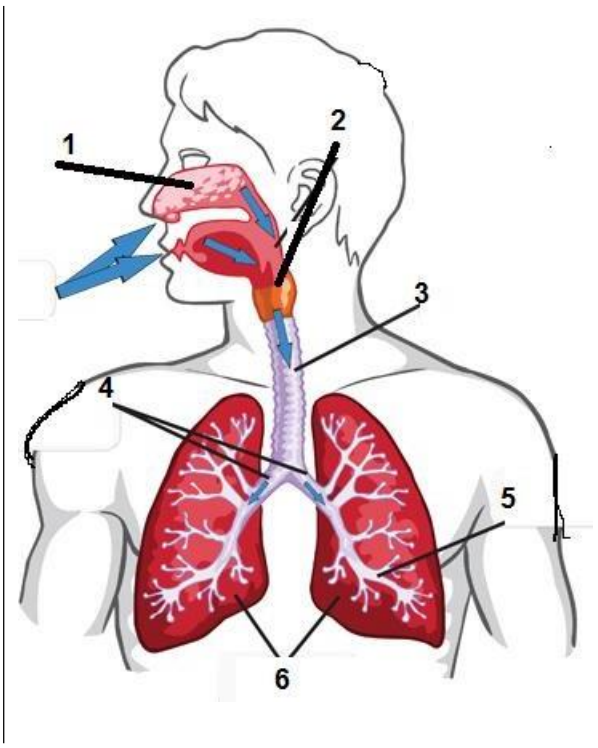
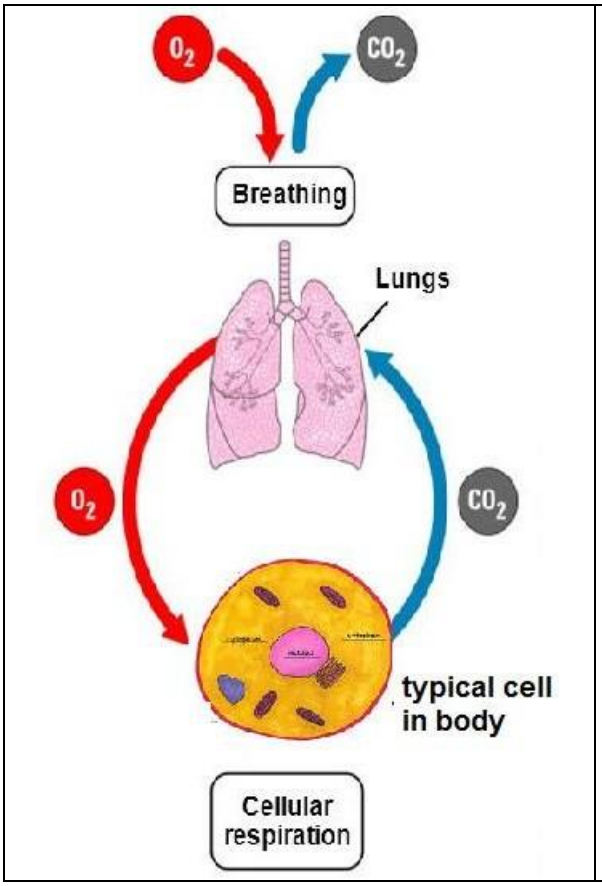
CLASS 7 ICSE BIOLOGY
RESPIRATION AND TRANSPIRATION



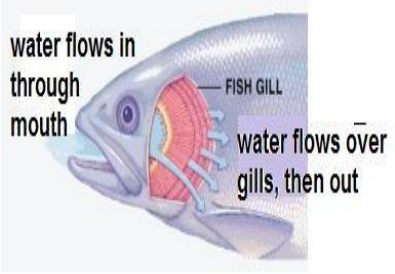
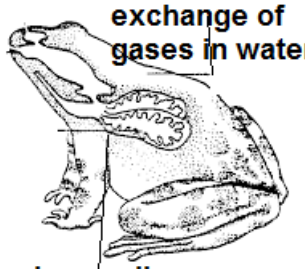
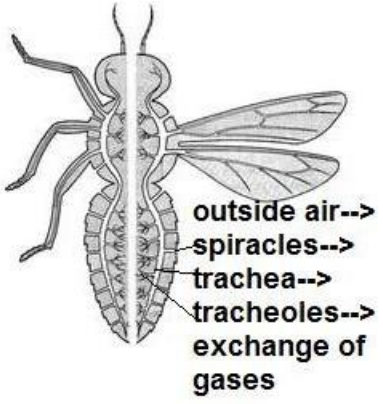
1. NOSE: Air enters through the mouth and nose which is lined with fine hair and mucus to trap dirt and bacteria
2. The EPIGLOTTIS is a flap of tissue which closes over the wind pipe when we swallow food
3. TRACHEA or wind pipe directs air into the lungs
4. The windpipe divides into two BRONCHI each of which enters into a lung
5. Bronchi branch into smaller BRONCHIOLES which end in minute bags called ALVEOLI
6. LUNGS: a pair of spongy lungs enclose the bronchioles and alveoli and oxygen is transferred to the blood and carbon dioxide is removed from the blood

IS RESPIRATION DIFFERENT FROM BREATHING?

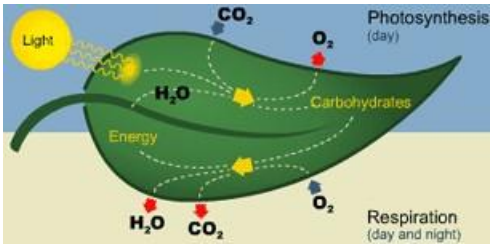


Breathing	Respiration
Takes place in the lungs	Takes place in each cell of the body
Process of gaseous exchange between lungs and environment	Process by which food is broken down to release energy
Uses oxygen from the environment	Aerobic respiration uses oxygen obtained through lungs
Removes carbon dioxide produced by oxidation of food during respiration	Glucose+ oxygen→ carbon dioxide + water+ energy
When we breathe out through a pipe into a beaker containing lime water, we find the lime water turns milky showing the presence of carbon dioxide	Anaerobic respiration does not use oxygen
	Produces carbon dioxide due to oxidation of food

RESPIRATORY ORGANS IN DIFFERENT ANIMALS

FISH: GILLS	AMPHIBIANS: LUNGS AND SKIN	INSECTS: TRACHEA
		

RESPIRATION IN PLANTS:



Plants also respire by breaking down glucose to release energy and carbon dioxide and water
Photosynthesis involves using carbon dioxide and water to synthesize glucose

TRANSPIRATION IN PLANTS: Loss of water in the form of vapour from leaf surface