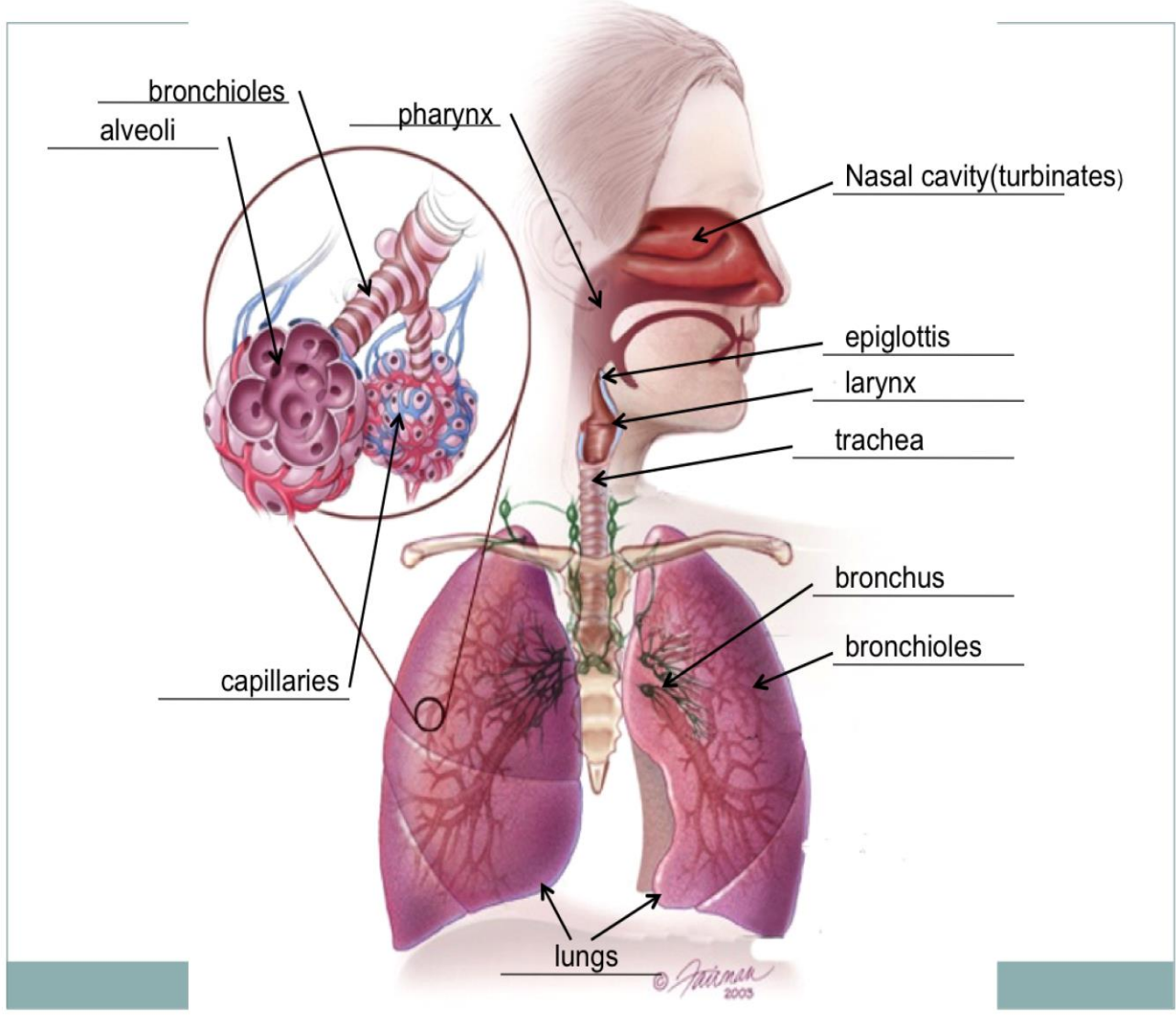


1.



2. The respiratory system is responsible for :

taking in oxygen and expelling carbon dioxide. The primary organs of the respiratory system are lungs, which carry out this exchange of gases as we breathe.

