

EAST POINT SCHOOL

Chp- Tissue

Assignment – Connective tissue

Q1. What kind of tissue is found in ligaments?

Q2. What type of connective tissue are tendons and ligaments?

Q3. What foods help repair ligaments?

Q4. What is the main function of dense connective tissue?

Q5. Distinguish between white fiber and yellow fiber

Q6. Mention the component of Areolar Connective tissue

You tube link :- <https://study.com/academy/lesson/what-are-ligaments-definition-types-quiz.html>

East Point School
Is matter around us Pure?

HOTS questions
Class 9

1. How can you separate the constituents of a mixture of sand, water and kerosene?
2. Water is a compound not a mixture. Explain.
3. Crystallization is preferred over evaporation, why?
4. What are metalloids? Give examples.
5. In the separation of gases from air, first CO_2 gets separated. Give reasons.
6. Name the non-metal which is lustrous?
7. FeS is not attracted towards magnet. Why?
8. What is tincture of iodine?
9. Define aerosol, emulsion.
10. Based on separation techniques, complete the following. The first one is done for you.

Mixture	Type	Separation Technique	Principle
1. Alcohol + water	Homogeneous	Fractional distillation	Difference in boiling point
2. Sulphur + carbon disulphide	—	—	—
3. Sand + water	—	—	—
4. Pigments of flower	—	—	—

11. salt can be recovered from sea water by evaporation. Suggest any other method of separation.
12. sea water can be classified as both homogenous and heterogeneous . explain

VIDEO LINK :

[Physical and Chemical Changes | #aumsum #kids #science #education #children](#)

Revision Notes:

Human Resources:

- ❖ People who are part of the workforce are called human resource. By contributing in productivity, the human resource plays a significant role in the economy of a country. Any other resource becomes useful only because of the input by the human resource.
- ❖ Investment in human capital yields a return like investment in other resources. Investment in human capital is done through education, training and healthcare. A person with better education usually earns better than an uneducated person. Moreover, a healthy person is more productive than an unhealthy person.
- ❖ Educated parents understand the value of education and hence invest in their child's education to secure a better future for the child. Educated parents also take extra care of the health and nutrition of their child. This creates a virtuous cycle of creating a better human capital.
- ❖ Uneducated parents are unable to invest on education and healthcare of their children. This creates a vicious cycle in which the coming generation is often forced to remain poor.

Assignment

-
- 1) **What do you understand by 'people as a resource'?** (1)
 - 2) **State the meaning of human capital.** (1)
 - 3) **Define human capital formation.** (1)
 - 4) **How Population becomes human capital?** (1)
 - 5) **In what ways can a country's large population change from a liability to an asset?** (3)
 - 6) **'Investment in human capital yields a return just like in physical capital'. Explain this statement.** (5)
- Or
- How can a child with investment in terms of education and health yield higher returns in future? Explain.** (5)

Video Link

https://www.youtube.com/watch?v=uPJV_HiY0TM

<https://www.youtube.com/watch?v=N8A-ipunSP4>

<https://youtu.be/uCisz4yL9Ms>

https://youtu.be/MgJ00_maiMU

https://www.youtube.com/watch?v=P9CGuzZ8_ek

https://www.youtube.com/watch?v=_rcEI6bc38I

https://www.youtube.com/watch?v=P9CGuzZ8_ek

https://www.youtube.com/watch?v=_rcEI6bc38I

<https://www.youtube.com/watch?v=rpm7vSTFdkc>

<https://www.youtube.com/watch?v=GrcRY1GzFDI>

EAST POINT SCHOOL
ENGLISH ASSIGNMENT
CLASS IX

Q1. Read the following passage carefully and answer the questions given below.

- I. Is there a central theme in Tagore's works? There is a central theme, and that is his love for freedom and nonconformity which is evident in his works. Apart from being a literary genius, have you ever wondered what else did he love? Have you ever thought of tasting the bard's favourite dishes?
- II. Now Kolkata can boast of a cafeteria-cum-restaurant, 'Cafe The', where people can get a taste of Tagore's culinary indulgences—all under one roof. It was conceived by Ratikanta Basu, who undertook a lot of research to make it a reality.
- III. The restaurant is located on H Chi Min Sarani in south Kolkata and is the first cafe-cum-restaurant in India that is exclusively dedicated to Tagore cuisine.
- IV. Tagore would encourage the 'thakurs' (cooks) in his ancestral palace in the northern part of the city to introduce variations in the platter, by including local versions of continental and Peshawari cuisine. Thus, the cross over culture ensconced silently in the kitchens of Thakurbari was launched, much before the clamour for cross-cultural cuisine actually started.
- V. The poet's innate wander lust took him to places like Italy, Spain, England, Turkey, and he imbibed the food traditions of respective countries. Since he was exposed to both oriental and continental cuisine, a penchant to blend the two forms came naturally.
- VI. There are not many documents to support that Tagore was a die-hard food lover. But he actually was one, and whenever he attended a lunch or dinner abroad, he used to collect and bring back the menu cards.
- VII. A part of the menu card will be a facsimile of the menu laid out for the dinner party hosted by India society, London, in 1912 to felicitate Tagore on the occasion of the publication of Gitanjali, a collection of his poems. Even the decor of the cafe in south Kolkata has been designed to suit the ambience with large portraits of Tagore at various lunch and dinner parties across the world, his framed write-ups on food, of course softly played Tagore songs.

1.1. Answer the following questions:

- a. What is the underlying theme of Tagore's works?
- b. How has Ratikanta Basu paid tribute to Tagore?
- c. What do you understand by "cross-cultural cuisine"?
- d. What was the purpose of the dinner party hosted by India society?

1.2. Choose the correct alternatives:

1. What is meant by 'penchant'? (Para V)

- a) desire
- b) material
- c) process
- d) None of the above

2. What is meant by 'innate '? (Para V)

- a) noble
- b) appreciated
- c) natural
- d) real

3. Find the word opposite in meaning to 'disperse '. (Para VI)

- a) collect
- b) support
- c) lover
- d) back

4. Find the word opposite in meaning to 'covered '. (Para V)

- a) imbided
- b) blend
- c) penchant
- d) exposed

Q2. Rearrange the following words and phrases to form meaningful sentences.

