# SCIENCE



## LEARNING BOOKLET

Table Top Air Rocket

### SFUN FAGTS

NASA IS PLANNING TO SEND HUMANS TO MARS IN THE 2030S. IT MIGHT BE POSSIBLE FOR YOU TO TRAVEL THERE WITHIN YOUR LIFETIME.







CHOKING HAZARD - Small parts, Not for children under 3 years.



## WARNING MESSAGE

#### GENERAL WARNING 🗥

Before you begin, please read through the instructions together with your children. Make sure you understand the safety messages. Please keep the packaging and instructions, as they contain important information.

This kit is designed for children over 5 years of age.

CHOKING HAZARD - Small parts, not for children under 3 years.

Children should have parental supervision when assembling the product.

Please clean the product with a clean cloth when necessary.

WARNING: Do not aim at eyes or face. WARNING: Do not discharge an object other than the projectile provided with this toy.

### UPackage Contents



### Installation steps

1. Insert the hose into the air pipe.



2. Snap the air pipe onto the pipe stand.



3. Insert the air pipe through the upper and lower holes of the launch pad.



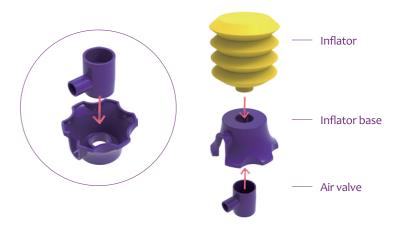
4. Attach the pipe stand to the launch pad.



5. Insert the air pipe in the air nozzle.



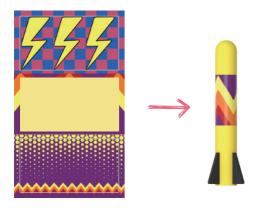
**6.** Connect the inflator and the air valve to the inflator base according to the figure.



7. Connect the air nozzle to the valve.



### **8.** Paste a sticker on the rocket.



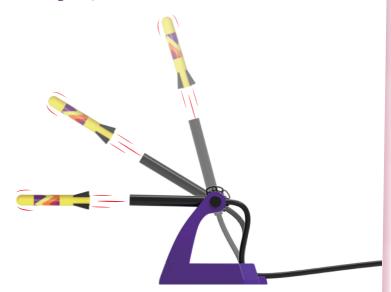
 $9\boldsymbol{.}$  Insert the rocket from the tail into the launch lever.



10. Press the inflator rapidly to launch the rocket.



Launch angle adjustment.



## What does it do?

Learn about air pressure with the Table Top Air Rocket. It is a perfect aerospace science activity suitable for indoors and outdoors.





Press sharply on the pump and watch the rocket fly. Depending on the force you apply, it will fly at a range of different heights and speeds.

You can change the flying angle by adjusting the launching platform.

# How does at work?

When you press the pump, air inside the pipe is compressed and transmitted to the bottom of the Rocket. The air pressure suddenly produced is a form of energy that will be used to launch and propel the Rocket.



### Try pushing

the pump harder to see what happens. You will find that the Rocket flies faster and higher.



#### This is because

the harder you press the pump, the more suddenly the air is released, creating higher air pressure and providing more energy to launch the rocket.

### Try to adjust

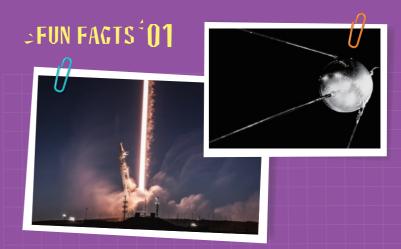
the angle and the force applied to the pump to launch the rocket.





# FUN FAGTS





### The first artificial

satellite in space was Sputnik I, launched by a fuel-powered rocket by the USSR in 1957.



