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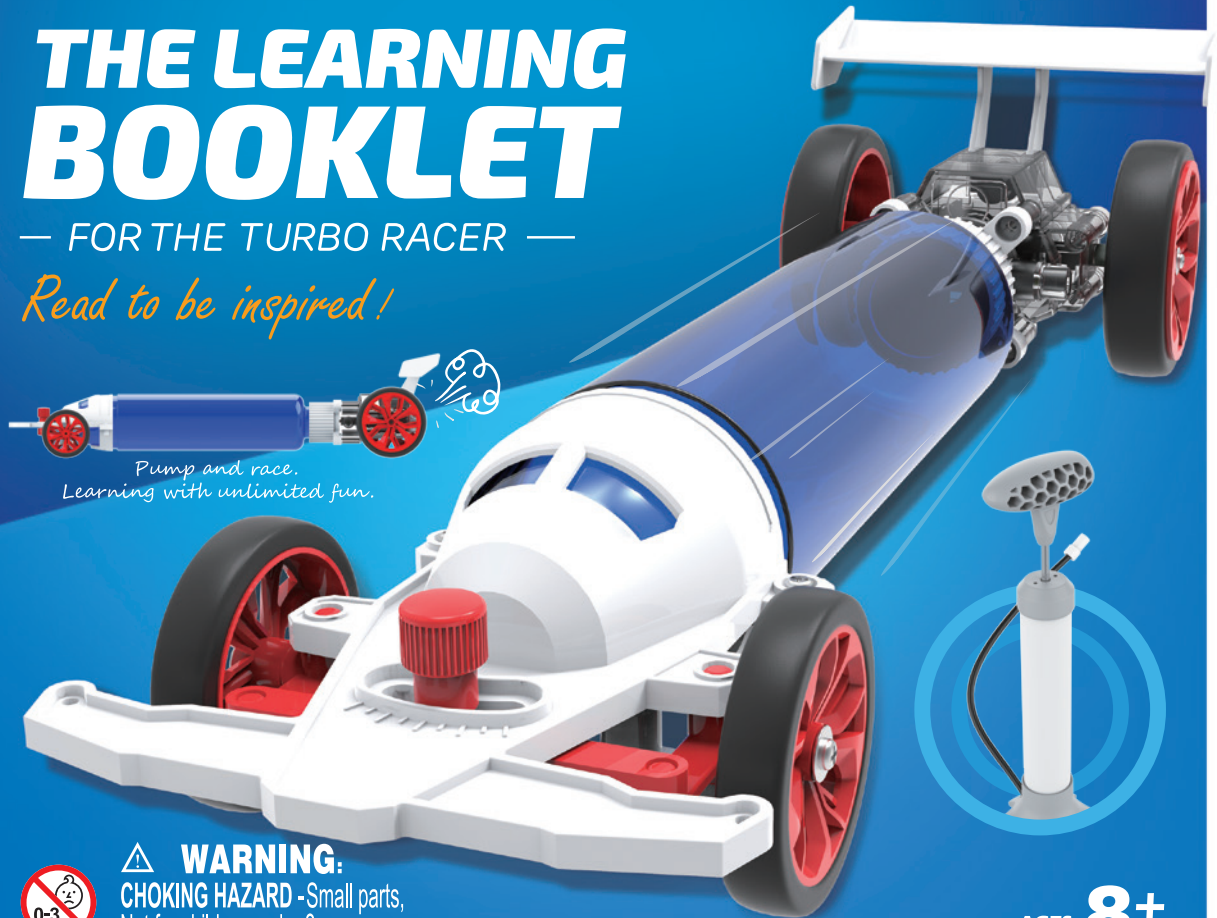
THE LEARNING BOOKLET

— FOR THE TURBO RACER —

Read to be inspired!



*Pump and race.
Learning with unlimited fun.*



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

AGES **8+**



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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 8 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.

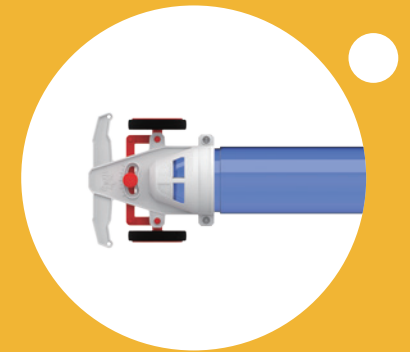
This kit was designed by using the default hand pump. The use of any other pump could lead to excessive air pressure which could damage the parts or even cause an explosion.

OTHER WARNINGS

Using a screwdriver

You must always be supervised by an adult when using a screwdriver. The metal may have sharp edges that can cause injury.