(a) of nature / biodiversity / the / is / variety of life forms / interact to support / a/ and / sustain / balance / the

(b) consumed / as / group / more and more of / earth's / the / resources / are / human population / the / by / being

(c) extinction / crisis / explosive / an consumption / had led / growth and/

(d) that have / earth's history / mass extinctions / the / threaten / periodically / during / occurred / the / and / to resurface

(e) one everyday / scientists / that / estimate / rate of / species are disappearing / the / at / the

Q3. Complete the following passage by choosing the correct word from the given options.

A few days later, Munshi Prem Chand resigned from (1) _____ job of inspector of schools (2) _____ having worked in (3) _____ department for 10 years. He was one of the (4) _____ important story writers.

Options:

1. its / the / a / his
2. before / without / after / for
3. his / is / their / the
4. much / more / most / more over

Q4. Read the following conversation carefully and complete the following passage.

Ruby: Raj, how is your knee today? Is it still giving trouble?

Raj: No. It feels a lot better today. I went to a doctor and he told me it was only a pulled ligament. I should be fine for Saturday's game.

Ruby: Great. But why don't you take it easy today? Maybe just practice throwing. Don't do any running.

Raj: Okay.

Ruby asked Raj (a) and if it was still giving him trouble. Raj replied that (b) He told him that he had gone to the doctor, who (c) that it was only a pulled ligament. He (d) for Saturday's game. Ruby then suggested that he should take in easy that day and just practice throwing and not do any running.

Q5. In the passage below, one word has been omitted in each line. Write the missing word along with the word that comes before and after it against the correct blank number.

Festivals gifting go hand in hand. While 1. _____ its fun be inundated with beautiful gifts, 2. _____ giving to others equally satisfying, and more 3. _____ so when gifts are appropriate. 4. _____

Q6. The following passage has not been edited. There is one error in each line against which a blank is given. Write the incorrect word and the correction in your answer sheet against the correct blank.

My day begins on five o'clock in the morning. 1. _____
It has been so since the last forty years 2. _____
except for the two years which I was 3. _____
very ill. I wake up at the sound of an aeroplane 4. _____

East point school

Class IX-Geography

Study Notes

Chapter 4 Climate

Factors Affecting India's Climatic

Latitude

The Tropic of Cancer (23°3 CV N) divides the country into the tropical zone (South of this line) and the sub-tropical zone (North of this line). The line runs from the Rann of Kutch (West) to Mizoram (East). All the remaining area, North of Tropic, lies in sub-tropics. So, India's climate has characteristics of tropical as well as sub-tropical climates.

Altitude

Mountains- in the North of India have an average elevation of about 6000 m, whereas on the coastal areas as well as islands, maximum elevation is about 30 m.

The Indian sub-continent experiences milder winters as compared to Central Asia because of the Himalayas which prevent the cold winds from entering the sub-continent.

Pressure and Winds

The following atmospheric conditions govern the climate and associated weather conditions in India

- Pressure and surface winds
- Upper air circulation
- Western cyclonic disturbances and tropical cyclones

Pressure and Surface Winds

India lies in the region of North-Easterly surface winds. These winds originate during winter from the sub-tropical high-pressure belt of the Northern hemisphere.

These winds blow South, get deflected to the right due to the Coriolis force and move towards the equatorial-low pressure region. These winds originate and blow over land and hence, carry very little moisture. Therefore, they bring no rain or very little rain. The

unique feature of Indian pressure and wind conditions is its complete reversal. During winter, high-pressure areas develop over the areas North of Himalayas. This causes cold dry winds blow from the area towards low-pressure area over the oceans to the South.

In summer, due to high temperature, low-pressure area develops over interior Asia and over North-Western India. Air from high-pressure areas blow towards this region resulting in complete reversal of wind direction.

As these winds from high pressure area of Southern Indian ocean crosses the equator and turns right towards low pressure areas of Indian sub-continent. These winds gather large moisture while moving over the warm ocean and bring widespread rainfall over the mainland of India. These winds are known as the South-West Monsoon winds.

Upper Air Circulation and Western Cyclonic Disturbances

The upper air circulation of the region (Indian subcontinent) is dominated by a westerly flow which is governed by Jet stream. Due to their location over 27° - 30° N latitude, these jet streams are known as sub-tropical westerly jet streams. They blow South of the Himalayas, throughout the year except in summer.

Western Cyclonic Disturbances and Tropical Cyclones

The Western cyclonic disturbances are weather phenomena of the winter months brought in by the westerly flow from the Mediterranean region. They usually influence the weather of the North and North-Western regions of India. Tropical cyclones occur during the monsoon as well as in October-November and are part of the easterly flow. These disturbances affect the coastal regions of the country.

The westerly flow brings the Western cyclonic disturbances in the North and North-Western India. In summer, the sub-tropical westerly jet stream moves North of the Himalayas due to apparent shifting of the sun. An easterly jet stream, called sub-tropical easterly jet stream, blows over peninsular India approximately over 14° N during the summer months

Coriolis force An apparent force that as a result of the Earth's rotation, deflects moving objects like air currents to the right in the Northern Hemisphere and to the left in the Southern hemisphere. This is known as Ferrel's law. This law states that a wind in any direction tends to deflect towards right (West to East) in the Northern Hemisphere and to the left in the Southern Hemisphere with a force that is directly proportional to the

mass of the wind in question, its velocity, the sine of the latitude and the angular velocity of the Earth's rotation.

Jet stream These are a narrow belt of high altitude (above 12,000 m) westerly winds in the troposphere. Their speed varies from about 110 km/h in summer to about 184 km/h in winter. A number of separate jet streams have been identified. The most constant are the mid-latitude and the subtropical jet stream

Important terms

Coriolis force:-AN apparent force caused by the earth's rotation. The coriolis force is responsible for deflecting winds towards the right in the northern hemisphere & towards the left in the southern hemisphere.

Jet stream:- These are a narrow belt of high altitude (above 12000m) westerly winds in the troposphere. Their speed varies from about 110km/hr in summer to about 184km/hr in winter.

