

## 3... 2... 1... Blast-off!

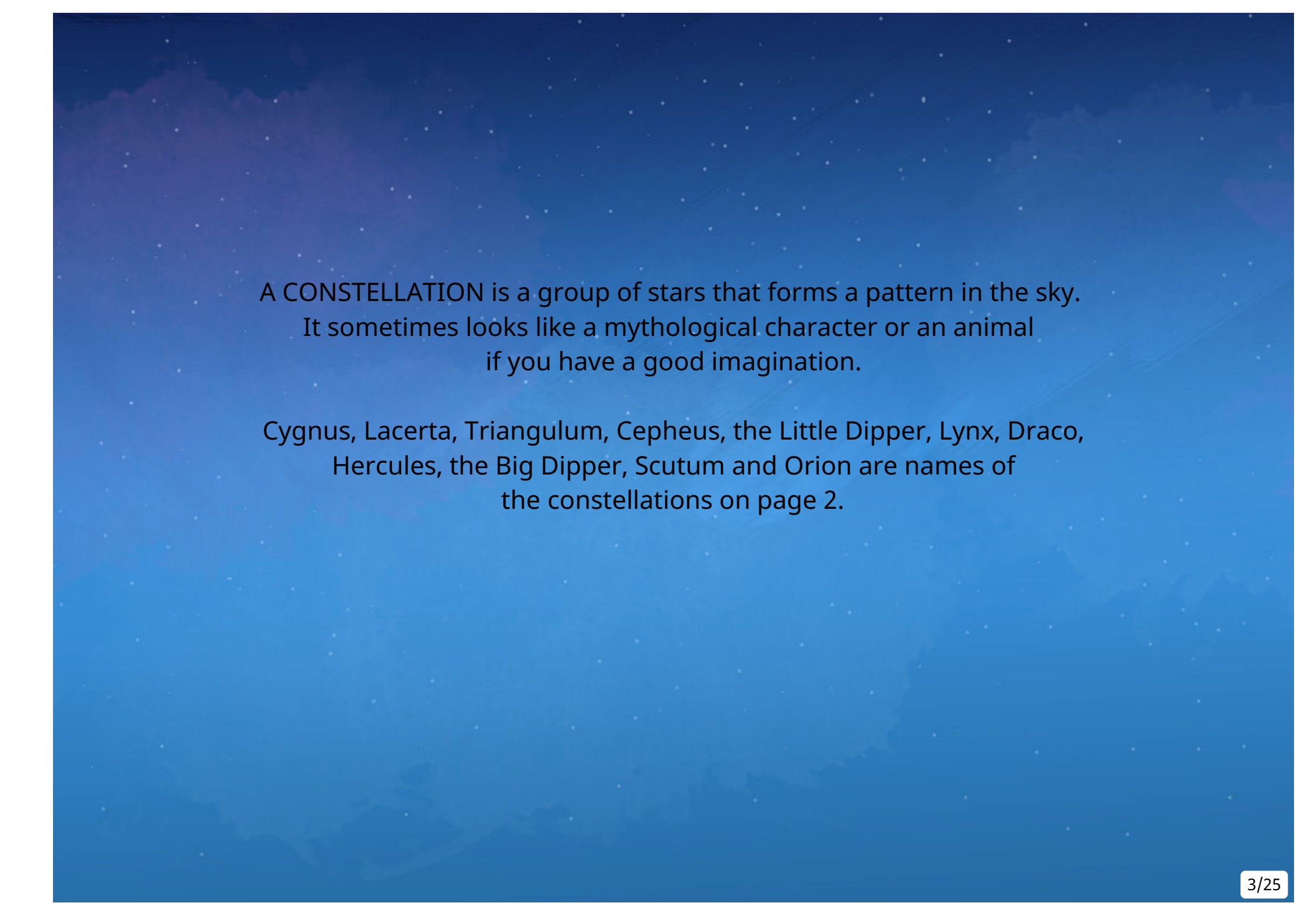
**Authors:** Praba Ram, Sheela Preuitt

**Illustrator:** Vidyun Sabhaney



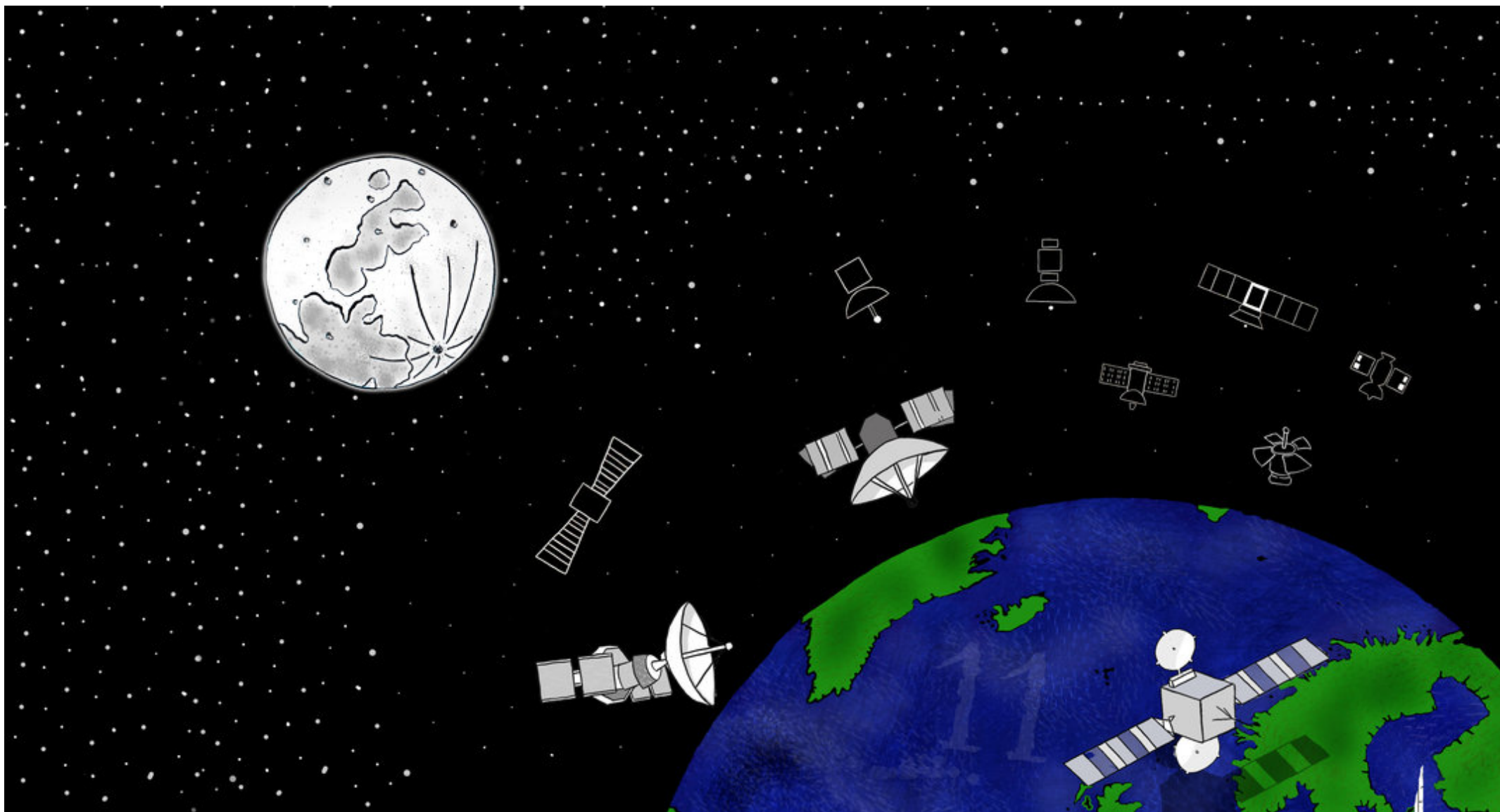
**12 dreamy constellations floating in space**



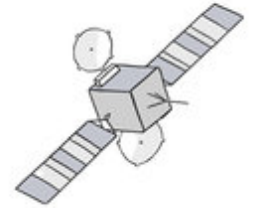


A CONSTELLATION is a group of stars that forms a pattern in the sky.  
It sometimes looks like a mythological character or an animal  
if you have a good imagination.