1 | WARNING MESSAGE





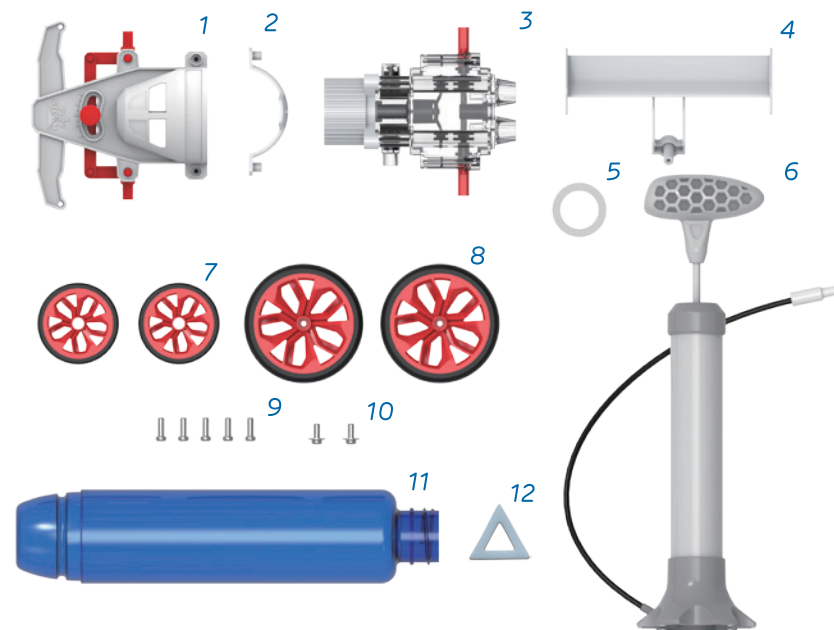
Read to be inspired!



2 | PACKAGE CONTENTS



Package Contents

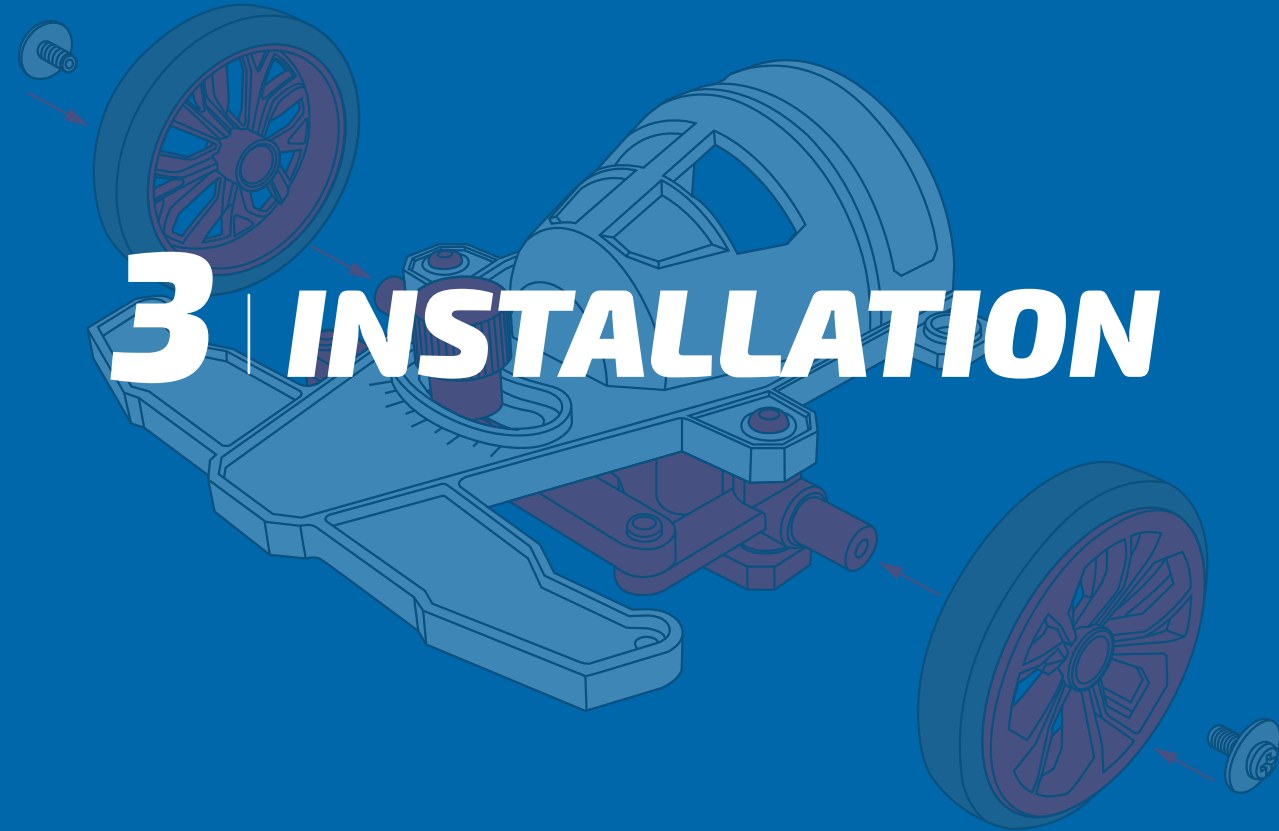


Serial	Name	Quantity	Serial	Name	Quantity
1	Front	1	7	Front wheel	2
2	Bottle hoop	1	8	Rear wheel	2
3	Engine components	1	9	PB 2.3*8 Screw	4+ 1(spare)
4	Spoiler	1	10	PWB 2.3*6 Screw	2
5	Leak-proof gasket	1	11	Bottle	1
6	hand pump	1	12	Pressure indicator	1