Video Link

https://www.youtube.com/watch?v=pTrJC7_nKkA&feature=youtu.be

https://www.youtube.com/watch?v=pTrJC7_nKkA&feature=youtu.be

<https://www.youtube.com/watch?v=CpkI5Y3CYoM&feature=youtu.be>

Multiple choice questions

1. Mawsynram is located in which of the hills?

- (a) Garo Hills
- (b) Jainita Hills
- (c) Khasi Hills
- (d) Shillong Hills

2. Which of the following areas is not an area of low precipitation?

- (a) Western parts of Gujarat
- (b) Leh in Jammu & Kashmir
- (c) Deccan Plateau
- (d) Assam

3. Fast flowing and narrow air currents are called

- (a) Monsoon
- (b) Cyclone
- (c) Jet Streams
- (d) Anticyclone

4. Wind generally blow from areas of

- (a) Low Pressure to High Pressure
- (b) High Pressure to Low Pressure
- (c) Low Pressure to Moderate Pressure
- (d) None of these

5. How many seasons do we have in India?

- (a) 2
- (b) 3
- (c) 4
- (d) 5

6. In which latitude of tropical areas are monsoon experienced?

- (a) 20°N and 20°E
- (b) 20°N and 20°S
- (c) 20°N and 20°W
- (d) 20°E and 20°W

7. Which one of the following is an element of weather?

- (a) Climate
- (b) Temperature
- (c) Humidity
- (d) Both (b) & (c)

8. Which imaginary line passes through the centre of our country?

- (a) Equator
- (b) Tropic of Capricorn
- (c) Tropic of Cancer
- (d) None of these

9. The state of the atmosphere over an area at any point of time is called

- (a) Temperature
- (b) Climate
- (c) Weather
- (d) Air Pressure

10. Which of the following control is not affecting the climate of India?

- (a) Altitude
- (b) Cyclones
- (c) Latitude
- (d) Pressure & Winds

Questions & Answers

1. Why the house in Rajasthan have thick walls & flat roofs. (solved)

Ans Houses of Rajasthan have thick walls & flat roofs because the thick walls do not allow the heat to get into the houses the flat roofs help to retain the little water that comes as rain in the desert.

2. How jet streams affect the climate of India.

Ans

- The westerly jet streams are responsible for bringing western cyclonic disturbances to north west India resulting in rainfall in winters.
- The easterly jet streams blowing over north India result in the creation of tropical depression. The latter play a significant role in the distribution of rainfall in the country.

Questions(unsolved)

1. What are jet streams.
2. Define coriolis force.

Activity

- Collect photographs of typical rural houses, & clothing of people from different regions of India. Examine whether they reflect any relationship with the climatic condition of the area.

- Do this activity on the chart

CLASS- 9Sub-HistoryTOPIC:-

SOCIALISM IN EUROPE AND THE RUSSIAN REVOLUTION

METHODOLOGY:- You tube link:-<https://www.youtube.com/watch?v=pYHp3xBGdNA>

:- PPT

SUB TOPIC:-The Russian Empire in 1914, Economy and Society

BLACK BOARD SUMMERY:-

❖ The Russian Empire in 1914

- 1914: *TsAR Nicholas II* ruled Russia.
- The Russian empire included current day Finland, Latvia, Lithuania, Estonia, parts of Poland, Ukraine, Belarus, Central Asian states, Georgia, Armenia, Azerbaijan and the territory outside Moscow.
- The majority religion was Russian Orthodox Christianity.
- **Economy and Society**
 - About 85% of the Russian population practiced agriculture.
 - Cultivators produced for both, market and their own needs.
 - Industries were few in number. St Petersburg and Moscow were the prominent industrial areas.
 - **1890s**: Many factories were set up when the Russian railway network was extended.
 - Foreign investment in industry increased.
 - Coal production doubled and iron and steel output quadrupled.
 - Government supervised large factories for ensuring minimum wages and limited hours of work.
 - The working hour for the craft units and small workshops was 15 hours and that of the factory was 10 to 12 hours.
 - Women made up 31% of the factory labour force by 1914, but they were paid between half and three-quarters of a man's wage.
 - Workers associations were formed for helping members in times of financial hardships or unemployment.
 - **1896-1897**: Workers strike in the textile industry.
 - **1902**: Workers strike in the metal industry.
 - The crown and the Orthodox Church owned large properties.
 - The peasants disliked the nobility.

- Nobles got their power and position through their services to the Tsar.
- **1902-05:** In Russia, peasants wanted the land of the nobles to be given to them; they refused to pay the rent and also murdered the landlords.
- Peasants in Russia pooled their land together periodically and their commune (*mir*) was divided in accordance to the needs of individual families.

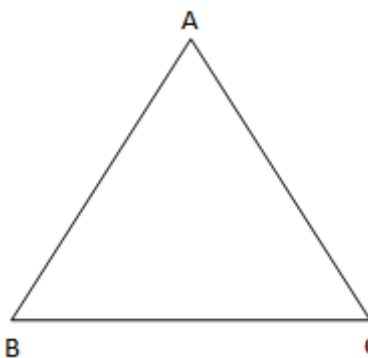
ASIGNMENT:-

1. Mention the most significant result of the February Revolution.
2. List the names of two workers associations.
3. How was the bad condition of women responsible for Russian Revolution ?
4. What was the impact of Industrialisation?

EAST POINT SCHOOL

MATHEMATICS

(1) Triangle : It is a closed figure formed by three intersecting lines. It has three sides, three angles and three vertices.

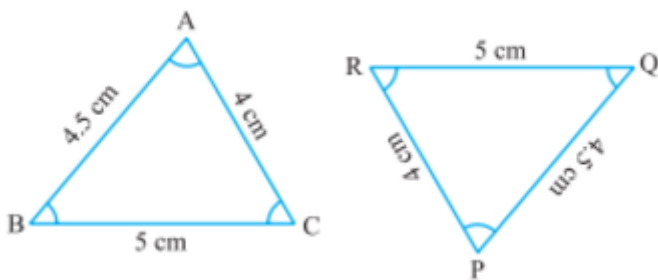


Consider a triangle ABC shown below: The triangle ABC will be denoted as ΔABC . Here, ΔABC have three sides AB, BC, CA; three angles $\angle A$, $\angle B$, $\angle C$ and three vertices A, B, C.