3.

## STRUCTURES OF THE RESPIRATORY SYSTEM

Structure	Function
Nasal passages	Filter air with hairs that coat lining Warm + moisten air with mucus
Pharynx (throat)	Carries air toward trachea + food toward the esophagus
Larynx	Carries Air Produces sound (voice)
Trachea	Filters + purifies air with cilia on trachea warms / moistens air wall
Bronchi	Carry air into lungs
Lungs	Ensure gas exchange between the body + the external world

1. What is the definition of a fluid?

A substance that has no definite form: is able to flow in all directions

2. Why are solids not fluids?

Because they have a definite form

3. Why is a gas considered a compressible fluid, but a liquid is considered an incompressible fluid?

The volume of a gas can be reduced by exerting a force on the fluid, pushing the particles closer together. In a liquid it is impossible to decrease the volume because the particles are already close together

4. Define the term pressure.

The measure of the amount of force exerted on a certain area. Measured in pascals

5. In a liquid, which 2 variables affect pressure?

concentration, temperature, volume

6. In a gas, what affects the pressure?

inverse → volume: temperature

volume: temperature

7. What three factors affect collision?

# of particles / concentration  
volume

8. What type of relationship does volume and pressure have in a gas?

more pressure the smaller the volume

12. List whether the following term below is compressible (C) or incompressible (I):

- a) Whip cream I
- b) Honey I
- c) Helium gas C
- d) Koolaid C

13. Use the following terms to complete sentences below:

12. Use the following terms to complete the sentences below.

particles  
liquid

fluid  
decreases

incompressible  
pressure

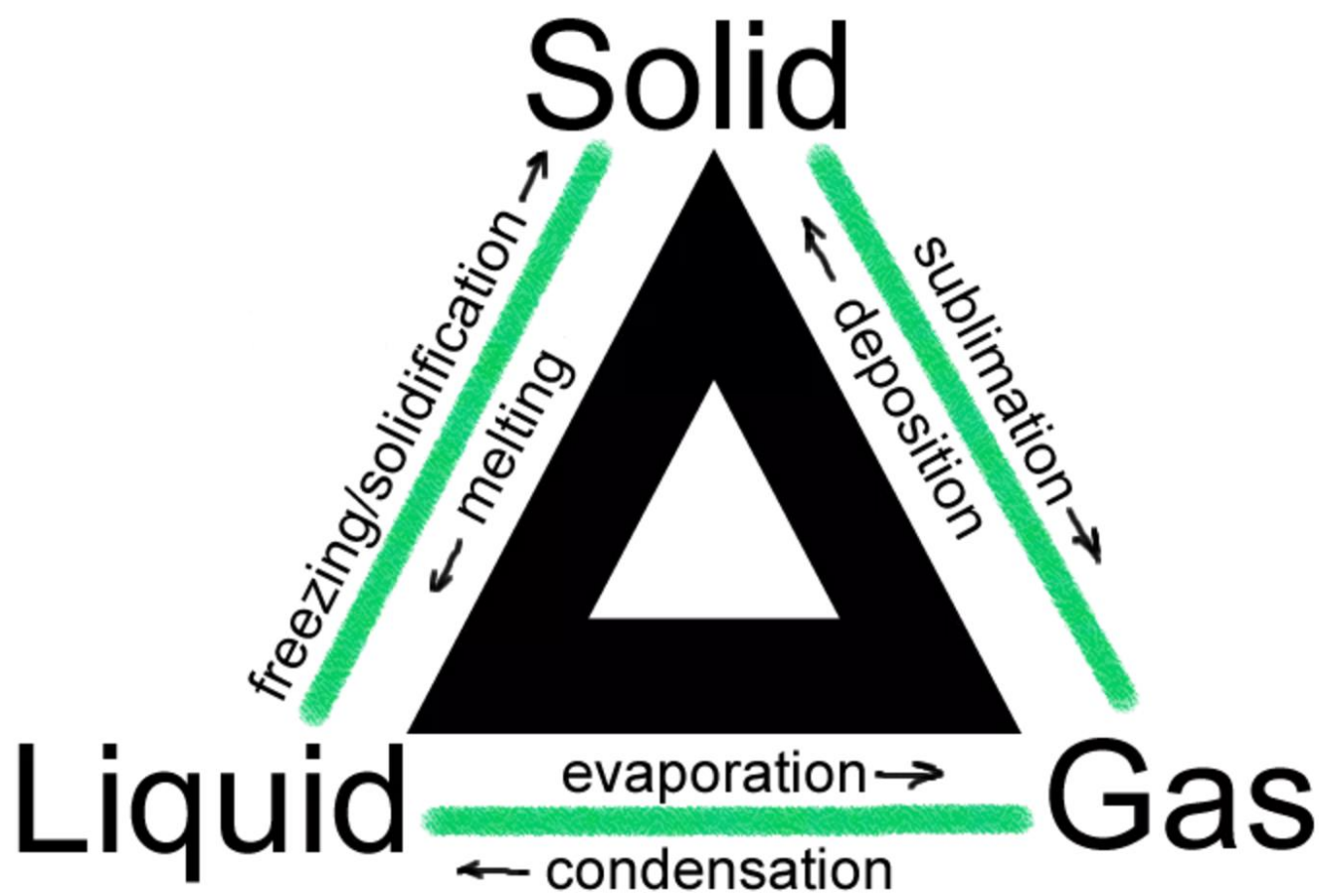
volume  
plunger

close to  
far from

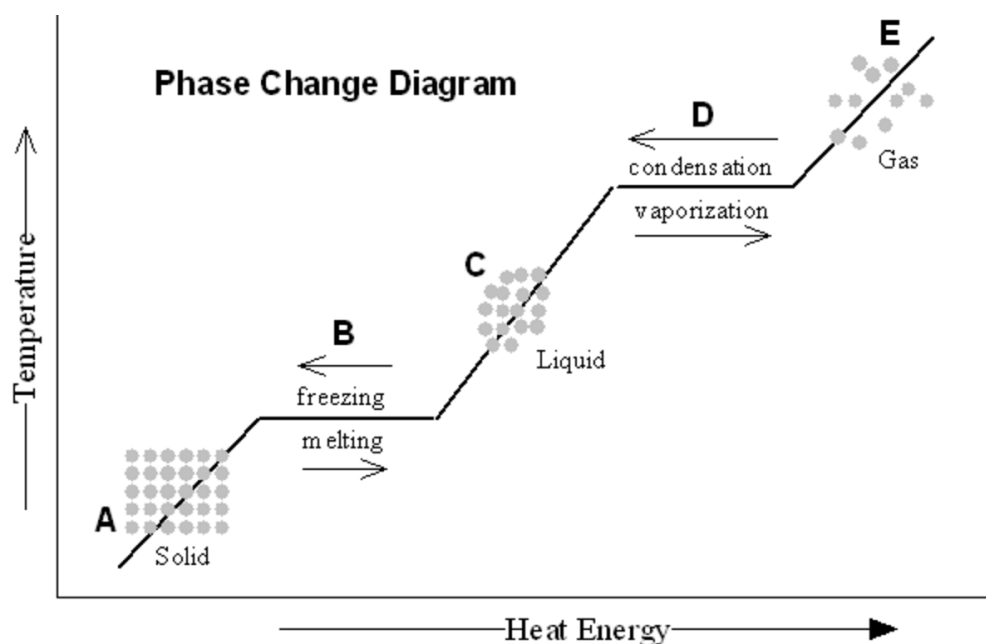
The volume of a gas decreases when the plunger of a syringe is pushed down. The particles of a gas are very far from each other. Therefore, gas is a compressible fluid. The volume of a liquid varies very little under pressure because particles are very close to each other. Therefore, liquids are incompressible fluids.

14.





15.



16.



**Solid:**  
Strong  
attraction of  
particles and  
low agitation

**Liquid:**  
Less strong  
attraction than  
solids more than  
gas (medium) of  
particles and  
medium agitation

**Gas:**  
Weak to no  
attraction of  
particles and very  
high agitation