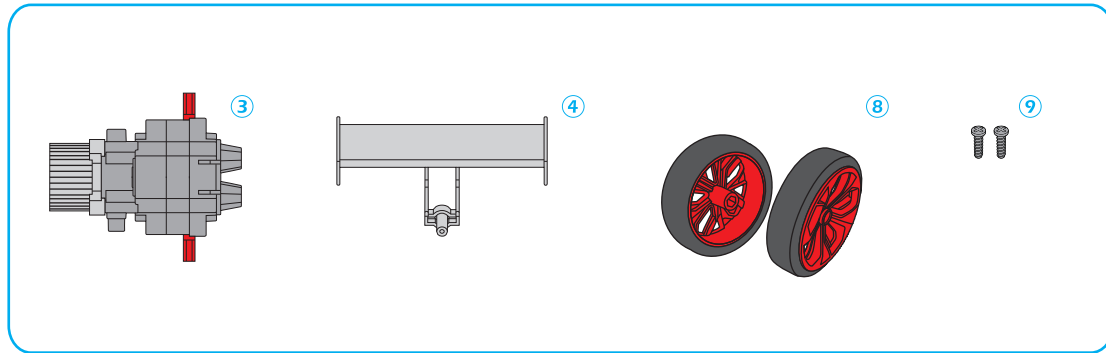
Necessary but not included



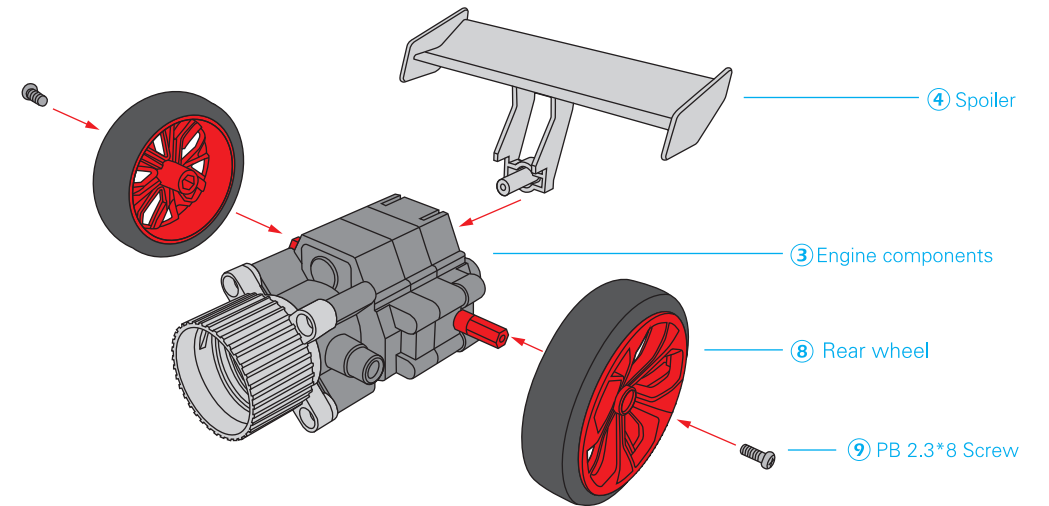
Cross-headed screwdriver

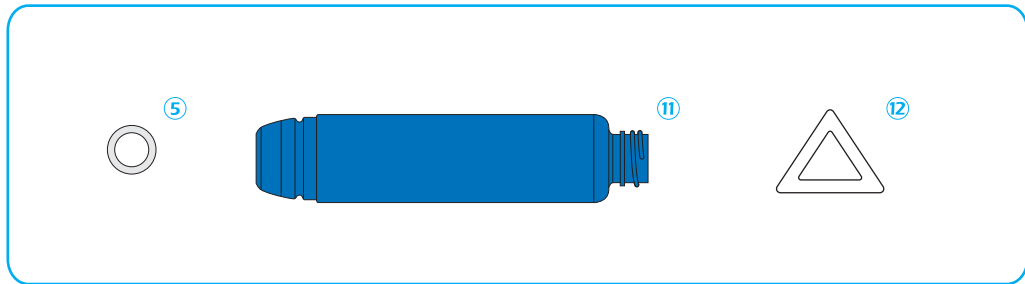


Assembly Steps

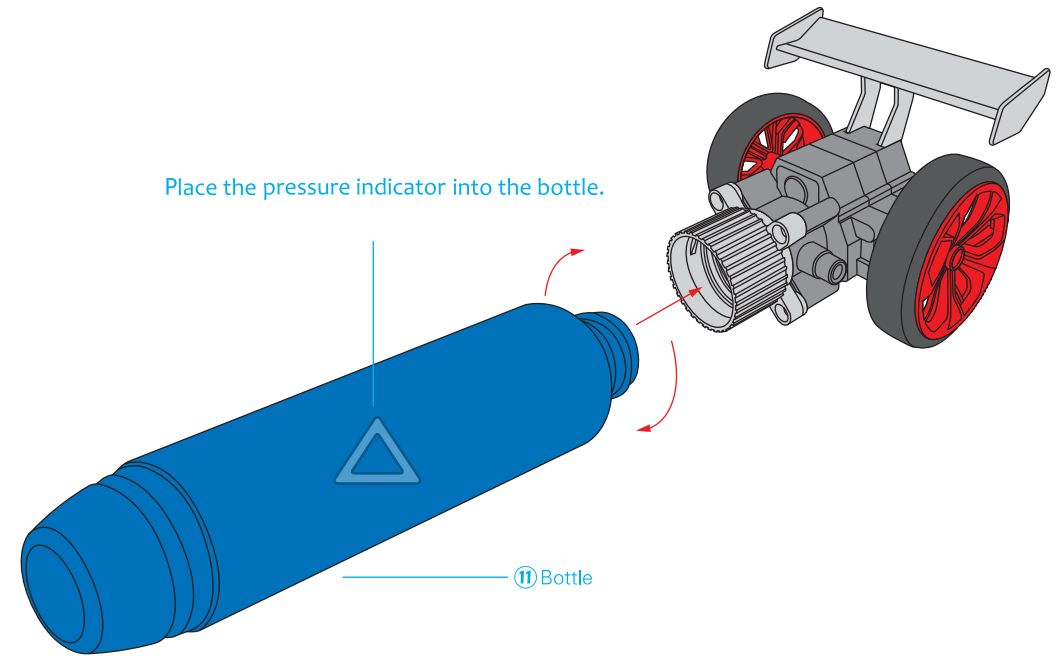
