

हस्त कला/hast kala/Craft activity

Saamagree:

A balloon/ek gobbara

Scissors/kanche

A jar/ek jar

A rubber band/ek rubber band

Tape

A straw/ek nali

A piece of card/ek kard

A marker (felt pen)/ek pen

Activity steps for the kidsWhat you'll need:

Banane kee vidhi:

- 1) Gubbare mein havaa bhar kar havaa nikaal den.
- 2) Kainchee se Gubbare ko kaaten. Oopar ka bhag rakhen.
- 3) kaanch kee botal ke muh par gubbara kheench kar baandhen. Gubbara rubberband kee sahayta se kas kar lagaayen.
- 4) Tape kee sahayta se ek straw gubbare par lagaayen (chitr dekhien) Straw ka ek chauthaayee hissa dhakkan par aur bacha baahar hona chahiye. Yah straw aapke Barometer yantr kee soochak suee hai.
- 5)Apkaa Barometer yantr taiyaar hai. Ab ek kagaz deewar par chipkaaiye aur barometer uske samane rakhiye. Straw kee sthiti ko kagaz par nishan lagaa kar dikhaiye. Ek nishan oopar aur ek nishan neeche bhee lagaaiye. (Chitr dekhiye)
Observation- avlokan - din mein ek baar, barometer

kee suee kee sthiti kagaz par nishan lagaa kar dikhaiye. Nishan ke saath us din ka mausam kaisa hai, yah bhee likhiye.

Jab hawaa ka dabaav badhta hai to suee oopar kee or jaatee hai. Hawaa ka dabaav kum hone se suee neeche jaatee hai.

Kyaa aap bataa sakte hain ki aisa kyon hotaa hai?

Kyaa aap mausam aur hawaa ke dabaav mein sambandh dekh paa rahe hain?

Hawaa ka dabaav kum ya jyada hone se mausam par kya prabhaav padtaa hai?

Barometer kee karya- pranaalee:

Jab hawaa ka dabaav badhta hai to bottle ke baahar kee hawaa gubbare ko neeche dabaatee hai. Isse straw ka ek siraa (jo gubbare se chikaa hua hai) neeche jaata hai aur doosra sira oopar ho jaata hai. Iske ulat, jab hawaa ka dabaav kum hota hai to bottle ke bheetar kee hawaa phailne lagtee hai aur straw ka sira (jo gubbare se chipkaa hai) oopar uth jaata hai. Straw kaa doosra sira neeche ho jaata hai.

Tape the straw onto the balloon lid; the straw should be sitting one quarter of a way on the lid, with the tape about 2 cm or 1 inch from the edge of the straw end that is sitting on the balloon lid. The straw is your indicator "needle". Trim the straw if it's too long, but leave more length off the jar as what is attached to it.



Gather the things you'll need. These consist of: Scissors, tape, a balloon, a jar, an elastic rubber band, a straw.



Blow up the balloon carefully and then let the air out of it again. (This is to stretch



it.)



Cut the **balloon** in half. Discard the piece with the neck on it.



Take the remaining piece of the balloon and stretch it across the glass or jar. and stretch it across the glass or jar.

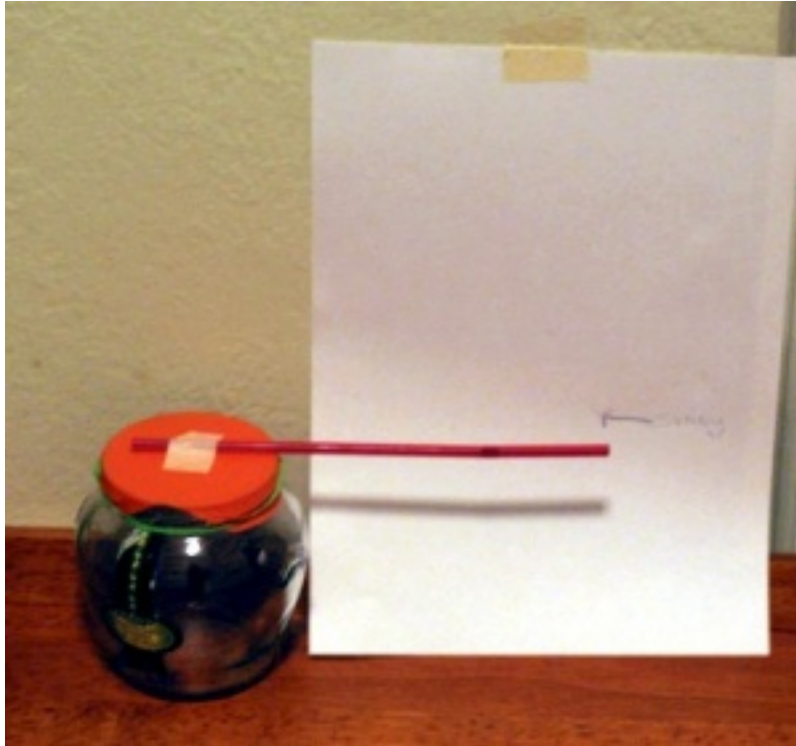
Keep it stretched firmly across and seal it down with the rubber band, around the rim of the glass jar. To make an airtight seal, avoid gaps between the balloon and the glass.



5.5

Tape the straw onto the balloon lid; the straw should be sitting one quarter of a way on the lid, with the tape about 2 cm or 1 inch from the edge of the straw end that is sitting on the balloon lid. The

straw is your indicator "needle". Trim the straw if it's too long, but leave more length off the jar as what is attached to it.



Put the finished glass jar next to a wall and tape a piece of paper or card to the wall behind it.



Mark the current position of the straw on the paper, and mark one above and below the mark, about the same length away, and label the high and low pressure. Arrange the paper so there is room above and below the straw for you to make more marks when the straw moves.

Check the straw regularly and keep marking its location on the paper for a few days.

Add notes that tell you what the weather is like (for example, "rainy," "windy," or "sunny,") next to the mark.

- Examine the paper after several days.

Check the markings and the weather statements you've put next to them. What do you notice? Can you tell if and when the weather is about to change? See the "Tips" for the answers.

This is a delicate item. Place it away from foot traffic and daily activity.

- As the straw moves up with higher air pressure, the days should be sunnier. As the straw lowers, the skies may be looking gray and you should expect cloudy or rainy weather on the way.
- Also notice that the straw moves up or down just before a weather change since a change in weather typically coincides with a change in the atmospheric pressure.
- Try to take each reading at the same **temperature**, since air expands when heated and contracts when cooled, which would also move the straw-indicator.

- Try this over a longer period of time if you're having a week of rain or a week of sunshine. Try and choose the seasons likely to bring the most changes during a short period of time in your part of the world.
- When you fitted the balloon over the glass, you captured air under a certain pressure. The balloon now indicates changes in the atmospheric pressure, that is, the pressure of the air around you. Higher air pressure pushes the balloon into the jar and makes the straw go up. Conversely, the air inside the **jar** expands against lower pressure and will bulge the balloon, moving the straw down. The straw makes it easier to see the motions of the balloon.
- Check your results against the pressure from weather reports for your area.