(2) Congruence of Triangles: The word '*congruent*' means equal in all aspects or the figures whose shapes and sizes are same.

For triangles, if the sides and angles of one triangle are equal to the corresponding sides and angles of the other triangle then they are said to be congruent triangles.

For Example: Consider two ΔABC and ΔPQR as shown below:



Here, ΔABC is congruent to ΔPQR

which is denoted as $\Delta ABC \cong \Delta PQR$.

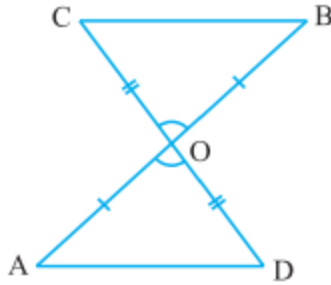
$\Delta ABC \cong \Delta PQR$ means sides $AB = PQ$, $BC = QR$, $CA = RP$; the $\angle A = \angle P$, $\angle B = \angle Q$, $\angle C = \angle R$ and vertices A corresponds to P, B corresponds to Q and C corresponds to R.

Note: CPCT is short form for Corresponding Parts of Congruent Triangles.

(3) Criteria for Congruence of Triangles:

(i) SAS Congruence Rule:

Statement: Two triangles are congruent if two sides and the included angle of one triangle are equal to the sides and the included angle of the other triangle.



For example: Prove $\triangle AOD \cong \triangle BOC$.
 $OA = OB$ and $OC = OD$

From figure, we can see that

Also, we can see that, $\angle AOD$ and $\angle BOC$ form a pair of vertically opposite angles,
 $\angle AOD = \angle BOC$

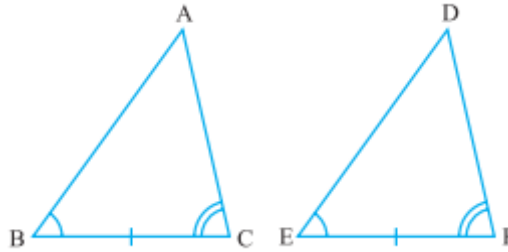
Now, since two sides and an included angle of triangle are equal, by SAS congruence rule, we can write that $\triangle AOD \cong \triangle BOC$.

(ii) ASA Congruence Rule:

Statement: Two triangles are congruent if two angles and the included side of one triangle are equal to two angles and the included side of other triangle.

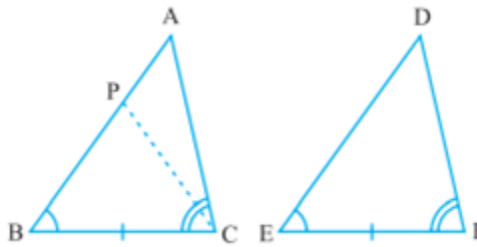
Proof: Suppose we have two triangles ABC and DEF , such that $\angle B = \angle E$, $\angle C = \angle F$, and $BC = EF$.

We need to prove that $\triangle ABC \cong \triangle DEF$.



Case 1: Suppose $AB = DE$.

From the assumption, $AB = DE$ and given that $\angle B = \angle E$, $BC = EF$, we can say that $\triangle ABC \cong \triangle DEF$ as per the SAS rule.



Case 2: Suppose $AB > DE$ or $AB < DE$.

Let us take a point P on AB such that $PB = DE$ as shown in the figure.

Let us take a

Now, from the assumption, $PB = DE$ and given that $\angle B = \angle E$, $BC = EF$, we can say that $\triangle PBC \cong \triangle DEF$.

$\cong \triangle DEF$ as per the SAS rule.

Now, since triangles are congruent, their corresponding parts will be equal. Hence, $\angle PCB = \angle DFE$

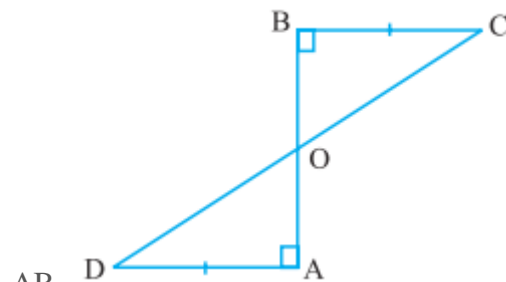
We are given that $\angle ACB = \angle DFE$, which implies that $\angle ACB = \angle PCB$

This thing is possible only if P and A are same points or $BA = ED$.

Thus, $\triangle ABC \cong \triangle DEF$ as per the SAS rule.

On similar arguments, for $AB < DE$, it can be proved that $\triangle ABC \cong \triangle DEF$.

For Example: AD and BC are equal perpendiculars to a line segment AB. Show that CD bisects



AB. From the figure, we can see that,

$\angle AOD = \angle BOC$ (Vertically opposite angles)

$\angle CBO = \angle DAO$ (Both are of 90°)

$BC = AD$ (Given)

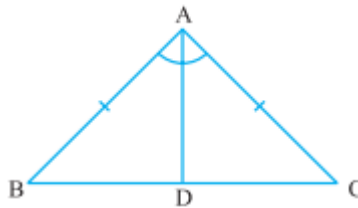
Now, as per AAS Congruence Rule, we can say that $\triangle AOD \cong \triangle BOC$.

Hence, $BO = AO$ which means CD bisects AB.

(4) Some Properties of a Triangle:

Theorem 1: Angles opposite to equal sides of an isosceles triangle are equal.

Proof: Suppose we are given isosceles triangle ABC having $AB = AC$.



We need to prove that $\angle B = \angle C$. Firstly, we will draw bisector of $\angle A$ which intersects BC at point D.

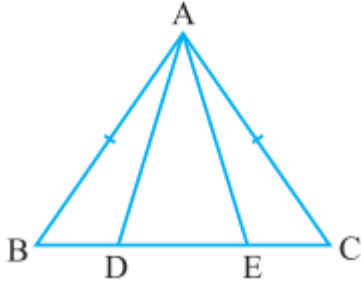
For the $\triangle BAD$ and $\triangle CAD$, given that $AB = AC$, from the figure $\angle BAD = \angle CAD$ and $AD = AD$.