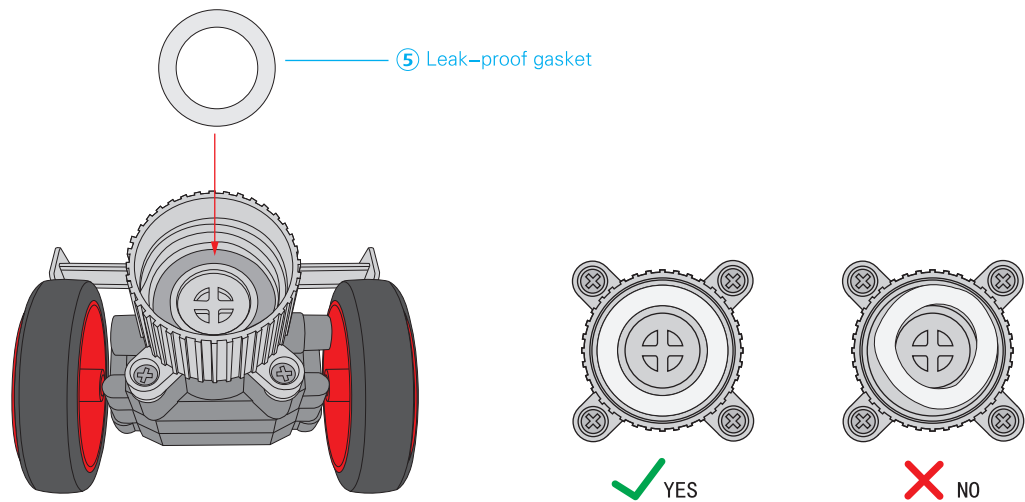


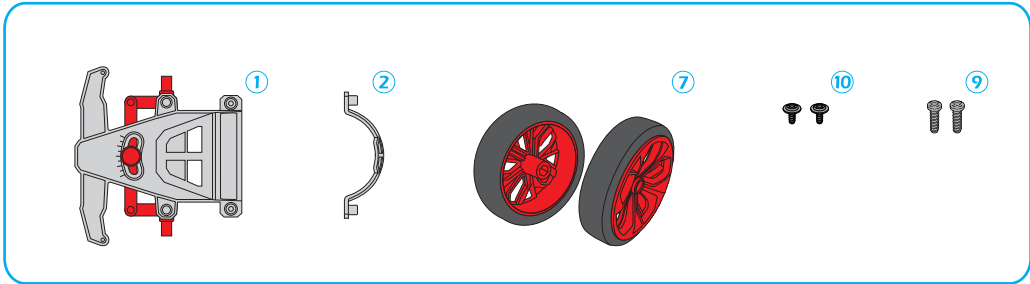
- 1 Insert the rear wheels into the rear axles and secure with screws. Attach the spoiler to the engine components.



