



## Set (Science) of nature, for 4 groups

EQ055C

### Function

Intended for experimental study, natural science laboratory and carrying out natural science experiment: height, taste, touch, smell, shape, vertical position, flat surfaces, free surface of water, importance of water, physical states of water, solids, liquids and gases, melting, evaporation, boiling, condensation, solidification, air, oxygen, carbon dioxide, air expansion, compressibility and elasticity, general and specific properties of matter, animals, seeds, germination, roots, stem, photosynthesis, phototropism, chlorophyll, flower, vegetables, monocotyledons and dicotyledons, irrigation, sand, soil, mineral salts, erosion, food decomposition, mold, fungus, bacteria, health, cigarette harm, vision, lens wear, genetics, color blindness, selection natural, mixtures, chemical reaction, movement, trajectory, inertia, heat, temperature, thermoscope, thermal sensation, heat propagation, light, Newton disk, sound, mechanical waves, Doppler effect, stringed instrument, phases of the Moon, force, pressure, mechanical deformations, plastic and elastic, simple machine, pulleys, dynamometer, spring, Hookes law, Pascals principle, communicating vessels, simple pendulum, optics, reflection, refraction, plane and spherical mirror, diopters, electrification, conductors and insulators electrical, simple circuit, series and parallel connection, resistors, color code, compass, magnetic field, magnet, electromagnet, etc.

### Knowledge areas

Math & Science Fundamentals

## Key Experiments

The touch of each of us

Who has the best sense of touch?

Water is necessary for the germination of seeds

The function of the plant roots

The photosynthesis, green plants need light (light energy) - ECOLOGY

Proving the existence of air

The phases of the Moon

The operation and use of the compass

The horizontal surface of still water

Noting the compressibility and the elasticity of air

Separating objects with the use of a magnet

Identifying some seeds - PLANTS

Chlorophyll, the substance found in most green plants

What are the structures of flowers like?

What are the conditions offered by the egg so that the bird develops?

What is yeast like?

The stem conducts the sap to all parts of the plant

Vision defects, correction of hyperopia and myopia with lenses

Comparing the development of the seed with the type of irrigation

The influence of light on sprouting and development of seeds

How does the environment determine natural selection?

Analysis of different amounts of the auxin plant hormone

What are the differences between monocots and dicots?

How do animals sustain themselves and how do they move around?

Where are the bacteria?

Am I color-blind?

What is the probability? E rule and OU rule in genetics.

Condensation, the change from gaseous to liquid state

States of matter - the condensation of the vapors we exhale

The air contained in a vessel

Heated air expands and cold air contracts

The soil contains mineral salts

Some characteristics of the air we breathe in and out, oxygen and carbon dioxide

The general properties of matter

Producing oxygen by a chemical reaction

The decantation and filtration, two steps for the purification of water

Some transformations of energy: the candle produces light and heat when burning

Identifying sugar components

Inertia, one of the general properties of matter - Newton's first law

Force, mechanical deformation, plastic deformation and elastic deformation

The experiment of the Magdeburg hemispheres and atmospheric pressure

Inflating a balloon, reducing the external pressure

The leveling of liquid surfaces in open communicating vessels

The thermoscope and thermometric scales

The physical states of water

The principles of geometrical optics

The composition of colors in a Newton Disk

Sound, a longitudinal mechanical wave

The Doppler effect, with tuning fork

The mapping of the magnetic field of a magnet, magnetism

Electrification by friction, the principle of conservation of charge, law of charges

Electrical conductors and electrical insulators

The links in series, in opposition and in parallel between cells

Color code in the characterization of a resistor (electrical resistance)

Permanent magnets, temporary magnets and the electromagnet

How do you perform the separation of heterogeneous mixtures by simple filtration? Part I of V

How to separate heterogeneous mixtures through magnetic separation. Part II of V

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