Thus, by SAS rule $\triangle BAD \cong \triangle CAD$.

Therefore, $\angle ABD = \angle ACD$, since they are corresponding angles of congruent triangles.

Hence, $\angle B = \angle C$.

For Example: In $\triangle ABC$, $AB = AC$, D and E are points on BC such that $BE = CD$. Show that



$AD = AE$. From the figure, we can see that in $\triangle ABD$ and $\triangle ACE$,

$AB = AC$ and

$\angle B = \angle C$ (Angles opposite to equal sides)

Given that $BE = CD$.

Subtracting DE from both the sides, we have,

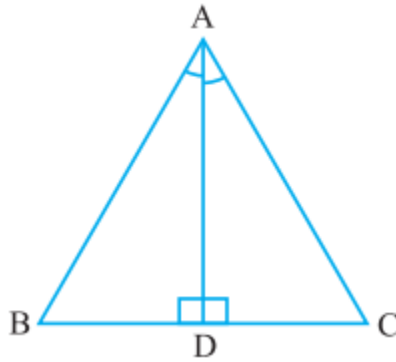
$BE - DE = CD - DE$ i.e. $BD = CE$.

Now, using SAS rule, we can say that $\triangle ABD \cong \triangle ACE$

Therefore, by CPCT, $AD = AE$.

Theorem 2: The sides opposite to equal angles of a triangle are equal.

For Example: In $\triangle ABC$, the bisector AD of $\angle A$ is perpendicular to side BC . Show that $AB =$



AC and $\triangle ABC$ is isosceles.

$\triangle ABD$ and $\triangle ACD$,

It is given that, $\angle BAD = \angle CAD$

$AD = AD$ (Common side)

$\angle ADB = \angle ADC = 90^\circ$

So, $\triangle ABD \cong \triangle ACD$ by ASA congruence rule.

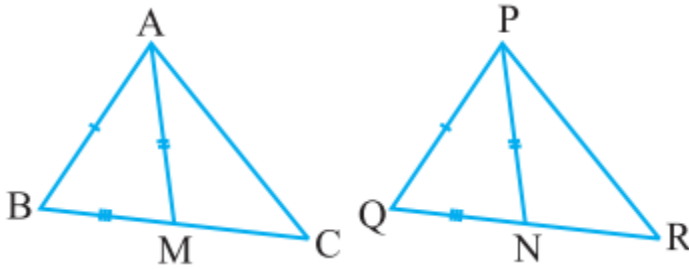
Therefore, by CPCT, $AB = AC$ (CPCT) or in other words $\triangle ABC$ is an isosceles triangle.

(5) Some More Criteria for Congruence of Triangles:

(i) SSS Congruence Rule:

Statement: If three sides of one triangle are equal to the three sides of another triangle, then the two triangles are congruent.

For Example: Two sides AB and BC and median AM of one triangle ABC are respectively equal to sides PQ and QR and median PN of $\triangle PQR$. Show that $\triangle ABM \cong \triangle PQN$.



From the figure, we can see that, AM is

the median to BC.

So, $BM = \frac{1}{2} BC$.

Similarly, PN is median to QR. So, $QN = \frac{1}{2} QR$.

Now, $BC = QR$.

So, $\frac{1}{2} BC = \frac{1}{2} QR$ i.e. $BM = QN$

Given that, $AB = PQ$, $AM = QN$ and $AM = PN$.

Therefore, $\triangle ABM \cong \triangle PQN$ by SSS Congruence Rule.

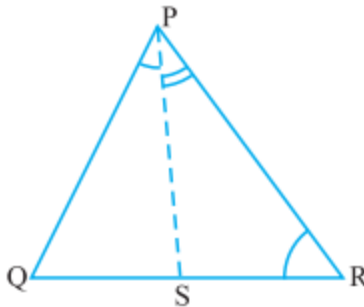
(6) Inequalities in a Triangle:

Theorem 1: If two sides of a triangle are unequal, the angle opposite to the longer side is larger (or greater).

Theorem 2: In any triangle, the side opposite to the larger (greater) angle is longer.

Theorem 3: The sum of any two sides of a triangle is greater than the third side.

For Example: For the given figure, $PR > PQ$ and PS bisects $\angle QPR$. Prove that $\angle PSR > \angle PSQ$.



Given, $PR > PQ$.

Therefore, $\angle PQR > \angle PRQ$ (As per angle opposite to larger side is larger) – (1)

Also, PS bisects $\angle QPR$, so, $\angle QPS = \angle RPS$ – (2)

Now, $\angle PSR = \angle PQR + \angle QPS$, since exterior angle of a triangle is equal to the sum of opposite interior angles. – (3)

Similarly, $\angle PSQ = \angle PRQ + \angle RPS$, since exterior angle of a triangle is equal to the sum of opposite interior angles. – (4)

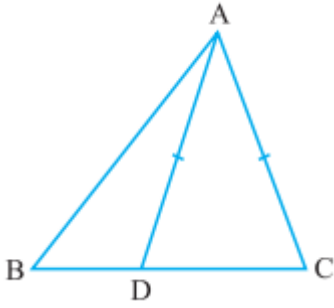
Adding (1) and (2), we get,

$$\angle PQR + \angle QPS > \angle PRQ + \angle RPS$$

Now, from 3 & 4, we get,

$$\angle PSR > \angle PSQ.$$

For Example: D is a point on side BC of $\triangle ABC$ such that $AD = AC$. Show that $AB > AD$.



Given that $AD = AC$,

Hence, $\angle ADC = \angle ACD$ as they are angles opposite to equal sides.

Now, $\angle ADC$ is an exterior angle for $\triangle ABD$. Therefore, $\angle ADC > \angle ABD$ or, $\angle ACD > \angle ABD$ or, $\angle ACB > \angle ABC$.

So, $AB > AC$ since side opposite to larger angle in $\triangle ABC$.

In other words, $AB > AD$ ($AD = AC$).