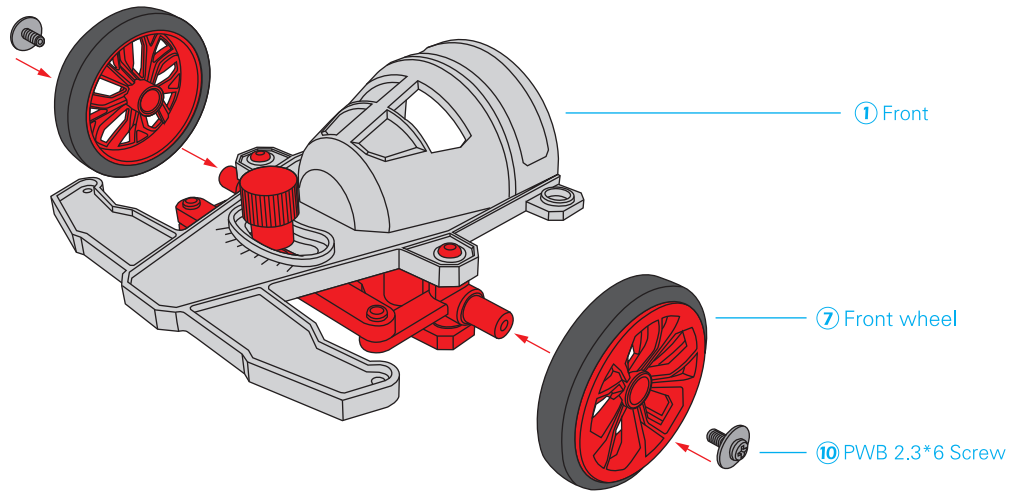


2 Put the leak-proof gasket tightly into the bottle cap of the engine components.

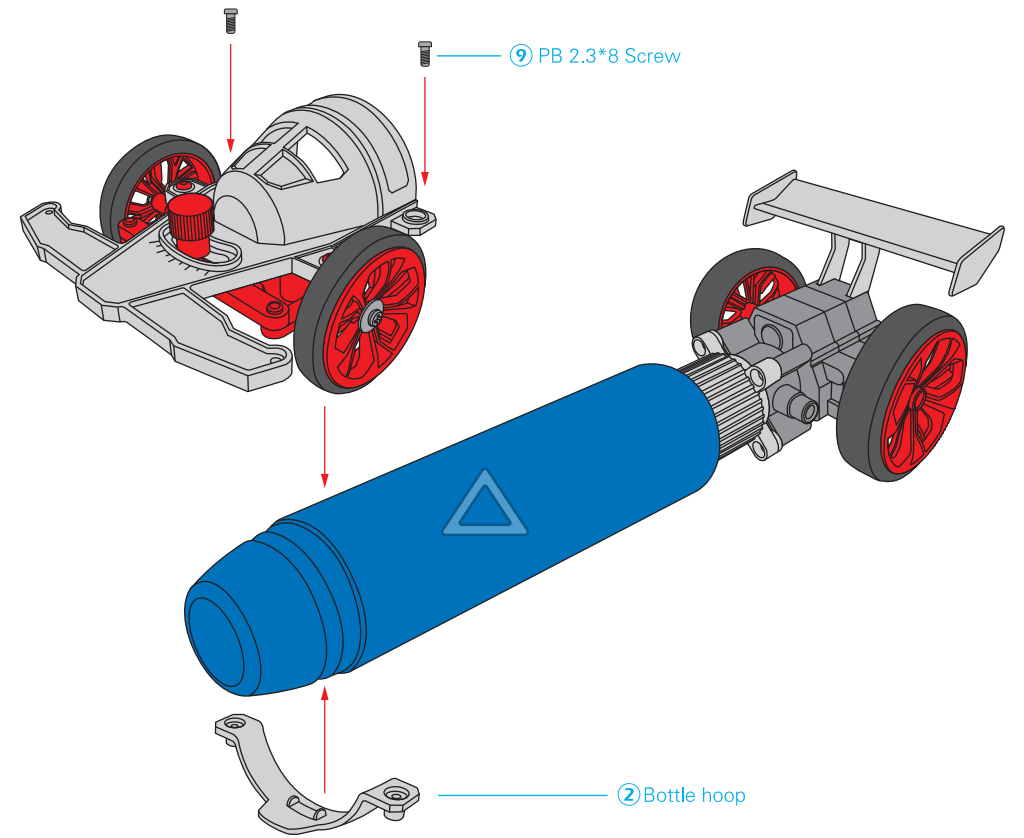




3 Insert the front wheels into the front axles and secure with screws.

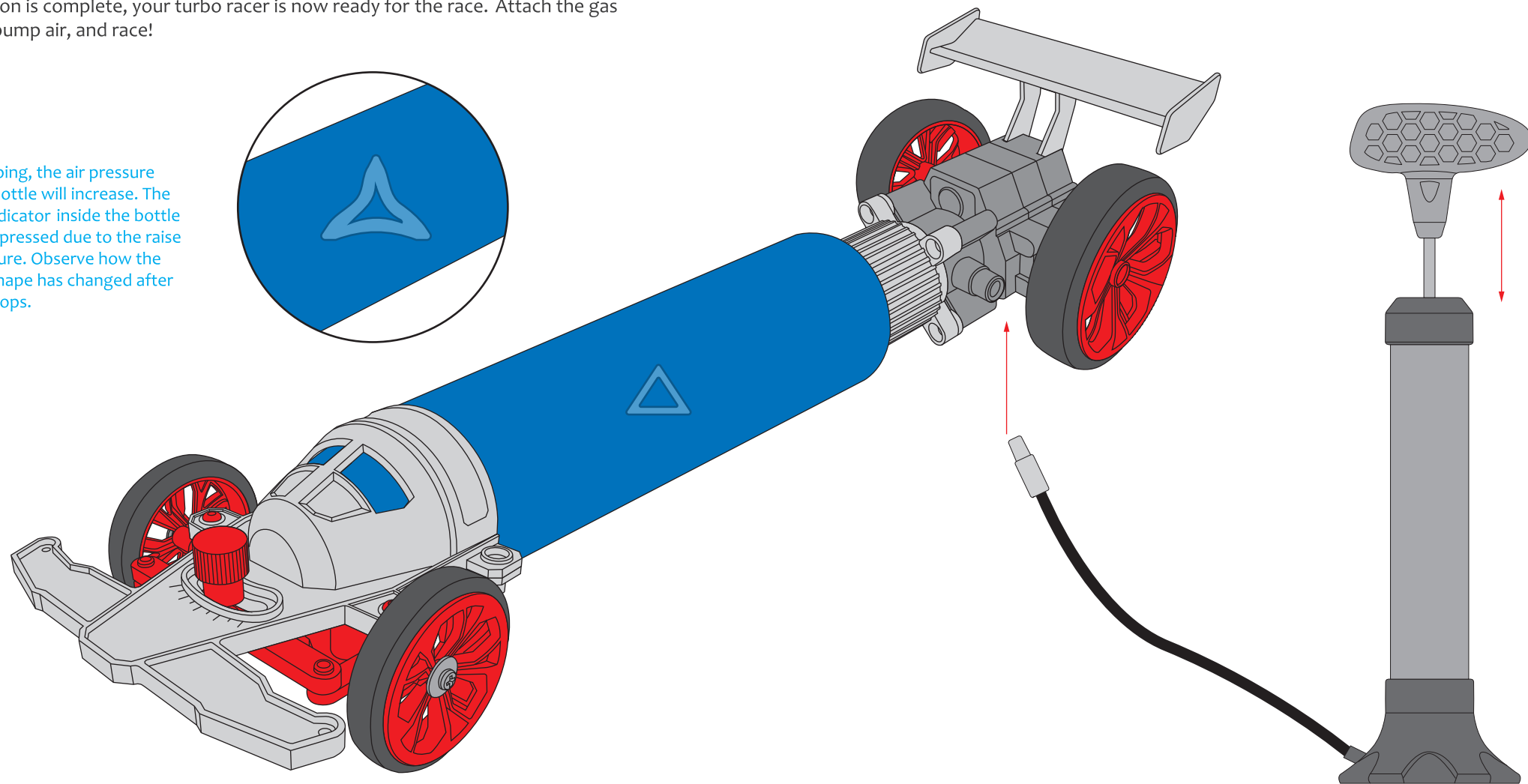


4 Snap the bottle hoop into the bottle's grooves, while aligning the front and bottle hoop. Once set, secure with screws.



- 5 Installation is complete, your turbo racer is now ready for the race. Attach the gas nozzle, pump air, and race!

While pumping, the air pressure inside the bottle will increase. The pressure indicator inside the bottle will be compressed due to the raise of air pressure. Observe how the triangle's shape has changed after the racer stops.

