**BIRLA VIDYA NIKETAN**
**EVS, ASSIGNMENT-3**
**CLASS V**
**BLOW HOT BLOW COLD**

**Q1. Perform the following activities and record your observations:**

| **ACTIVITIES** | **OBSERVATIONS** |
|---|---|
| 1. Keep your hand close to your mouth and blow out air with pursed lips. | Rapid cool air / Slow warm air |
| 2. Keep your hand close to your mouth and blow out air with open mouth. | Rapid cool air / Slow warm air |
| Inference:<br>**The sensation of heat or cold when blowing on your hand depends on the speed of the air flow.** | |
| Reason:<br>**When we exhale with wider mouth air comes out slowly and feels warmer but when we purse our lips air rushes out with speed from narrow opening which makes the air cooler.** | |

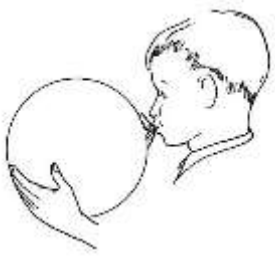
| **ACTIVITIES** | **OBSERVATIONS** |
|---|---|
| 1. Keep your hand close to the mouth and blow out air with open mouth. | **Warm air can be felt** |
| 2. Keep your hand away from mouth and blow out air with open mouth. | **No effect** |
| Inference:<br>**Warmth of the air from mouth can be felt at a short distance.** | |
| Reason:<br>**In this case, air from the mouth is warmer than the air outside and can be felt close to mouth but on increasing distance, warm air from mouth mixes with the air outside and doesn't feel so warm.** | |

| **ACTIVITIES** | **OBSERVATIONS** |
|---|---|
| 1. Take a mirror, keep it close to your mouth and blow air on it with mouth wide open. | **Fog appears on the mirror** |
| Reason:<br><br>**Warm air from mouth settles on the cool surface of mirror and cools down to form fog. This is called condensation.** | |

**Q2. What is the effect of blowing out air in the following cases?**

Cooling effect

Warming effect



Balloon gets inflated

Air produces vibrations

**Q3. Try this and record your observations:**

| ACTIVITIES | What happens to your hand? | What happens to the object? |
|---|---|---|
| 1. Touching a warm object. | Gets warmer | Gets cooler |
| 2. Touching a cold object. | Gets cooler | Gets warmer |

**Inference:**

**Heat transfers from hotter object to cooler object. (From high temperature to low temperature)**
**If we hold it for longer time, both the hand and object come to the same temperature.**

**Q4. Draw the condition when snake will rotate in these directions. Why does this happen?**

**a) Anti-clockwise**

Placing paper snake under the fan

**Property:**

**Cool air is heavy and settles down moving the snake.**

**b) Clockwise**

Placing paper snake over the flame

**Property:**

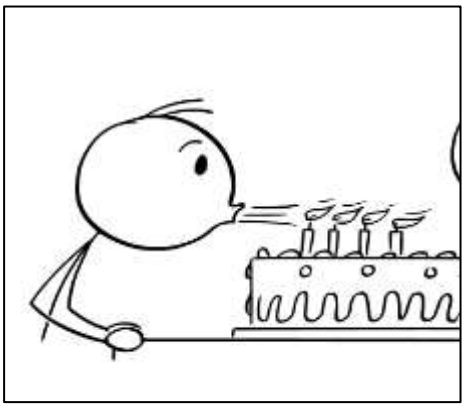
**Hot air is light and it rises up moving the snake.**

**Q5. Name and draw any two musical instruments that work on air?**

**Flute, Mouth organ, trumpet, shehnai, been**

**Q6. How does air help in the following cases?**

**Air is slowly blown into chulha to provide more oxygen from surrounding which supports burning.**



**Strong blow releases large amount of air which extinguishes the candle flame.**