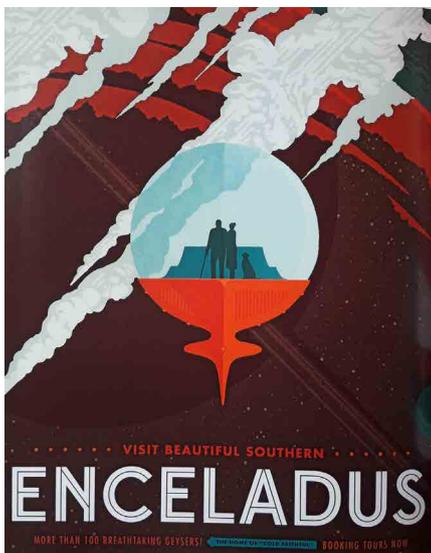




Activity 3: Encedalus – Wish You Were Here

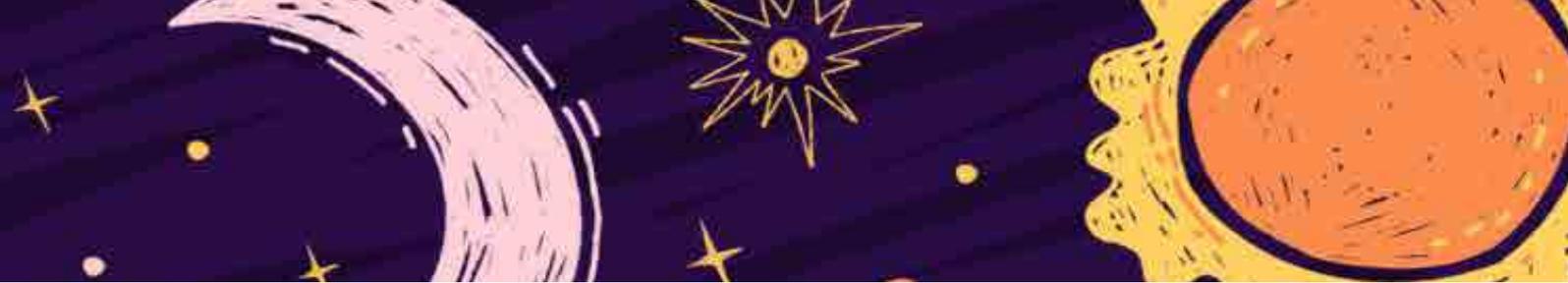
Planets, moons and stars have truly amazing names! Some have been named after ancient gods, animals, famous people or just numbers. Encedalus – just one of Saturn’s 60 moons – was named after a giant in the Greek legend. Encedalus is mostly covered by fresh, clean ice which from far away looks like a smooth snowball with cracks in the icy crust called “tiger stripes” – because that’s what they look like, except they appear blue in colour. Encedalus is full of volcanoes that, instead of fire, eject clouds of icy material out from under its surface.

To Do: Imagine that in the future – when space travel is open to tourists – you and your friends will be able to go ice skating and cross-country skiing on Encedalus. Draw, paint or make a collage for a “Wish You Were Here on Encedalus” postcard to send back to Earth.



'Ice Moon' by David Hardy.

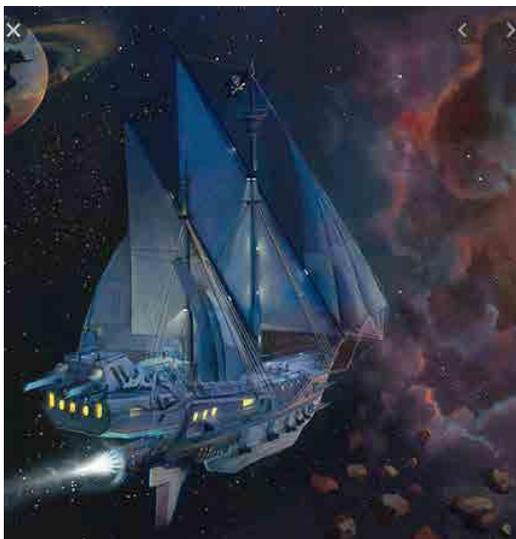




Activity 4: Sailing on Titan

Saturn's moon Titan is the largest of its 60 moons. On Titan there are large amounts of liquid but is not water. Because of its freezing temperatures, the rivers, lakes and seas on Titan are made of liquid gases. If you were to visit this moon you'd need a special suit for protection from the cold and from radiation. The sky is filled with orange clouds.

To Do: Imagine in a distant future you're part of a crew of space scientists that study this strange moon. You would be working on board a specially designed sailing ships, raft or submarine. Design a futuristic sailing ship, raft or submarine.





Activity 5: Robot Pets

A tiny talking robot called Kirobo (meaning 'Hope Robot') was sent into space in 2013 and spent 18 months orbiting (going around) the Earth as a companion to lonely astronauts. His special mission was to be a best friend to the Japanese space commander Koichi Wakata.

To Do: Would you like to take a robot friend on your space mission to Jupiter? Create and colour in a few designs of your own and cut out your favorite.