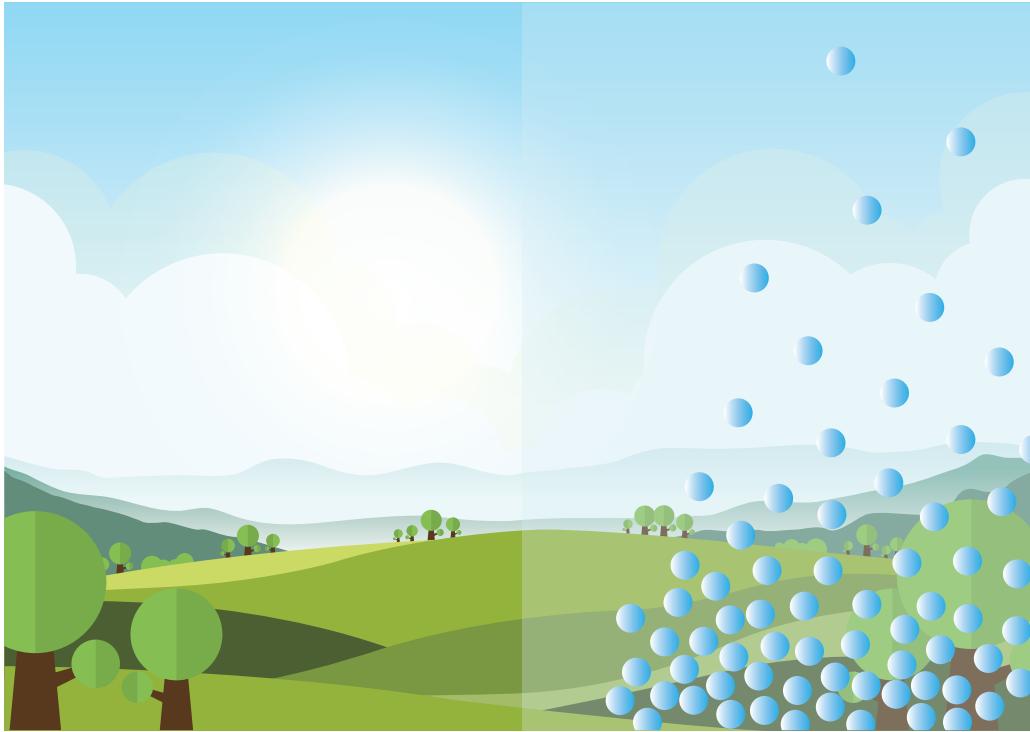


4 | *ACTIVITIES*



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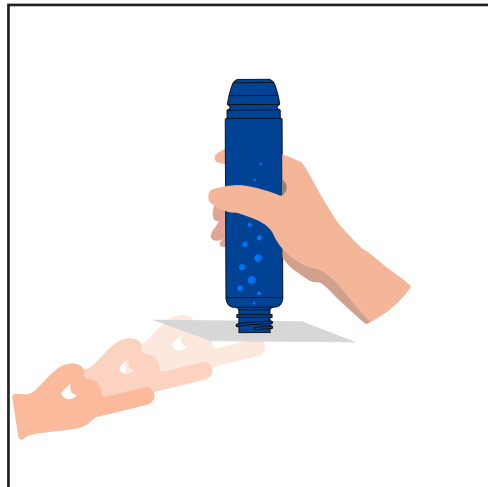
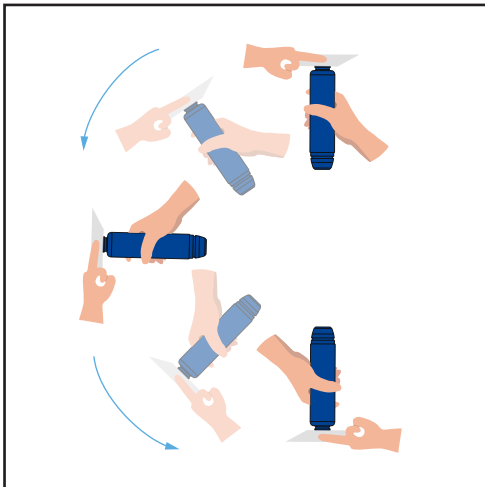
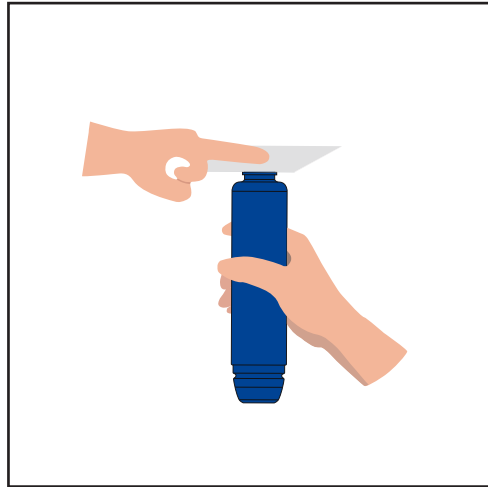
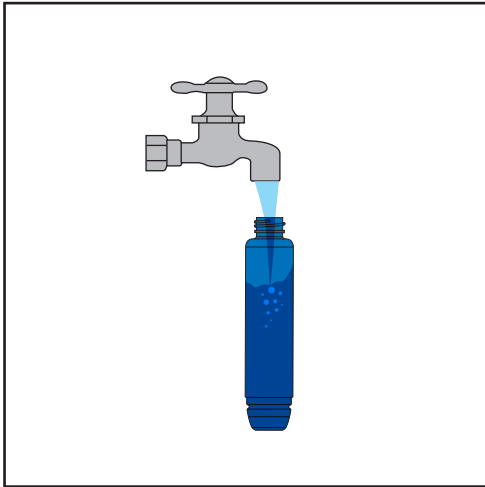




A. What are Air Molecules?

Before learning about air pressure, we need to understand a new term - Air Molecules.

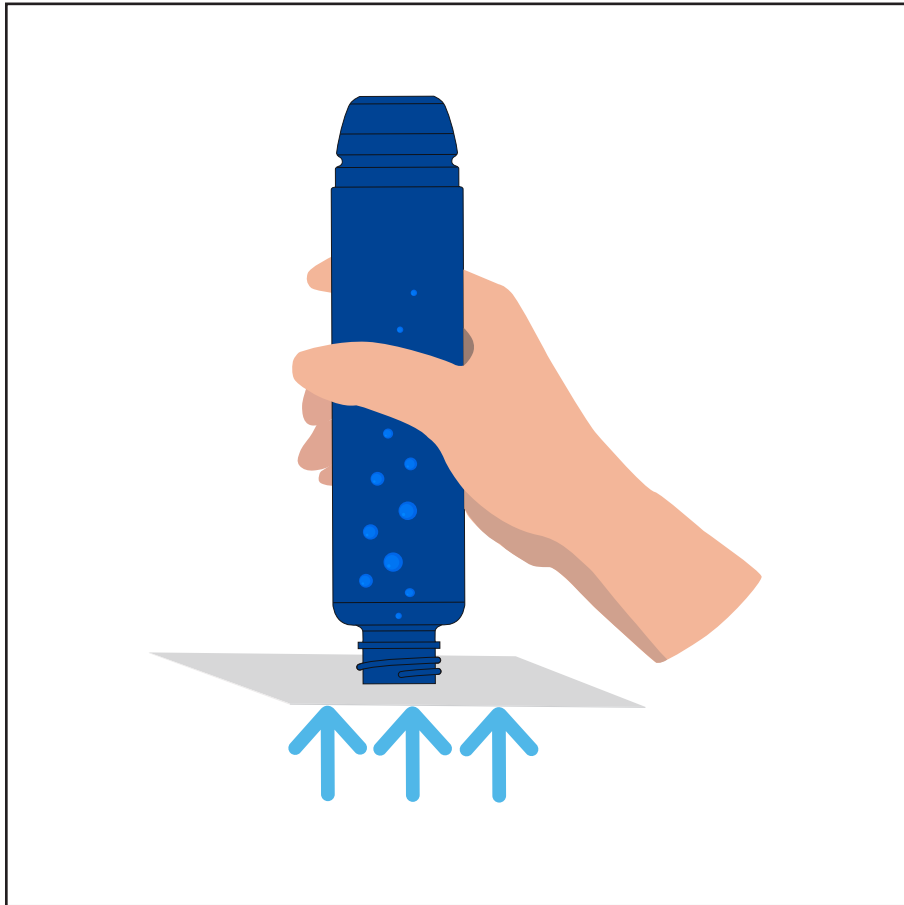