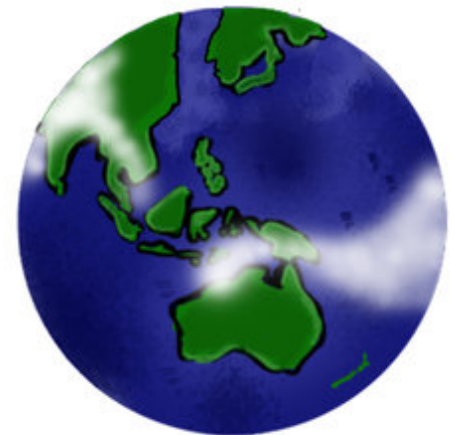
Cygnus, Lacerta, Triangulum, Cepheus, the Little Dipper, Lynx, Draco,  
Hercules, the Big Dipper, Scutum and Orion are names of  
the constellations on page 2.

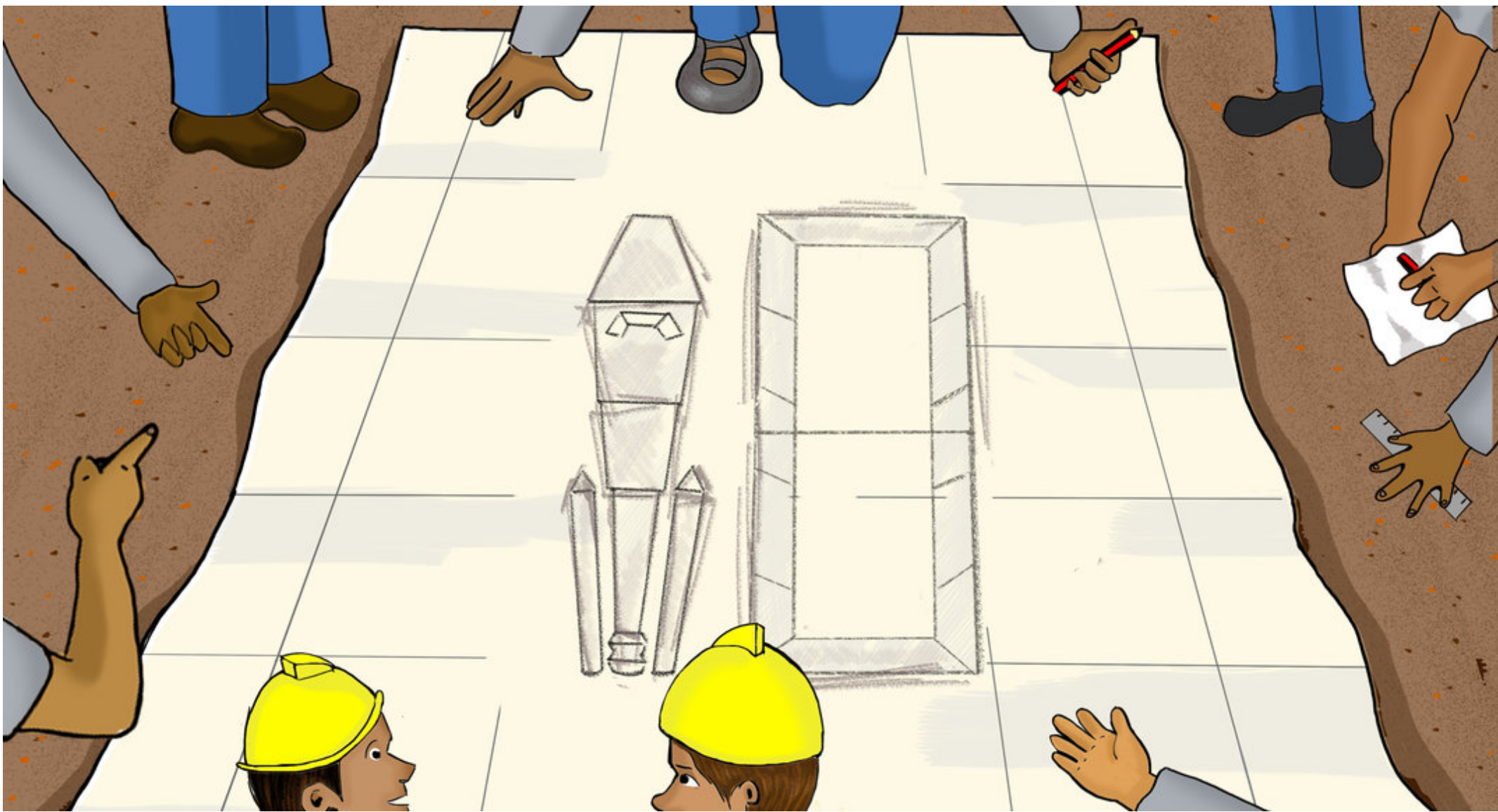


**11 shiny satellites up in the sky**



A SATELLITE is an object that goes around a planet or a star.  
Earth has a natural satellite -- the moon. Artificial satellites are launched  
into space for communications, astronomy,  
and weather studies.



