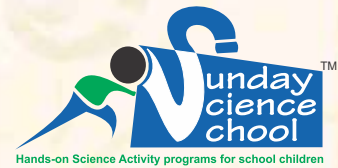




Observe

## Standard 1

At the entry level of formal schooling, we intend to give children an opportunity to develop their observational skills and effective coordination. At the age when children are busy developing language skills, motor skills and numeric skills, the science activities will enhance their understanding and skill development together with lot of excitement. Mirrors, magnets, illusions, observation of colours in the tops will be useful to develop their thinking. Activities on shadows will be helpful to understand how things happen. Dancing doll is extremely useful to know about our postures and understanding verbal and visual instructions.



### Hands-On Science Activities

#### 101. Fun with Magnets



- 1 Straw and magnets
- 2 Making a magnetic top
- 3 Moving snake

Magnets  
Use of magnets  
Fun of attraction  
Understand force  
Repulsion  
Motor skills

#### 102. Magnifying Glass



- 1 Reading small letters
- 2 Observing nature / leaves flowers / seeds etc.
- 3 Image on wall

Magnification  
Observation  
Images  
Nature around us



## Standard 1



### 103. Illusion Tops



- 1 Making different illusion tops
- 2 Spinning tops to see illusions
- 3 Colours through black-white tops

Rotating top at desired speed  
Getting colours through black and white tops  
Understanding persistence,  
Fine motor skills development,  
Keen observation

### 104. Hide & Seek(Alphabets through Science magic)



- 1 Magic film study
- 2 Identifying alphabets / objects and relating them.
- 3 Holding 2 films together to see vertical lines

Study of objects  
Study of Alphabets  
Images through grey paper  
Study of film with lines

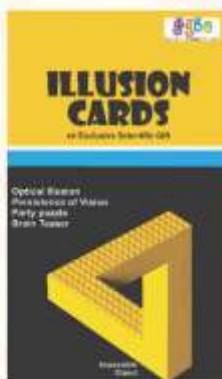
### 105. Persistence of Vision



- 1 Parrot - cage activity
- 2 Hunter - deer activity
- 3 Preparing a drawing
- 4 Horse / Jockey puzzle

Persistence  
Eye - hand coordination,  
Puzzle and thinking.

### 106. Illusions



- 1 Identical twin illusion
- 2 Geometrical illusions
- 3 Mental oscillations & illusions
- 4 Impossible objects

Image formation  
Illusion due to shapes  
Mental oscillation  
Impossible objects  
Imaginary paintings





## Standard 1



### 107. Fun with Mirrors



- 1 Observation of images
- 2 lateral Inversion of letters
- 3 Fun using 2 mirrors
- 4 Complete the cake and flower

Images in mirrors  
Lateral Inversion  
Multiple images  
Making multiple images to complete a cake and flower

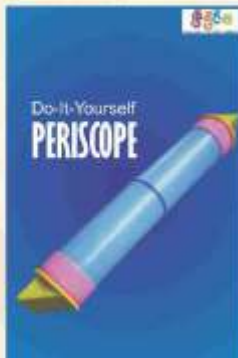
### 108. Sinking and Floating



- 1 Paper clips activity
- 2 Floating thermofoam and pins
- 3 Sinking by adding weight

What is floating?  
What is sinking?  
Heavy and light

### 109. Making a boat and Periscope



- 1 Making a balloon based boat
- 2 Making a simple plastic periscope

Boat floats  
Boat moves  
Air pushes boat  
Periscope view  
Use of periscope

### 110. Body parts & their actions through Instructions



- 1 Knowing body part names
- 2 Actions of hands
- 3 Neck movements
- 4 Dancing postures
- 5 Verbal instructions

Body parts  
Joints  
Movements  
Listening to instructions  
Visual Instructions



## Standard 1



### 111. Faces Puzzle



- 1 Complete the face \_\_\_\_\_
- 2 Create various types of faces \_\_\_\_\_
- 3 Try to make animal and even bird faces. \_\_\_\_\_

Emotions, expressions, how do we express feelings, mental and cognitive growth, Puzzle solving

### 112. Shadows



- 1 Shadow using day light \_\_\_\_\_
- 2 Length of shadow using light \_\_\_\_\_
- 3 Shadows using 2 bulbs \_\_\_\_\_

Why shadows are formed, Shape and direction of shadow, Why shadow size changes? What happens when there are 2 lights?

### 113. 7 Pieces Tangram



- 1 Human figures using 7 pieces \_\_\_\_\_
- 2 Animal figures / birds \_\_\_\_\_
- 3 Geometrical figures \_\_\_\_\_
- 4 Solving any puzzle \_\_\_\_\_

Useful for brain development, Creative and logical thinking. Boost to the imagination, Human-Animal-bird postures, Puzzle solving

### 114. Classroom card game



- 1 Identify similar coloured cards \_\_\_\_\_
- 2 Similar shapes \_\_\_\_\_
- 3 Opposite objects, pairs \_\_\_\_\_
- 4 Similar numbers \_\_\_\_\_

Useful for brain development, Useful to know about Similar, dissimilar, identical and opposite, same in number, same in colours etc.