Air Molecules are super tiny particles that surround us.
Gravity pulls the air molecules toward the earth.
The denser the air molecules, the heavier they are.
The weight of the air molecules around us is called - AIR PRESSURE.



B. Learn more about Air Pressure

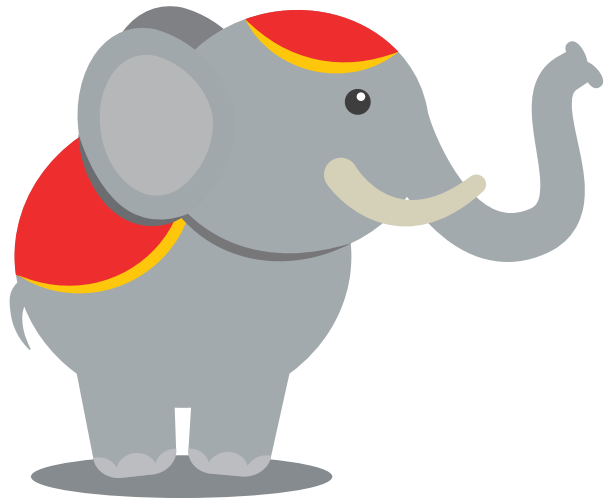
The weight of air pressure above a given area of the Earth's surface is called Atmospheric Pressure. It can be measured by an instrument called Barometer.