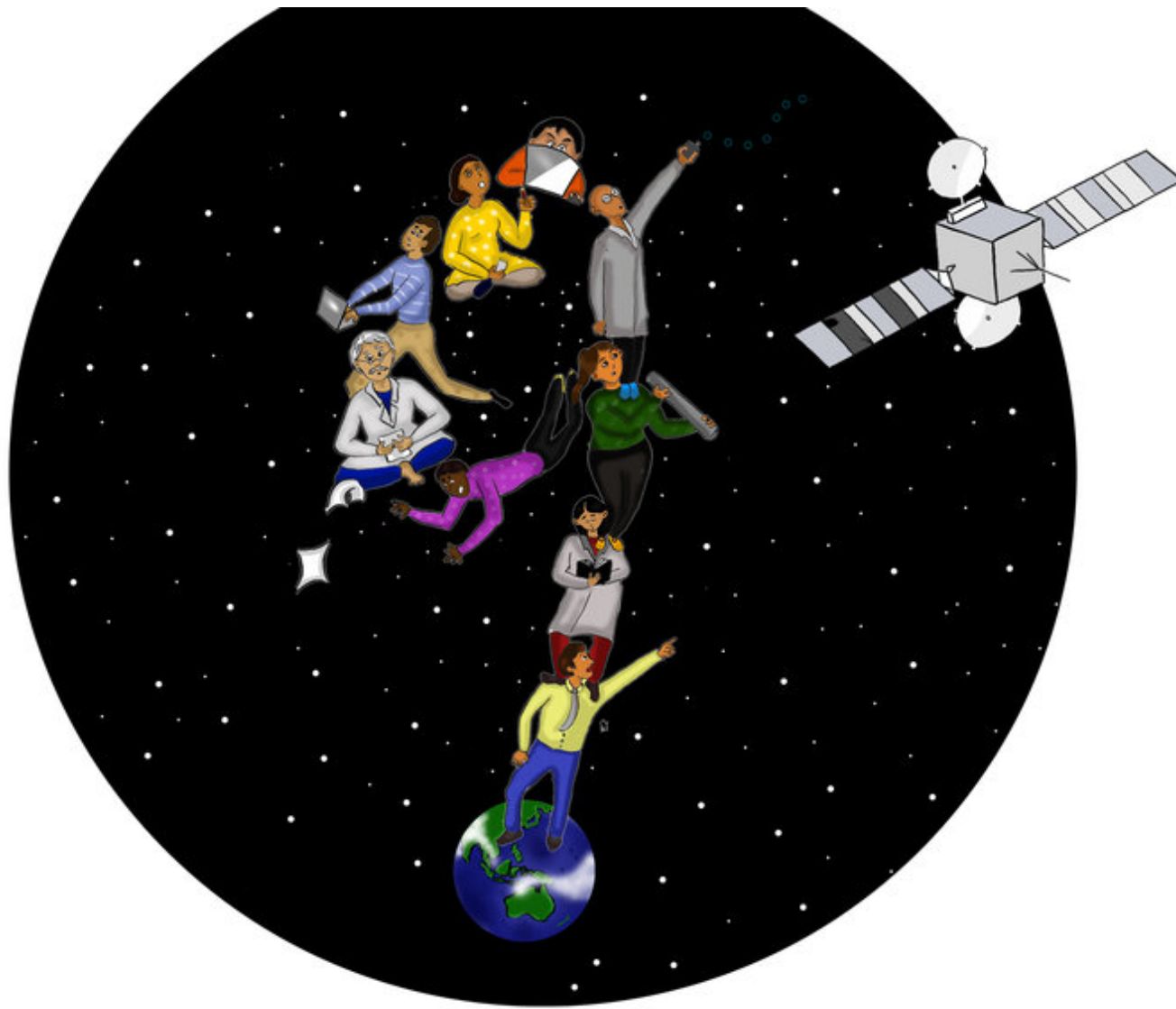


**10 busy engineers working on a rocket**

Mechanical ENGINEERS, electrical ENGINEERS,  
and electronics ENGINEERS work together  
to assemble a rocket.



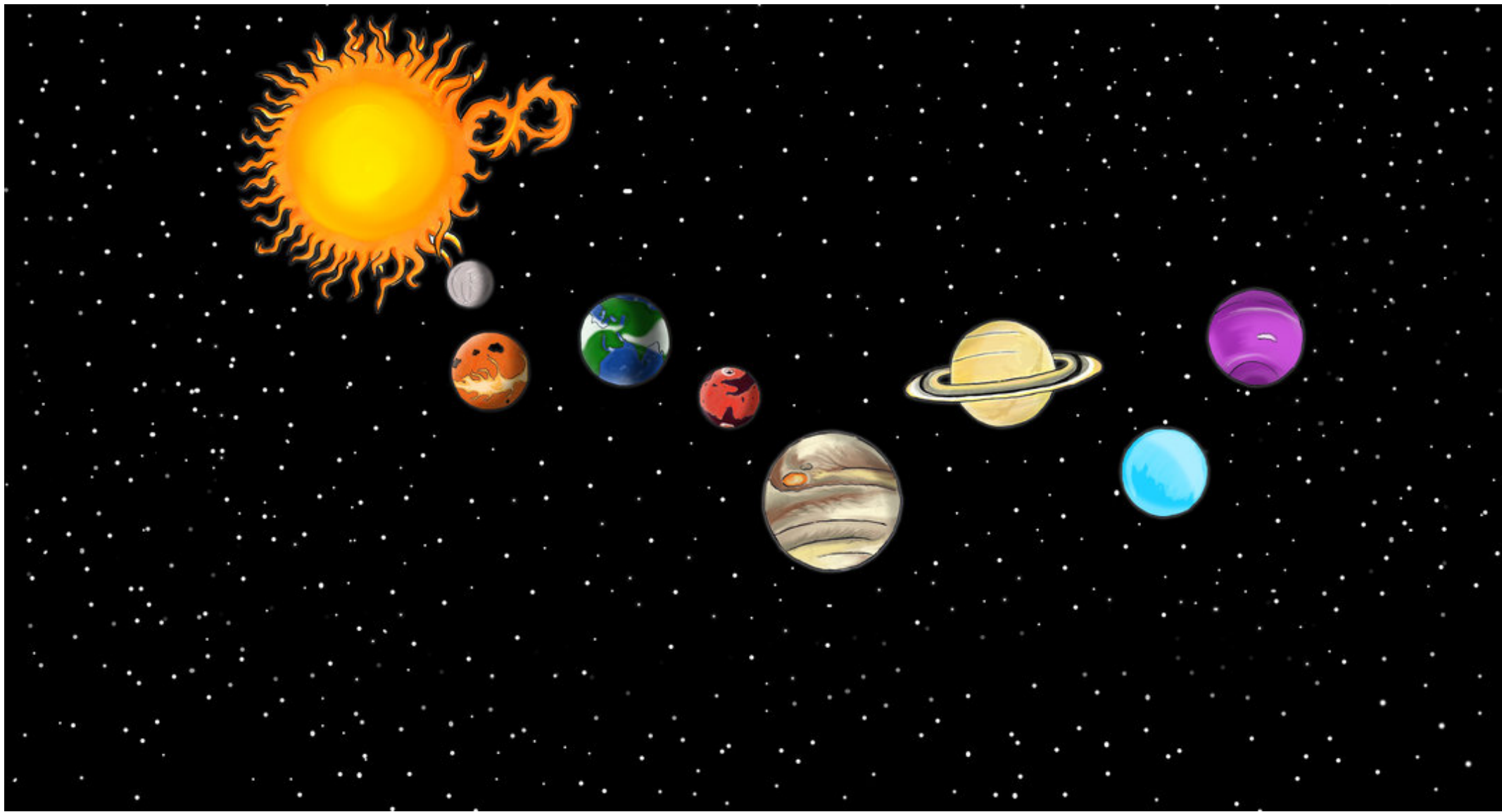




## **9 expert scientists calculating the orbit**

SCIENTISTS figure out what path the satellite will take when it is in space.  
The path was called orbit.

