

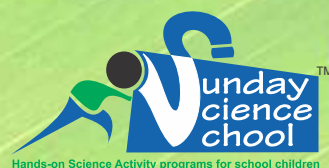


Realize

## Standard 3

During this year, children learn about themselves, their digestive system, respiration and circulation. We have given them 2 activities in this arena.

Children are also given activities to understand air and gases, Moon and its phases, making of Solar system etc. There are many topics, which are difficult to study through experiments in classroom. Animals, birds and plants can be studied using our "innovative" electric "match-it-right" board. They can make many "match-the-pair" exercises using this novel tool, and that too created by themselves. We have also given an activity to identify and classify things around them.



Hands-on Science Activity programs for school children

## Hands-On Science Activities

### 301. Air



- 1 Balloon rocket
  - 2 Understand atmospheric pressure
  - 3 Separating 2 Guericke's hemispheres
  - 4 Lifting weight using hemisphere
- Understanding properties of air, air pressure, atmosphere. Simple experiment to demonstrate atmospheric pressure.

### 302. Air composition



- 1 Importance of Oxygen & CO<sub>2</sub>
  - 2 Making of CO<sub>2</sub>
- Understanding composition of air, important gases for living things.



## Standard 3



### 303. Things around us



- 1 Recognize objects given in the kit
- 2 Source of the objects
- 3 Are the objects naturally occurring or man-made?

Developing observational skill to know about objects around children, natural and man-made objects, materials for making useful objects etc.

### 304. Respiration



- 1 Measure capacity of your Lungs
- 2 Preparing lime water
- 3 Lime water experiment

Understand Respiration, Gas exchange, Function of lungs, What we inhale and exhale?

### 305. Digestive system



- 1 Understand digestive system
- 2 Colouring the Digestive system using crayon or water colours
- 3 Identify all organs once they are coloured

When we eat food, what happens next? Understand the functions of food pipe, stomach, intestine.

### 306. Sound



- 1 See the sound waves
- 2 Make a string phone
- 3 Sound of whistle
- 4 Our throat vibrates

Understanding the science of sound, propagation of sound. How sound is produced? How do we produce sound?



## Standard 3



### 307. Wind vane



- 1 Make a wind vane
- 2 Observation and recording of weather parameters.

How wind is produced?  
Understanding weather parameters, how are they recorded?  
Keeping record of selected parameters.

### 308. Plants



- 1 Identify seeds
- 2 Grow seeds
- 3 Complete the observation chart

Understanding life cycle of plants, functions of various parts of tree.  
Observational activity.

### 309. Insects



- 1 Make a paper butterfly
- 2 Make a climbing butterfly

Insects around us, their life cycle.  
Benefits from silkworm.

### 310. Birds - Match birds with their parts



- 1 Making a **Match it right** board
- 2 Prepare matching exercise from syllabus
- 3 Play using boards of all students one by one

Discussion on animals, birds, plants and their parts. Design of this game and assignment to students to create more exercises.



## Standard 3



### 311. Measurement



- 1 Measure length using tools

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- 2 Activities with spring balance

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- 3 Measuring volume using small cup

Understand the units of length and weight with simple activities. Hands-on experience with instruments. Volume and weight.

### 312. Moon



- 1 Sun and Moon

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- 2 Phases of moon model

Understanding concept of day and night. Why we can see moon? Phases of moon.

### 313. Solar system



- 1 Know your planets

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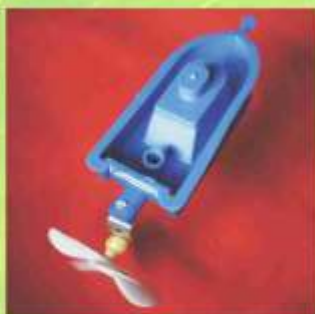
- 2 Sizes and distances of planets

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- 3 Make a hanging solar system

Introduction to Sun and planets in our solar system. Difference between stars and planets.

### 314. Force



- 1 Assembly of Fan

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- 2 Rubber Powered boat

Understand various forces  
Application of forces