EAST POINT SCHOOL
CLASS IX SUBJECT- PHYSICS
CHAPTER- GRAVITATION (WORKSHEET)

Link-https://youtu.be/5y2JUQw_RAq

1. The mass of moon is about 0.012 times that of the earth and its diameter is about 0.25 times that of earth. The value of G on the moon will be:

- (a) Same as that on the earth
- (b) About one-fifth of that on the earth

- (c) About one-sixth of that on the earth

- (d) About one-fourth of that on the earth

Answer: (a) Same as that on the earth

2. An apple falls from a tree because of the gravitational attraction between the earth and the apple. If F_1 is the magnitude of the force exerted by the earth on the apple and F_2 is the magnitude of the force exerted by the apple on the earth, then

- (a) F_1 is very much greater than F_2

- (b) F_2 is very much greater than F_1

- (c) F_1 and F_2 are equal

- (d) F_1 is only a little greater than F_2

Answer: (c) F_1 and F_2 are equal

3. The earth and the moon are attracted to each other by gravitational force. The earth attracts the moon with a force that is:

- (a) More than that exerted by the moon

- (b) Same as that exerted by the moon

- (c) Less than that exerted by the moon

- (d) Not related to that exerted by the moon

Answer: (b) Same as that exerted by the moon

4. A stone is released from the top of a tower of height 19.6 m. Then its final velocity just before touching the ground will be:

(a) 384.16 m/ s

(b) 196 m/s

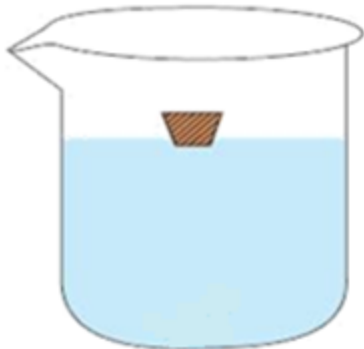
(c) 19.6 m/s

(d) 3841.4 m/s

(Take $g = 9.8 \text{ m/s}^2$)

Answer: (c) 19.6 m/s

5. When a piece of cork is put into the water it starts floating on the surface of water due to the upward buoyant force from water.



If the cork is pushed more inside the water by applying the force than the buoyant force:

(a) Will increase as the cork is immersed into the water

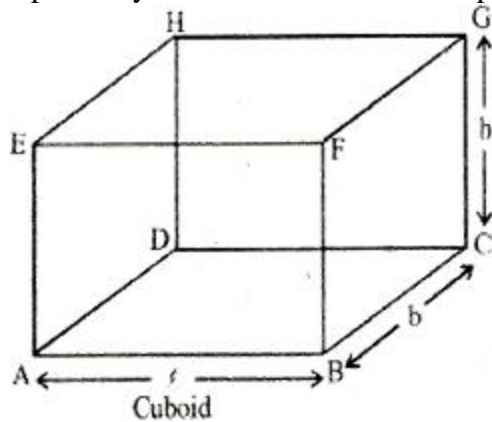
(b) Will decrease as the cork is immersed into the water

(c) Will first increase and then decrease as the cork is immersed more into the water

(d) Will remain the same as long as the cork is inside the water

Answer: (a) Will increase as the cork is immersed into the water

6. A rectangular wooden block has the length, breadth and height of 40 cm, 35 cm and 10 cm, respectively. This wooden block is kept on ground in three different ways, turn by turn.



Which of the following is the correct statement about the pressure exerted by this block on the ground?

- (a) The maximum pressure is exerted when the length and breadth form the base
- (b) The maximum pressure is exerted when the length and height form the base
- (c) The maximum pressure is exerted when the breadth and height form the base
- (d) The maximum pressure is exerted when the length and height form the base

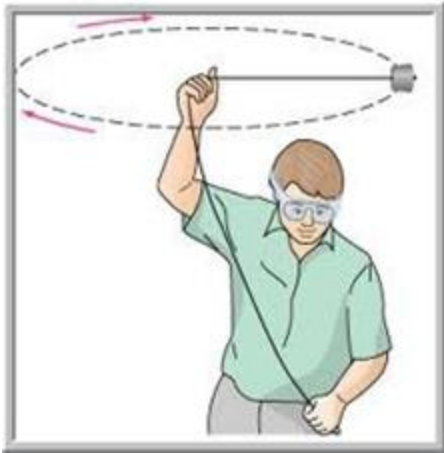
Answer: (c) The maximum pressure is exerted when the breadth and height form the base

7. Two particles are placed at some distance. If the mass of each of the two particles is doubled, keeping the distance between them unchanged, the value of gravitational force between them will be:

- (a) 1/4 times
- (b) 4 times
- (c) 1/2 times
- (d) Unchanged

Answer: (b) 4 times

8. A boy is whirling a stone tied with a string in a horizontal circular path as shown in the following figure:



If the string breaks the stone:

- (a) Will move along a straight line towards the centre of the circular path
- (b) Will move along a straight line the tangential to the circular path
- (c) Will move along a straight line perpendicular to the circular path away from the boy
- (d) Will continue to move in the circular path

Answer: (b) Will move along a straight line the tangential to the circular path

9. Following table represents the mass and volume data of the three liquids named A, B, C and D. Can you find which two liquids are identical?

Liquid	Mass (in g)	Volume (in cm ³)
A	80	100
B	100	100
C	80	80
D	100	80

- (a) A and C
- (b) B and C

(c) A and D

(d) B and D

Answer: (b) B and C

10. A ball weighing 4 kg of density 4000 kgm^{-3} is completely immersed in water of density 10^3 kgm^{-3} . What will be the buoyant force acting on it?

(a) 100 N

(b) 10 N

(c) 1600N

(d) 16 N

Answer: (b) 10 N

11. Choose the correct unit for the relative density among the following:

(a) kg/cm

(b) unitless

(c) kg/cm

(d) kg/m^3

Answer: (b) unitless

12. An object having mass equal to 350 g occupies 200 cm^3 of the space. When this object is thrown into a river what will be the condition of this object there? (Density of water = 1 g/ cm^3)

(a) It will float on the surface of water

(b) It will float fully submerged in the liquid

(c) It will sink in the liquid

(d) It will float partially submerged in the liquid

Answer: (c) It will sink in the liquid

13. An object is put in three liquids having different densities, one by one. The object floats with $1/9$, $2/11$ and $3/7$ parts of its volume outside the surface of liquids of densities d_1 , d_2 and d_3 respectively. Which of the following is the correct order of the densities of three liquids?