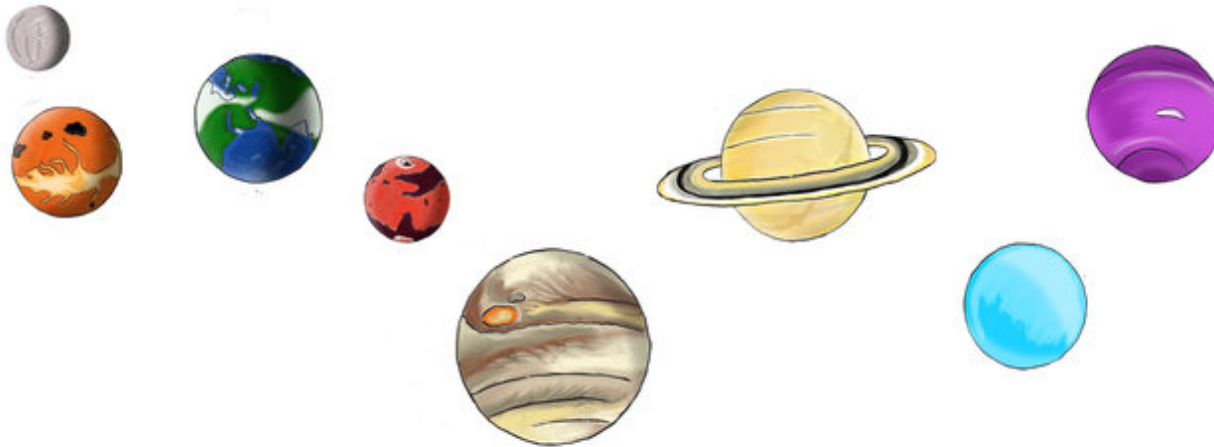


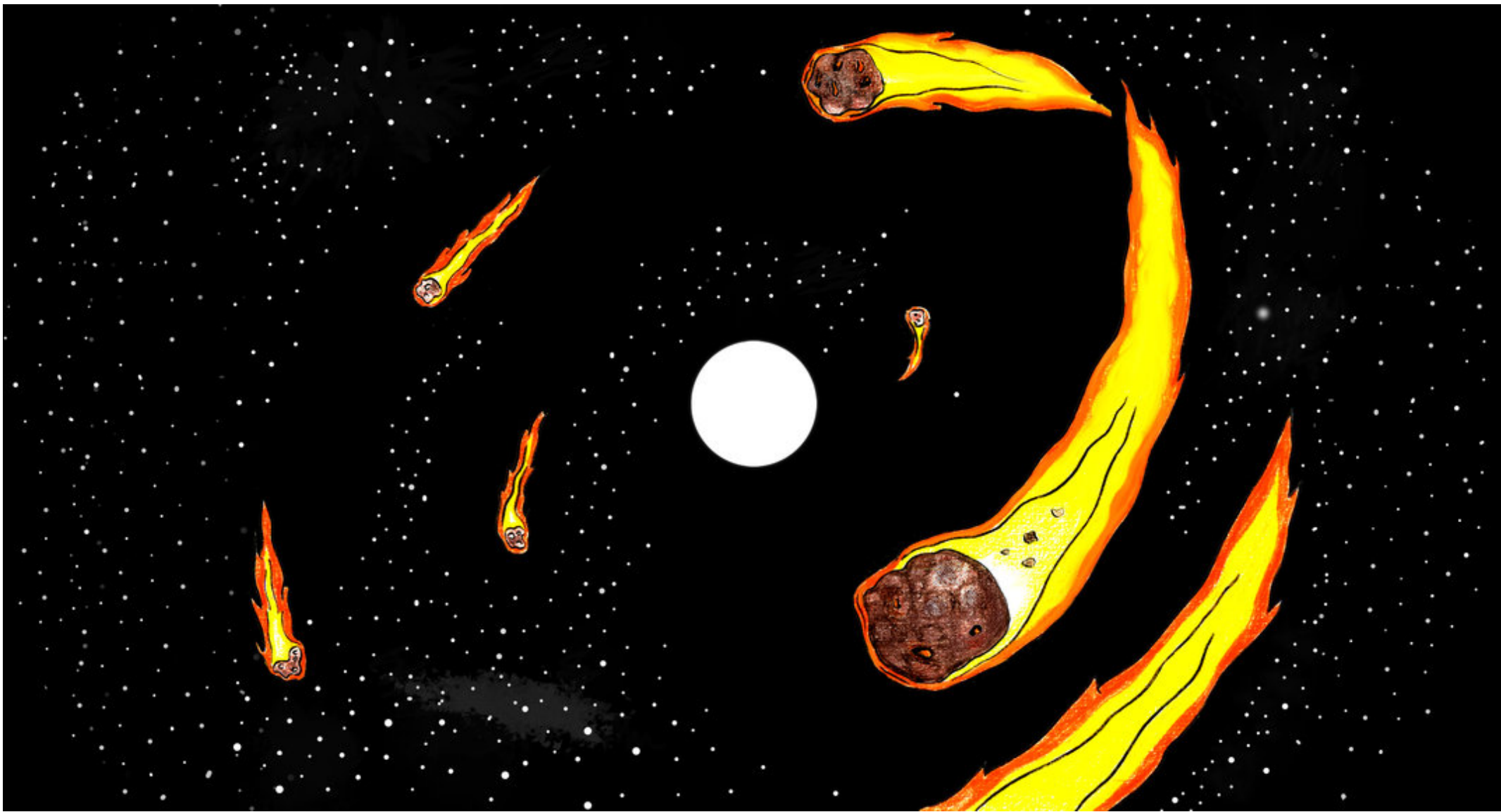


**8 stable planets going around the sun**

Four rocky inner PLANETS -- Mercury, Venus, Earth, Mars -- and four gassy outer PLANETS -- Jupiter, Saturn, Uranus, Neptune -- make up the eight major PLANETS of our solar system.

Pluto used to be the ninth planet but in 2006, International Astronomical Union (IAU) decided that Pluto was a dwarf planet.





