

**Class 5
EVS****Blow Hot, Blow Cold****A Do This**

Miya Balishtiye was confused when he saw the woodcutter blowing on his cold hands to make them warm and on the hot potatoes to cool them.

1. Have you warmed your hands in winter by blowing on them when they are cold? How does it feel?

Ans. Yes, I have warmed my hands in winter by blowing on them when they are cold. It feels quite comfortable.

2. Blow hard from your mouth onto your hands. How did you find the air from your mouth as compared to the air around? Was it hotter or cooler?

Ans. When I blow hard from my mouth onto my hands, the air from my mouth feels hotter as compared to the air around me.

3. Now put your hands at some distance from your mouth and blow again. Does the air from your mouth feel warm? Why?

Ans. When hands are put at some distance from the mouth, the air blown from the mouth does not feel very warm. This happens because the air travels some distance and gets mixed up with the air around it.

B Think and Tell

1. Can you think of any other way in which you use the warmth from your breath?

Ans. Yes, I can think of another way in which the warmth from breath is used. When someone gets redness in their eyes or some minor injury, a part of their

handkerchief is warmed by blowing air over it. The warm handkerchief is used to provide warmth to the eyes or the injured part. This gives some relief.

2. Fold a piece of cloth 3-4 times. Now bring it close to your mouth and blow hard on it. Did the cloth become warm?

Ans. Yes, the cloth became warm.

3. Balishtiye saw that the woodcutter was trying to cool the hot potatoes by blowing on them. What would have happened if he had eaten the potatoes without cooling them?

Ans. Eating the potatoes without cooling them could cause burns in the mouth.

4. Have you ever burnt your tongue when you ate or drank something that was too hot? How do you cool some food when it is too hot?

Ans. Yes, sometimes I burnt my tongue while eating hot pakodis or sipping hot tea. I usually cool the hot food by blowing over it. Sometimes, we also use a fan to cool the food.

5. If you were to cool these three hot things—dal, roti, rice—in which ways would you do so?

Ans. Dal, roti, and rice can be cooled by keeping them in a broad container under a fan and also by blowing air on them from the mouth.

6. For what other things do you blow air from your mouth?

Ans. The other things for which I blow air from my mouth are:

- i. For whistling
- ii. For playing with a firkin
- iii. When erasing the notebook with an eraser, the rubber particles are removed by blowing air on them.
- iv. For cleaning the spectacles.

C Picture

Picture 1:

Mini tried to cool her tea by blowing on it. Which do you think will be hotter Mini's tea or the air she blew from her mouth?

Ans. Mini's tea would be hotter than the air she blew from her mouth.



Picture 2:

Sonu was feeling very cold. He kept blowing on to his hands. Now think and write, which will be cooler—Sonu's hands or his breath?

Ans. Sonu's hand will be cooler as compared to the air blown by him.



D Blow in Different Ways

1. Make whistles of the things given below. Write in a sequence from the loudest to the slowest whistle.

- i. Wrapper of a toffee
- ii. A leaf
- iii. A balloon
- iv. The cap of a pen
- v. Any other thing

Ans. The sequence from the loudest to the softest whistle is as follows:

- i. The cap of a pen
- ii. By putting fingers in the mouth

- iii. By wrapping a toffee
- iv. By a balloon
- v. By a leaf

2. Have you seen people with different musical instruments like flute, dholak, been... guitar, mridang, etc.? Can you recognize their sounds with your eyes closed? Find out more about this musical instrument. Collect their picture.

Ans. Yes, I have seen and can recognize the sounds of the flute, dholak, been, guitar, mridang etc.

These instruments are discussed below:

- i. Flute: It is made up of wood, and it is played by blowing air from the mouth.
- ii. Dholak: It is made up of wood and leather, and it is played by tapping hard with both hands.
- iii. Been: It is made up of wood and played by blowing air from the mouth.
- iv. Guitar: It is made up of wood and metal strings and played by fingers.
- v. Mridang: It is made up of wood and copper, and it is played by tapping hard with both hands.



E Write

1. Can you name some things which produce melodious or pleasing sounds when we blow into them?

Ans. Musical instruments that fall under the category of wind instruments produce melodious sound when we blow air into them, e.g., the flute, shehnai, saxophone, mouth organ, clarinet, etc.

