

HWW
17/10

1. water changes liquid to gas.
2. When the solid directly becomes gas.
3. when the liquid becomes gas naturally.
4. The physical forms solid, liquid, gas, plasma.
5. all of these.
6. Frictional force.
7. all of these.
8. polished marble.
9. contact force.
10. static friction.
11. force, direction, motion.
12. muscular, frictional, gravitational force.

13 motion, force

14 against

15: gravitational force ii mechanical & aerodynamic force

iii mechanical force iv gravitational force

16 a 10 quintal = 1 metric tonne

b 1 cm = ~~0.01~~ 0.01 metre

c 1 mm = 0.001 metre

d 1 yard = 3 ft

e ~~1 dec~~ decimetre = 0.1 metre

f 1 decametre = 10 metre

g 1 hectometre = 100 metre

h 1 g = 0.001 kg

i 1 mg = 0.0001 kg

j 1 lb = 450 g

k 1 h = 3600 s

l 1 yr = 3153600 s

m 1 day = 86400 s

n 1 dec = 10 m²

o 1 hectare = 10000 m²

p 1 km² = 1000 m²

- d. $1 \text{ dm}^2 = 100 \text{ cm}^2$
- n. $1 \text{ cm}^2 = 0.0001 \text{ m}^2$
- s. $1 \text{ mm}^2 = 0.001 \text{ m}^2$
- f. $1 \text{ yard}^2 = 3 \text{ m}^2$
- y. $1 \text{ ft}^2 = 0.09 \text{ m}^2$
- v. $1 \text{ acre} = 4047 \text{ m}^2$

e. 17 The effects of friction is:

- 1. produces heat
- 2. causes wear & tear
- 3. opposes motion
- 4. slows down objects

18 The effects that opposes friction are

- ① smoothness of surface
- ② force between object & surface
- ③ smoothness of object.

19. static force is when an object isn't moving but sliding force is when a body is sliding & rolling force is when the body is rolling.

20 the disadvantages of friction are:

- ① it causes wear & tear
- ② produces heat
- ③ the force of friction slows down objects

21 the matchstick catches fire when rubbed on the surface of a box because of friction.

22: The sole of the ~~worn~~ shoe get worn after some time because it is being used for a long time so because of the friction it gets worn out.

23) 187
2) 30/18cm

- iii) $0\sqrt{2} \text{ m}$
- iv) 120 cm
- v) 200 m
- vi) 2 mm
- vii) 0.9 s

24) Applied force is the force that is applied on an object.

(i) The force applied through string, cable, chain when pulled from opposite side side

(ii) Frictional force is the force that creates friction & opposes motion.

25) ~~Solid, liquid & gas~~

	Solid	Liquid	gas
1	low inter molecular space	moderate inter molecular space	high inter molecular space
2	high inter molecular attraction	moderate inter molecular attraction	low inter molecular attraction

26 Most substances change state under pressure, high temperature eg ice to water

27a) Machines are oiled because if not they will wear out because friction.

b) An object thrown comes down after a certain point because of ~~reaching~~ a point gravity.

c) Powder is sprinkled on carrom boards to make it slippery.

28 To ~~increase & decrease~~ friction friction you can increase friction by making surface rough.

& you can decrease friction by making the surface smooth.

29 If the cartilage wears off the joints will start to move slowly.

30 The mass of a body is the quantity of matter contained in it. The SI unit of mass is kg

In C.G.S. system it's gram

In F.P.S. system it's pound

- a 2 metric tonne
- b 1.5 quintal
- c 4 kg
- d ~~50~~ 0.26 kg
- e 10 g
- f 0.0005

32 Clinical thermometer is a thermometer that is used by doctors to check the temperatures of patient's body. Its range is 35°C to 42°C . Its special feature is the constriction which does not let the mercury fall back on its own.



33) metre, second, kg

(i) Temperature

(ii) 1000 kg

(v) water

(v) clinical thermometer

(v) 37°C , 98.6°F

34) The crystals of potassium permanganate when dropped in water the water becomes purple. This observation tells us that

~~They have tiny particles~~

The potassium permanganate break further into smaller particles that occupy the space between molecules of water.