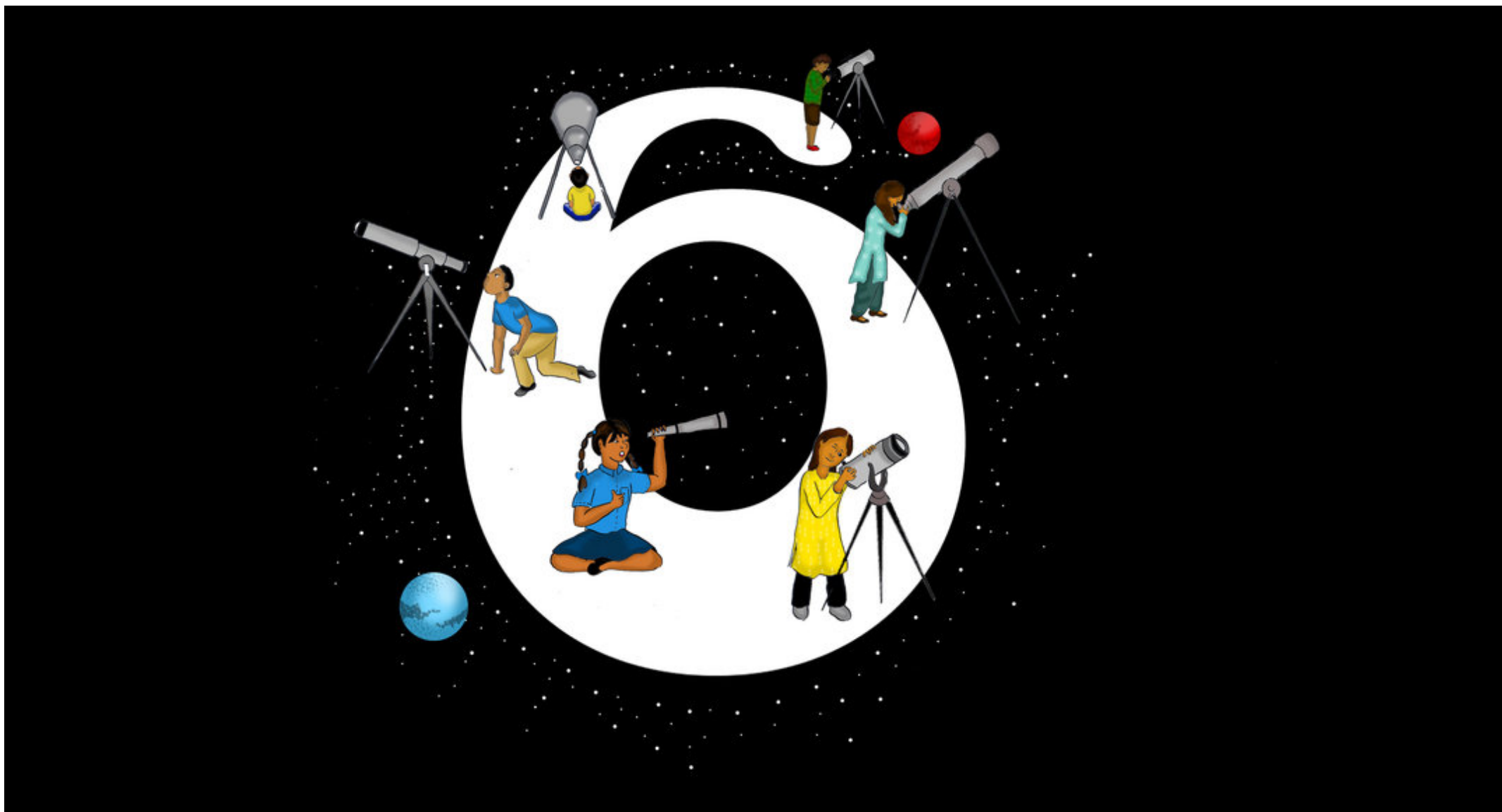
**7 icy comets passing through**





COMETS are large chunks of ice, rock and gas.  
They orbit the Sun, but are usually far from Earth.  
As they pass, they leave a trail that looks like a tail.  
Some famous comets are Hale-Bopp, Halley,  
Hyakutake and Shoemaker-Levy.





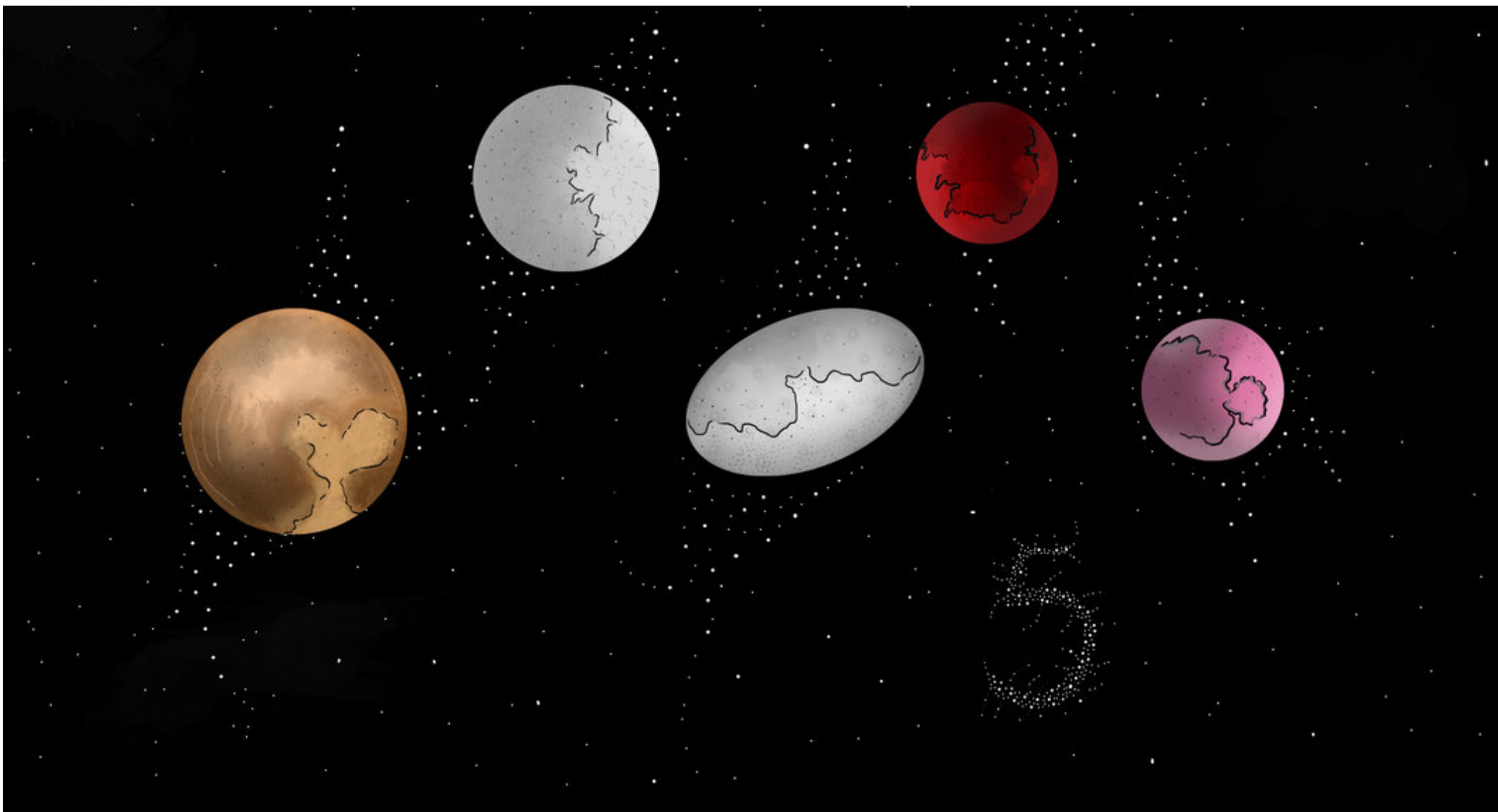
**6 curious people looking through telescopes**



TELESCOPES help us see objects that are far,  
far away like the comets,  
stars, planets, and moons.