F Do This and Discuss

1. Have you seen someone blowing on their spectacles to wipe them clean? How does the air from the mouth help in cleaning the spectacles?

Ans. The air blown from the mouth is hot, and the glass of the spectacles is comparatively colder. The hot air we breathe out contains water vapours, which turn into tiny droplets of water when it come into contact with the colder glass. This makes the glass moist and hazy.

2. Take a glass. Bring it near your mouth and blow hard on it. Do this, two or three times. Does the glass look hazy?

Ans. Yes, the glass looks hazy after blowing on it two to three times.

3. Can you make a mirror hazy in the same way? Can you tell by touching the mirror what made it hazy? Is the air you blew from your mouth dry or wet?

Ans. Yes, I can make a mirror hazy in the same way. On touching the mirror, some moisture sticks to the fingers, which shows that the moisture turned the mirror hazy. It also shows that the air blowing from my mouth is wet.

4. Put your hand on your chest. When you breathe in, does your chest come out or go in?

Ans. When I breathe in, my chest comes out.

5. Measure Your Chest:

- i. Take a deep breath in.
- ii. Ask your friend to measure your chest with a thread. Measurement
- iii. Now breathe out. Again ask your friend to measure your chest. Measurement
- iv. Was there any difference in the two measurements of your chest?

Ans. The measurement of the chest when I take a deep breath in is 25cm. The measurement of the chest when I breathe out is 21cm. Yes, there is a difference in the two measurements. When we breathe in, the chest comes out and measures more. While we breathe out, the chest goes in and measures less.

G How Many Breaths in One Minute?

1. Put your finger under your nose. Can you feel any air when you breathe out from your nose?

Ans. Yes, I can feel the air when I breathe out of my nose.

2. Count how many times in one minute do you breathe in and breathe out?

Ans. I breathe in and out about 20 times in a minute.

3. Jump 30 times. Did you feel breathless?

Ans. Yes, on jumping, I feel breathless.

4. Now again count how many times in one minute you breathed in and out?

Ans. After jumping 30 times, I breathed about 30 times in a minute.

5. What was the difference in your count before and after jumping?

Ans. I breathed about six times more after jumping. The difference in the count before and after jumping shows that the breathing rate increases after jumping.

H The Clock Inside You

1. You have all heard the 'tick tick' of the clock. Have you seen a doctor using a stethoscope to listen to your chest? What do you think she hears? Where is the – sound coming from? Is there a clock inside your chest that keeps ticking away?

Ans. Yes, I have seen doctors use a stethoscope to listen to a person's chest. The doctor hears the heartbeat. The sound of the heartbeat comes from the heart. The heart is not a clock but an organ that is on the left side of the chest.

2. Do you want to listen to your heartbeat? Take a rubber tube as long as the distance from your shoulder to your elbow. At one end of the tube fix a funnel. Place the funnel on the left side of your chest. Put the other end of the tube to your ear. Listen carefully. Did you hear a dhak dhak sound?

Ans. Yes, I can hear the dhak-dhak sound.

I Snake Tells the Flow of Air

1. Stand with this snake below a fan. Look in which direction it moves. Take this paper snake to different places and observe its movement.

Ans. When the snake is kept below a fan, it moves in an anticlockwise direction. This happens because the air is moving in the downward direction.

2. Can you understand from the movement of the snake—if the air is moving upwards or downwards?

Ans. When the snake is moving in a clockwise direction, it means the air is moving upwards. When the snake is moving in an anticlockwise direction, it means the air is moving downward.

J What We Have Learnt

1. While playing Amit hit a wall. His forehead was swollen. Didi immediately folded a scarf (4-5) times, blew on it, and kept it on Amit's forehead. Why do you think Didi did this?

Ans. After hitting the wall, Amit's forehead would have swollen and become hotter. Didi folded a scarf below it and kept it on Amit's forehead because she might have learned this from her elders, but it is wrong practice. Actually, it does not cure the pain, but on blowing, the scarf becomes a little warmer and gives some relief to the pain and swelling.

2. We blow to cool hot things as well as to warm them. Give examples of each.

Ans.

Example: when we blow to cool hot things: (i) a cup of tea; (ii) any hot food, etc.

Example: when we blow to warm a cold thing. Our hands in the winter