(a) $d_1 > d_2 > d_3$

(b) $d_2 > d_3 > d_1$

(c) $d_1 < d_2 < d_3$

(d) $d_3 > d_2 > d_1$

Answer: (c) $d_1 < d_2 < d_3$

14. The school bags are generally provided with the broad strips because:

(a) It will spread the force of the bag over the large area of the shoulder of the child producing large pressure

(b) It will spread the force of the bag over the large area of the shoulder of the child producing less pressure

(c) It has become a trend among the students to carry the bags with wide strips

(d) It will spread the force of the bag over the small area of the shoulder of the child producing less pressure

Answer: (b) It will spread the force of the bag over the large area of the shoulder of the child producing less pressure

15. Two objects of different masses falling freely near the surface of moon would:

(a) Have different accelerations

(b) Undergo a change in their inertia

(c) Have same velocities at any instant

(d) Experience forces of same magnitude

Answer: (c) Have same velocities at any instant

Assignment

Political Science

Class -IX

1. What do you understand by the term election?
2. Discuss the role of independent an Election Commission
3. Define the following terms:
 - a) by election b) constituency
4. What kind of election is called a democratic election?
5. Discuss the merits and demerits of having a Political competition.
6. "Regular electoral competition provides incentives to political parties and leaders.' Justify.
7. Explain the Model code of conduct to be followed by candidates during election campaign.
8. List the legal declaration given by the candidate before standing in election.
9. Name the leader of Lok Dal Political Party in haryana.
10. State the promise given by Devi lal to win the elections in Haryana.
11. List the choices made by the voters .
- 12 Explain the role of independent election.
13. What are the challenges to free and fair elections
- 14 How can you say that voter's turnout is increasing in the developed countries and decreasing in the developed countries?

https://youtu.be/3a4akfp_5rw

SANSKRIT

(xvi) 'राजन्' नकारान्त (पुंलिङ्ग)			
विभक्तिः	एकवचनम्	द्विवचनम्	बहुवचनम्
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तृतीया	राज्ञा	राजभ्याम्	राजभिः
चतुर्थी	राज्ञे	राजभ्याम्	राजभ्यः
पञ्चमी	राज्ञः	राजभ्याम्	राजभ्यः
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सप्तमी	राज्ञि, राजनि	राज्ञोः	राजसु
सम्बोधनम्	हे राजन् !	हे राजानौ !	हे राजानः !
(xvii) 'विद्स्' सकारान्तः (पुंलिङ्ग)			
विभक्तिः	एकवचनम्	द्विवचनम्	बहुवचनम्
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VIDEO LINK : <https://youtu.be/ojldYwoHBCw>

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3. 冒号- (:) :

冒号用于表示解释、说明、列举、总结等。冒号前面的部分称为冒号前项，后面的部分称为冒号后项。冒号后项可以是短语、句子、列表等。冒号后项如果是句子，那么冒号后项的首字母要大写。

冒号用法 :

- 用于解释、说明：例如，他是一个非常聪明的人：他从小就表现出过人的天赋。
- 用于列举：例如，会议议程包括：第一项，讨论报告；第二项，听取意见；第三项，总结发言。
- 用于总结：例如，经过一天的努力，大家终于完成了任务：这是一个值得骄傲的时刻。

4. 感叹号- (!) :

感叹号用于表示强烈的感情，如惊讶、喜悦、愤怒、悲伤等。感叹号前面的部分称为感叹号前项，后面的部分称为感叹号后项。感叹号后项可以是短语、句子、列表等。感叹号后项如果是句子，那么感叹号后项的首字母要大写。

感叹号用法 :

- 表示惊讶：例如，他考了100分！真是太厉害了！
- 表示喜悦：例如，她终于结婚了！真为她高兴！
- 表示愤怒：例如，他怎么能这样对待别人！真是让人气愤！
- 表示悲伤：例如，他离开了人世！真让人难过！

5. 分号- (;) :

分号用于分隔两个或多个并列的句子。分号前面的部分称为分号前项，后面的部分称为分号后项。分号后项如果是句子，那么分号后项的首字母要大写。分号也可以用于分隔列表中的项目。

分号用法 :

- 用于分隔并列的句子：例如，他喜欢读书；她喜欢听音乐；他喜欢运动。
- 用于分隔列表中的项目：例如，会议议程包括：第一项，讨论报告；第二项，听取意见；第三项，总结发言。
- 用于分隔列表中的项目：例如，会议议程包括：第一项，讨论报告；第二项，听取意见；第三项，总结发言。

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〇〇〇〇〇〇 () 〇〇 〇〇〇〇〇〇〇 〇〇〇〇 〇〇 〇〇 〇〇〇〇 〇〇〇〇〇〇〇 〇〇〇〇 〇〇 〇〇〇
〇〇〇〇 〇〇〇〇 〇〇〇〇〇〇〇〇〇 〇〇 〇〇〇〇〇〇〇 〇〇 〇〇〇〇〇 〇〇〇〇〇〇 〇〇〇〇 〇〇〇〇
〇〇〇

〇〇〇〇〇〇 :

- 〇〇〇〇〇〇〇 (〇〇〇〇〇〇〇〇〇 〇〇〇) " 〇〇〇〇 〇〇〇 〇〇〇〇〇 〇〇〇"
- 〇〇〇〇〇〇〇〇〇〇〇〇 (〇〇〇〇〇〇 〇〇〇 〇〇〇〇〇〇〇 〇〇〇) 〇〇〇 〇〇〇
- 〇〇〇〇〇〇〇〇 (〇〇〇〇〇〇〇〇〇〇) 〇〇〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇〇〇〇〇 〇〇〇

9. 三項省略符 - (...) :

三項省略符 (...) は、文中で繰り返すことのある語句を省略し、その代りに (...) と記すことで、文章を簡潔にするのに使われます。

例文 :

- 彼は毎日公園で散歩をする。...
- 彼は毎日公園で散歩をする。...
- 彼は毎日公園で散歩をする。...