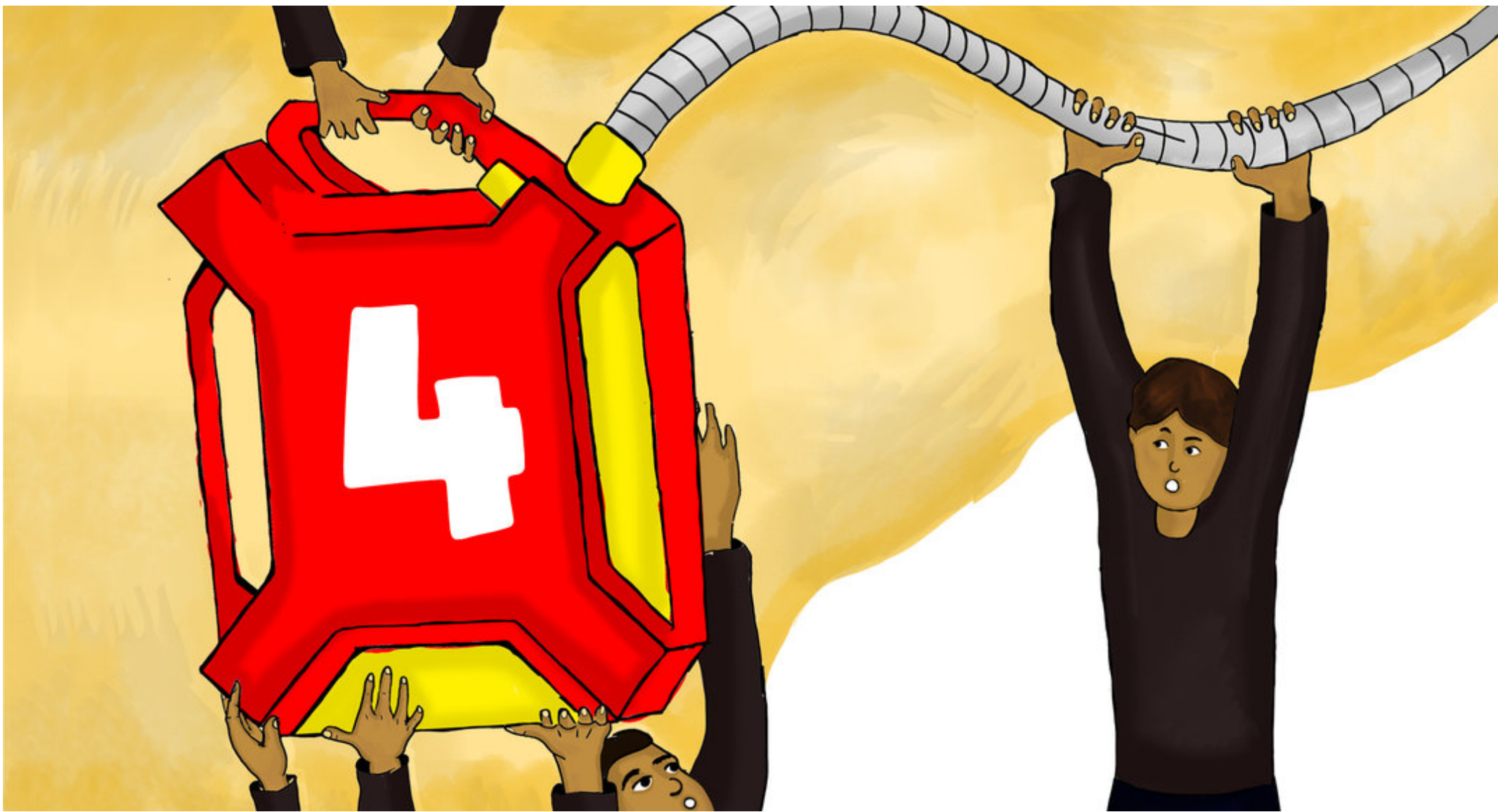




**5 small dwarf planets hanging around**




DWARF PLANETS are like planets but they are much smaller and they do not yet have a clear path around the Sun. This means that objects like asteroids and comets litter their path. Pluto, Ceres, Eris, Makemake and Haumea make up the five recognized dwarf planets of our solar system.

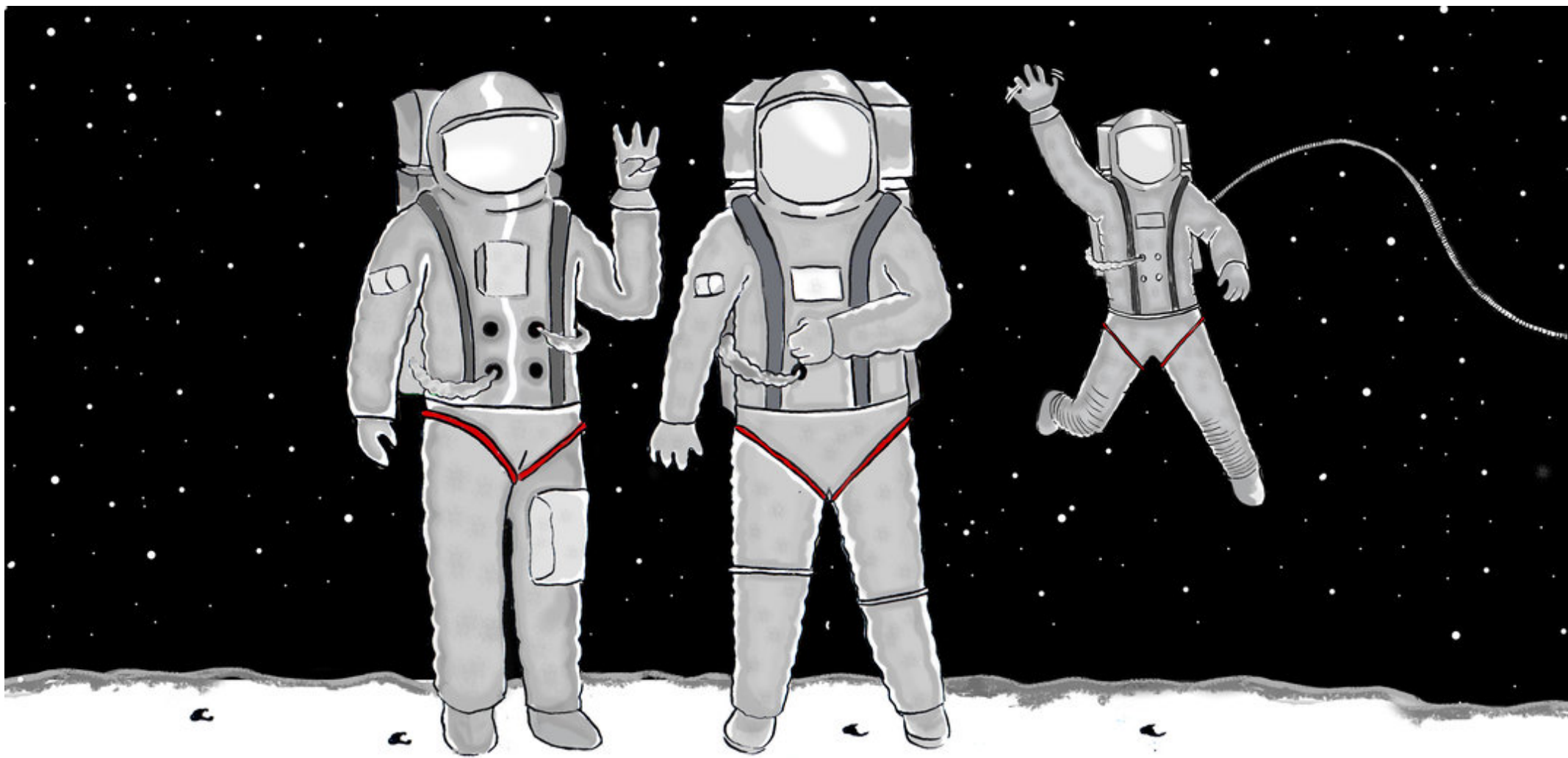


**4 careful workers fueling the rocket**

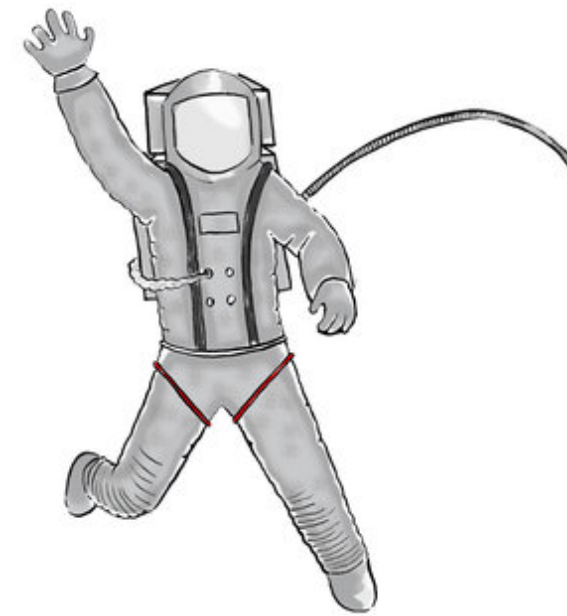
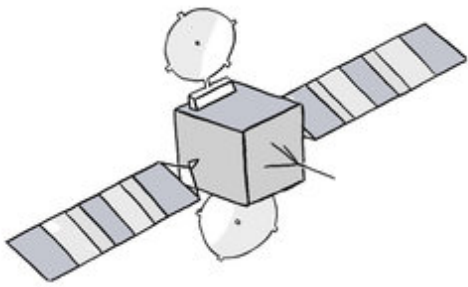




Just like cars need petrol to run,  
rockets need FUEL to take off and do their job.  
Rockets can use both liquid fuel and solid fuel.



