

# SCIENCE PROGRAM AT SCHOOL “FROM MOLECULES TO THE FLIGHT”

CEIP “NUESTRA SEÑORA DE LOS ÁNGELES” EL ESPARRAGAL (MURCIA) FROM  
MOLECULES TO THE FLIGHT

THE EXPERIMENTS WERE CARRIED OUT IN FIRST, THIRD AND SIXTH YEARS

TEACHER: Serafina Fernández Sarabia

# FIRST SESSION

- ▶ There are three states of matter: Solid, liquid and gas.
- ▶ We are going to study gases.
- ▶ Air occupies a space, has weight and it contains water vapor.



# FIRST YEAR









# THIRD YEAR





# SIXTH YEAR





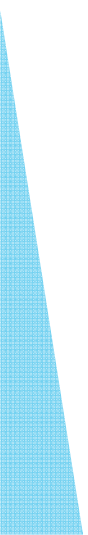


## SECOND SESSION

- ▶ Gases are made up of molecules that are in continuous movement.
- ▶ Air is made up of different gases.
- ▶ Aerostatic is the science that studies gases in equilibrium.
- ▶ There are things that can fly such as helicopters, planes, balloons etc.
- ▶ There are things that cannot fly.
- ▶ There are objects lighter than the air can fly influenced by different forces.



FIRST YEAR













THIRD YEAR







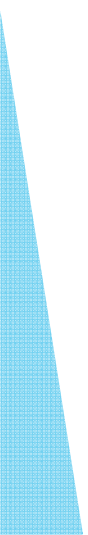








SIXTH YEAR



















# THIRD SESSION

- ▶ What happens with the objects that are heavier than the air?
- ▶ Aerodynamic is the study of the motion of air particularly as interaction with a solid object (paper, helicopter, parachute).
- ▶ The first force that appears in air in motion is friction.
- ▶ A reaction of this force is the opposite force: Lift force.



FIRST YEAR















# THIRD YEAR





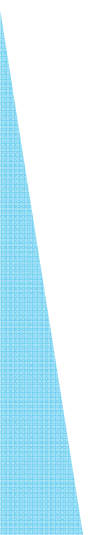








SIXTH YEAR







# FOURTH SESSION

- ▶ Bernoulli's principle: An increase in the velocity of any fluid is always accompanied by a decrease in pressure.





# SIXTH YEAR









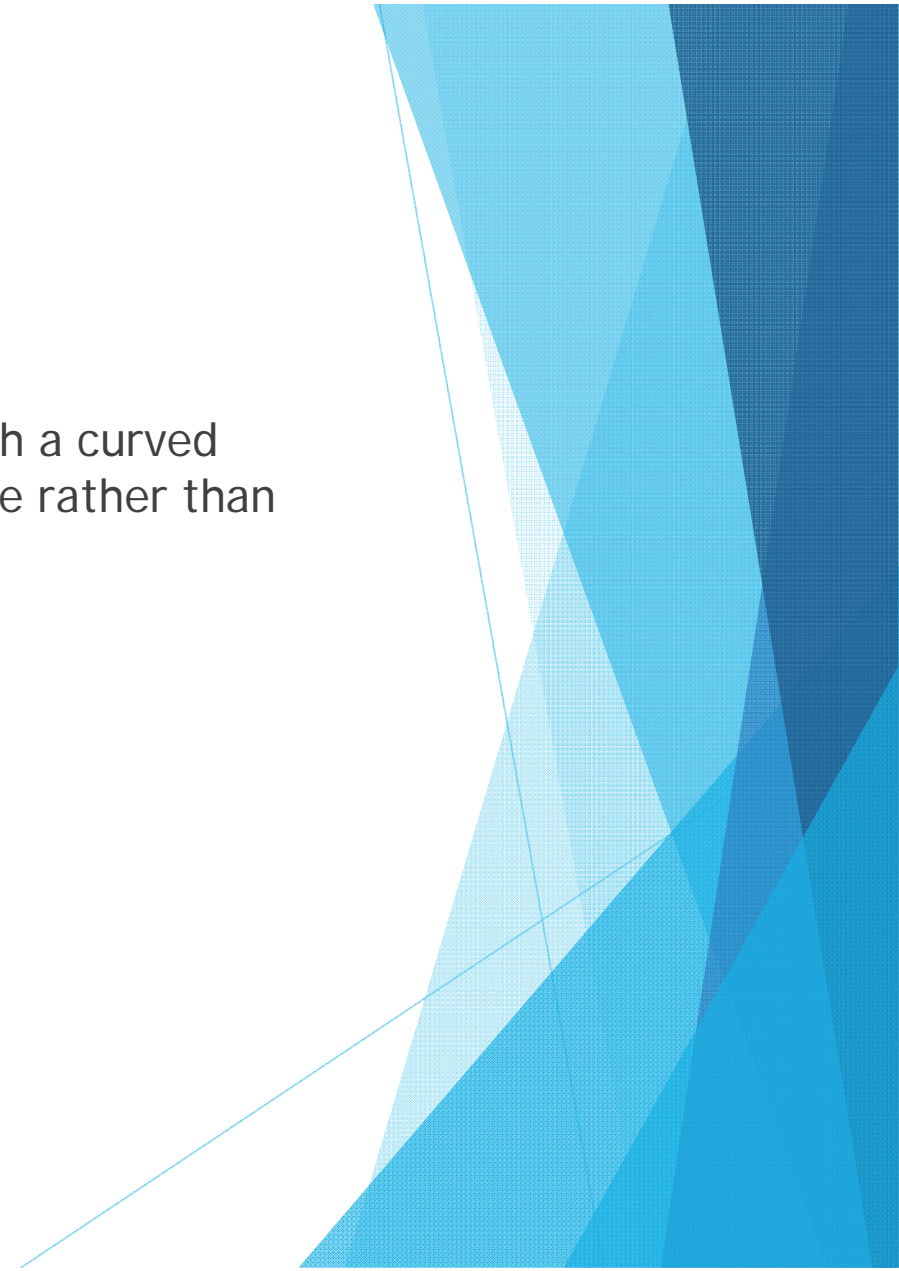






# FIFTH SESSION

- ▶ Coanda Effect: A moving stream of fluid in contact with a curved Surface will tend to follow the curvature of the Surface rather than continue traveling in a straight line.



SIXTH YEAR