10. 二項省略符 - ("...") :

二項省略符 ("...") は、文中で繰り返すことのある語句を省略し、その代りに "... " と記すことで、文章を簡潔にするのに使われます。

例文 :

- 彼は毎日公園で散歩をする。 - "公園で散歩をする。"
- 彼は毎日公園で散歩をする。 - "公園で散歩をする。"
- 彼は毎日公園で散歩をする。 "公園で散歩をする。"

11. 四項省略符 - () :

四項省略符 () は、文中で繰り返すことのある語句を省略し、その代りに () と記すことで、文章を簡潔にするのに使われます。

例文 :

- 彼は毎日公園で散歩をする。 - ()
- 彼は毎日公園で散歩をする。 - ()
- 彼は毎日公園で散歩をする。 - ()
- 彼は毎日公園で散歩をする。 - ()

12. 五項省略符 - (:-) :

五項省略符 (:-) は、文中で繰り返すことのある語句を省略し、その代りに (:-) と記すことで、文章を簡潔にするのに使われます。

例文 :

- $\frac{1}{x^2} = x^{-2}$
- $\frac{1}{x^3} = x^{-3}$
- $\frac{1}{x^4} = x^{-4}$

13. $x^a \cdot x^b = x^{a+b}$:-

$x^a \cdot x^b = x^{a+b}$:-

Example :

- $x^2 \cdot x^3 = x^{2+3} = x^5$
- $x^4 \cdot x^1 = x^{4+1} = x^5$
- $x^5 \cdot x^0 = x^{5+0} = x^5$
- $x^3 \cdot x^2 = x^{3+2} = x^5$

14. $\frac{x^a}{x^b} = x^{a-b}$:-

$\frac{x^a}{x^b} = x^{a-b}$:-

Example :

- $\frac{x^5}{x^2} = x^{5-2} = x^3$
- $\frac{x^3}{x^5} = x^{3-5} = x^{-2} = \frac{1}{x^2}$

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<https://www.youtube.com/watch?v=jtFPqdx-Vm8>

https://www.youtube.com/watch?v=K_Dx_p_CEQc

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1. Example :

2. 〇〇〇〇 〇〇〇〇 〇〇〇 〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇〇 〇〇 〇〇〇 〇〇〇〇〇〇〇 〇〇〇〇〇
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3. 〇〇〇〇 〇〇〇〇〇〇〇〇〇〇〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇
4. 〇〇〇〇〇 〇〇 〇〇〇〇〇〇〇 〇〇〇〇 〇〇〇 〇〇〇〇 〇〇 〇〇〇〇〇 〇〇〇〇 〇〇〇〇 〇〇〇〇 〇〇〇
5. 〇〇〇 〇〇〇 〇〇 〇〇〇〇 〇〇〇〇 〇〇 〇〇〇〇 〇〇〇〇 〇〇 〇〇 〇〇 〇〇〇〇 〇〇〇〇
6. 〇〇〇〇〇 〇〇 〇〇〇〇〇〇〇 〇〇〇〇〇 〇〇 〇〇〇 〇〇〇 〇〇 〇〇〇〇 〇〇〇 〇〇〇〇〇 〇〇〇〇 〇〇
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7. 〇〇〇〇〇〇〇〇 〇〇〇 〇〇〇〇〇〇〇 〇〇〇〇〇〇〇 〇〇 〇〇〇〇〇〇〇〇〇 〇〇〇〇 〇〇
8. 〇〇 〇〇〇 〇〇〇〇〇〇〇〇 〇〇〇 〇〇〇〇〇〇〇〇 〇〇〇〇 〇〇〇〇〇, 〇〇〇〇〇〇〇〇〇〇 〇〇〇〇〇〇〇〇〇
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9. 〇〇〇〇 〇〇〇 〇〇 〇〇〇〇〇〇〇〇 〇〇〇〇 〇〇〇〇 〇〇〇〇〇 〇〇〇〇〇〇〇 〇〇〇〇 〇〇〇〇〇〇 〇〇
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10. 〇〇〇 〇〇〇 〇〇 〇〇〇〇 〇〇〇〇〇 〇〇〇 〇〇〇 〇〇 〇〇 〇〇〇〇
11. 〇〇〇〇 〇〇〇 〇〇〇 〇〇〇〇〇〇〇〇〇〇〇 〇〇 〇〇
12. 〇〇〇〇 **125** 〇〇〇〇〇〇 〇〇〇〇〇〇 〇〇〇〇〇〇 〇〇〇 〇〇〇〇 〇〇
13. 〇〇 〇〇〇〇 **25** 〇〇〇〇〇〇 **2014** 〇〇 〇〇〇〇 〇〇〇 〇〇

14. 〇〇〇 〇〇〇 〇〇〇〇〇 〇〇 〇〇〇〇 〇 〇〇〇 〇〇
15. 〇〇〇〇 〇〇〇〇〇 〇〇〇〇〇 〇〇〇〇〇〇〇〇〇〇 〇〇〇〇 〇〇〇〇〇 〇〇 |
16. 〇〇〇〇 〇〇〇〇〇〇 〇〇 〇〇〇〇〇 〇〇〇〇 〇〇 〇〇〇 〇〇〇〇 〇〇〇
17. 〇〇〇〇〇 〇〇 〇〇 〇〇〇 〇〇〇〇〇〇〇〇 〇〇 〇〇〇 〇〇〇〇〇〇 〇〇〇〇
18. 〇〇〇 〇〇 〇〇〇〇〇〇〇〇〇 〇〇〇〇〇 〇〇〇〇 〇〇
19. 〇〇〇 〇〇〇〇 〇〇 〇〇 〇〇〇 〇〇 〇〇〇 〇〇〇
20. 〇〇〇〇〇 〇〇 〇〇 〇〇〇〇 〇〇〇 〇〇〇〇 〇〇〇 〇〇〇〇 〇〇〇