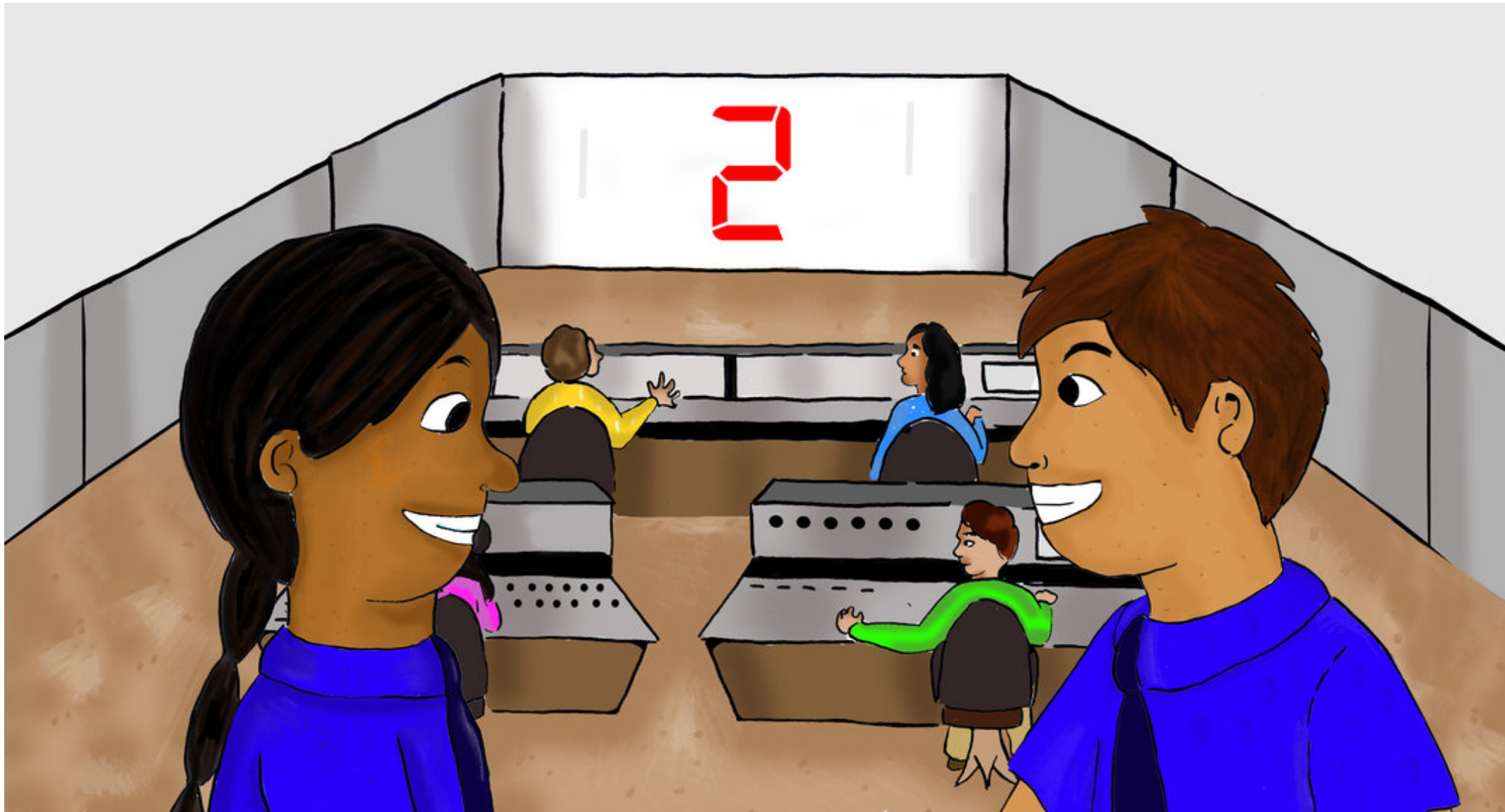
**3 skilled astronauts in their spacesuits**



SPACESUITS protect astronauts in space.  
Suits have oxygen supplies for astronauts to breathe,  
and also water to drink.

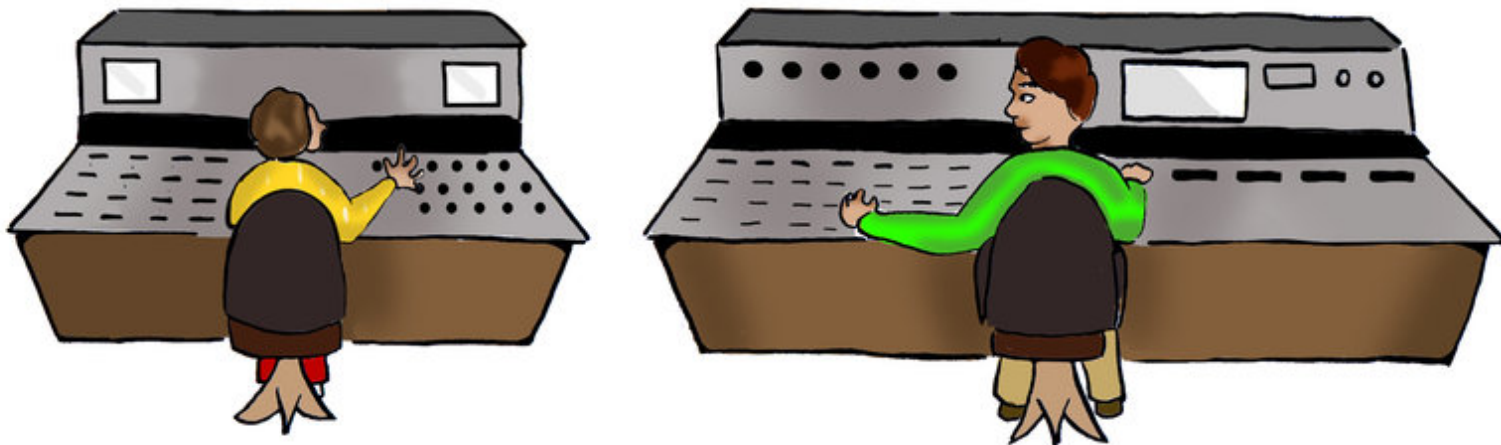
They prevent astronauts from getting too  
hot or too cold, and keep them safe from space dust.