How can we test the existence of Air Pressure from home? Let's do a simple experiment by using the bottle provided for the Turbo Racer.



How does it work?

It is magical, isn't it? The reason why the water doesn't pour out is Air Pressure. When we fill the bottle up with water, all air inside has been squeezed out. The space inside the bottle becomes a vacuum. Air Pressure pushes the card towards the bottle's mouth and thus keeps the water from pouring out.



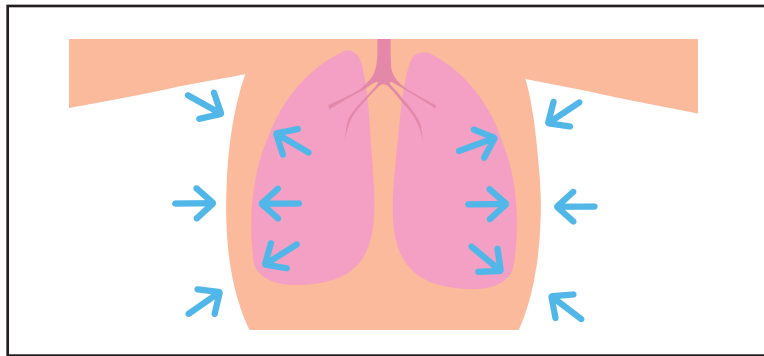
C. How Air Pressure relates to us.

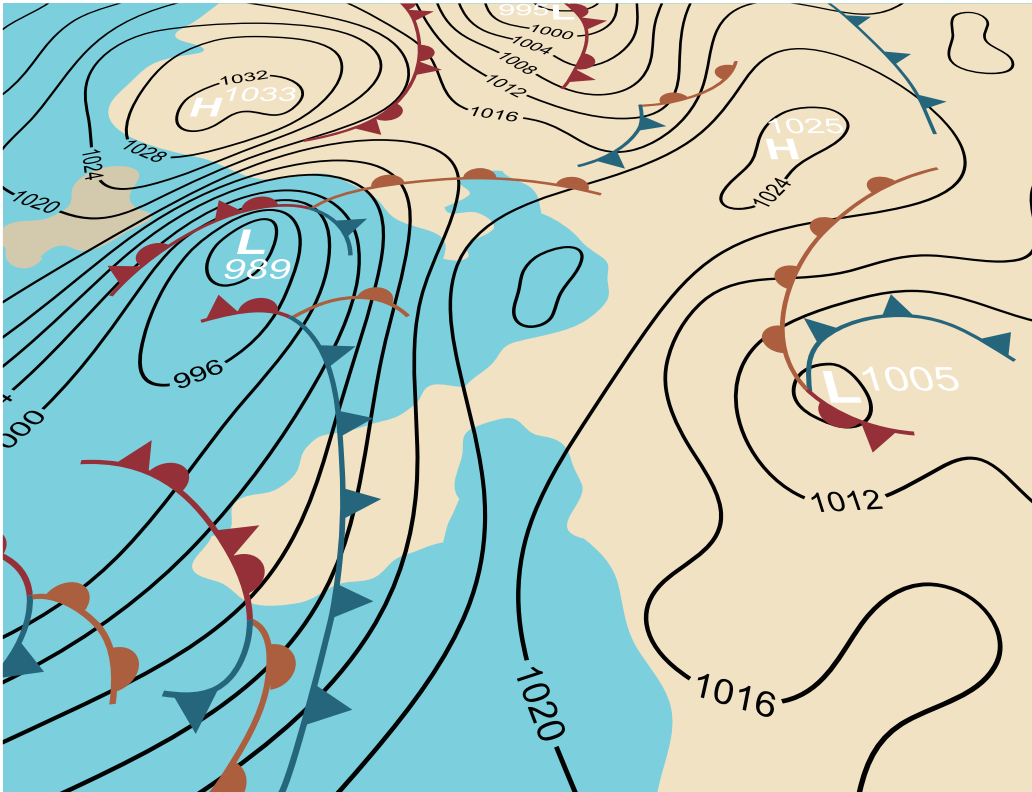
Did you know that Air Pressure all around us is very high?
For every square meter, the weight of air pressure can reach around 1 ton. It is just like an elephant sitting on your head.
You may ask another question:



Why Doesn't Air Pressure crush our bodies?

Indeed, there is Air Pressure inside of our bodies and it acts as a counterpart to balance the Air Pressure outside. We breathe fresh air into our lungs, filling them with air and maintaining a balanced level of Air Pressure. So, it keeps us alive on Earth.





D. What can Air Pressure be used for?

Air Pressure can be utilized as energy to trigger our Atmospheric Turbo Racer and help us breathe. Apart from this, Air Pressure can also be used to predict short-term weather changes. Have you ever seen this weather diagram before?

Changes between High and Low Air Pressure will cause short-term weather changes, for example, wind, rain or even tornados!