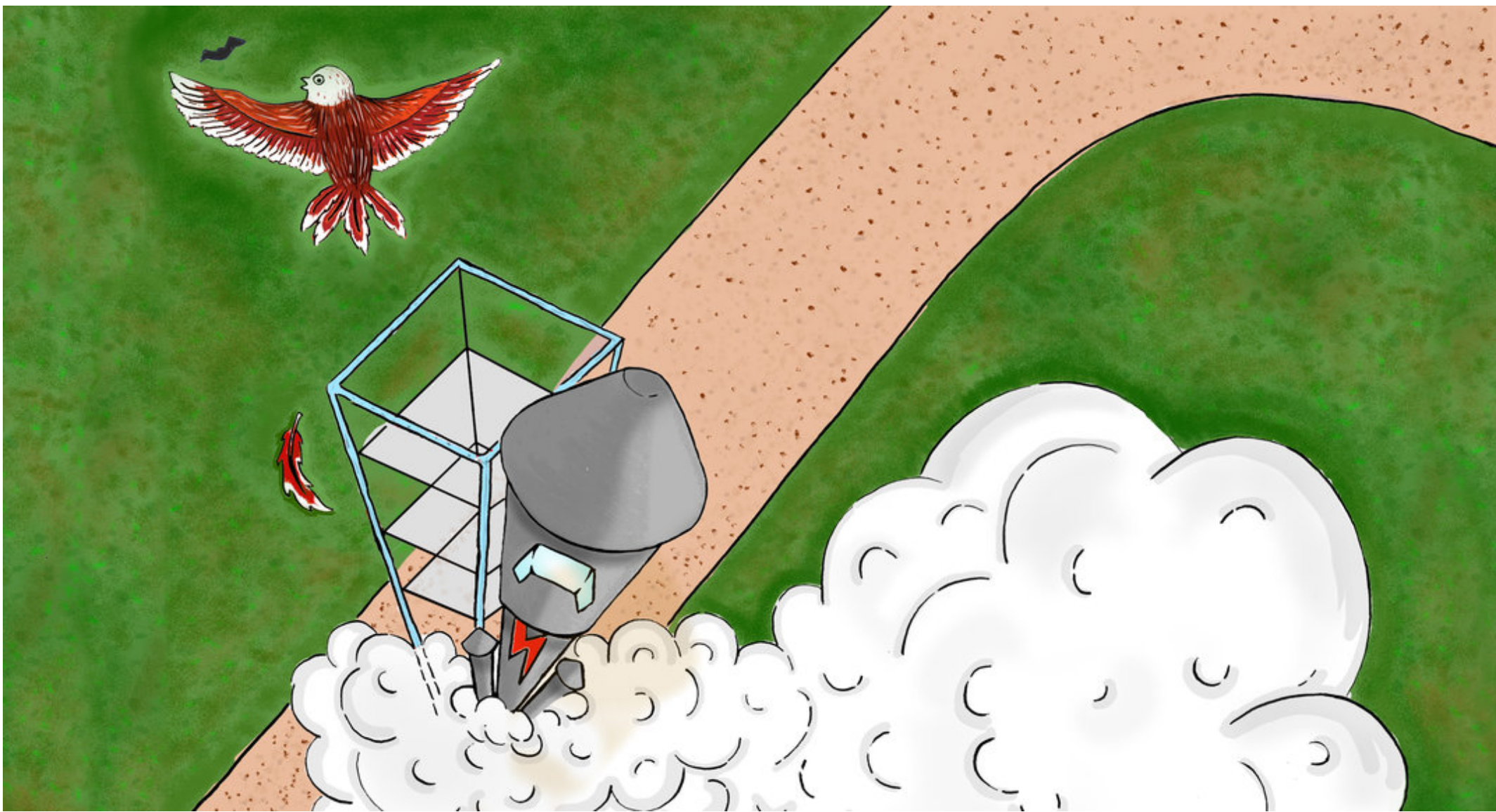




**2 eager kids at the mission control centre...**

MISSION CONTROL CENTRE is a room where team leaders get together and make sure the launch goes smoothly and everything works as designed till the mission is complete.

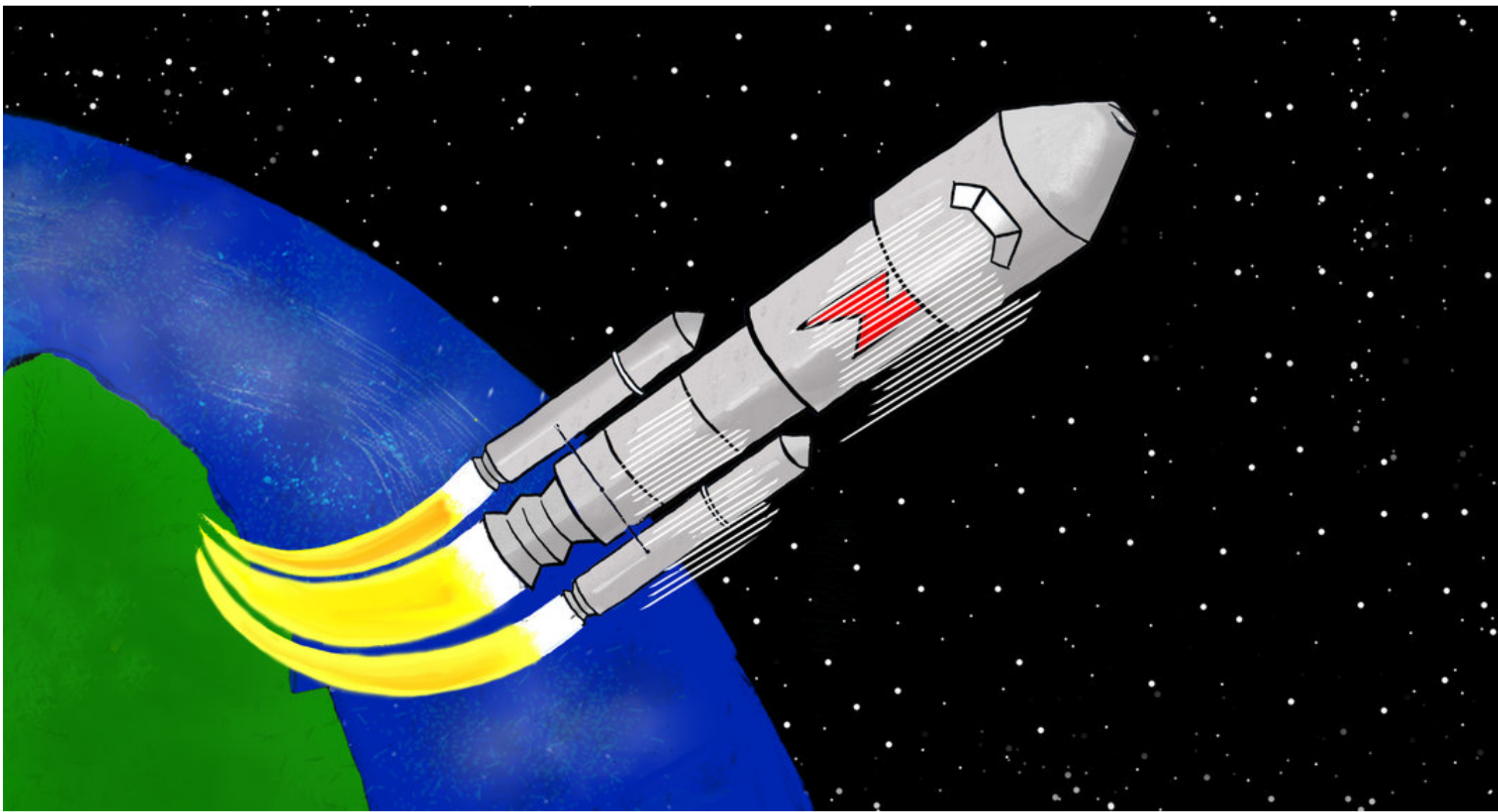




## **1 roaring rocket ready to soar!**

A ROCKET is a self-propelled vehicle that can shoot into space.  
It is used to launch man-made satellites into space.





**Blast-off!**



India created a world record in 2017 when it launched 104 satellites from a single rocket, PSLV-C37.

Scientists at the Indian Space Research Organisation (ISRO) launched the rocket from the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.





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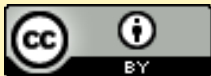


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## **3... 2... 1... Blast-off!** (English)

This count-down book introduces readers to fascinating celestial objects, to space concepts and to the people involved in the various facets of astronomy. It may just inspire them to take a step towards a career in astronomy. Come, let us go space travelling!

This is a Level 3 book for children who are ready to read on their own.



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