

SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA

Class – 10th (Revisional Assignment)

Date-07.01.2026

Dear students in revisional assignment is divided into two parts 1. Study material of topic\ chapter

2. Quiz related to topic So students please read carefully all the key details of chapter and at the end there is quiz related to topic 3. it is must to solve all quiz questions .Instructions to Attempt Quiz & Send Certificate Screenshot to class in charge.

- Open the Quiz Link
- Click on the quiz link shared by your teacher.
- Enter your Name, last name and email id correctly then start quiz.
- Select the correct answer and submit the quiz.
- Take a clear screenshot of the certificate and send to class in charge.
- Do all assignment work on fair notebook.

Math

Key Concepts with Hints / Explanation

1. Distance Formula

If $A(x_1, y_1)$ and $B(x_2, y_2)$ are two points, then the distance between them is:

$$AB = \sqrt{[(x_2 - x_1)^2 + (y_2 - y_1)^2]}$$

2. Section Formula (Internal Division)

If a point P divides the line joining $A(x_1, y_1)$ and $B(x_2, y_2)$ in the ratio $m : n$, then:

$$P\left(\frac{mx_2 + nx_1}{m+n}, \frac{my_2 + ny_1}{m+n}\right)$$

Example: Find the distance between $A(2, 3)$ and $B(6, 7)$.

Solution: $AB = \sqrt{[(6 - 2)^2 + (7 - 3)^2]} = \sqrt{[16 + 16]} = \sqrt{32} = 4\sqrt{2}$ units

Q1 Find the distance between the points $A(-2, 3)$ and $B(4, -3)$.

Q 2 Find the coordinates of the point dividing the line joining $A(1, 2)$ and $B(7, 8)$ internally in the ratio $2 : 1$.

Q3 Determine whether the points A(1, 2), B(2, 4), and C(3, 6) are collinear.

Q 4 Find the coordinates of the midpoint of the line joining (–6, 4) and (2, –8).

Quiz <https://www.propofs.com/quiz-school/ugc/story.php?title=ndu2mdi4naho27>

Science

Dear students please read carefully all the key details of chapter and at the end there is quiz related to topic . it is must to solve all quiz questions .

Refraction of Light & Lenses

Content Summary

Refraction of light is the bending of light when it passes from one medium to another due to change in its speed. It explains phenomena like bending of a straw in water and formation of images by lenses. Lenses work on the principle of refraction and are used in spectacles, microscopes, cameras, and telescopes. Depending on their shape, lenses are classified as convex (converging) and concave (diverging) lenses.

Key Concepts

- Refraction of light
- Refractive index
- Laws of refraction (Snell's laws)
- Refraction through glass slab
- Lateral displacement
- Types of lenses: Convex and Concave
- Image formation by lenses
- Power of a lens

Important Formulae

1. Refractive Index (μ)

$$\mu = \frac{\text{Speed of light in air}}{\text{Speed of light in medium}}$$

Or,

$$\mu = \frac{\sin i}{\sin r}$$

2. Lens Formula

$$\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$$

Where:

f = focal length
 v = image distance
 u = object distance

3. Magnification (m)

$$m = \frac{\text{Height of image}}{\text{Height of object}} = \frac{v}{u}$$

4. Power of a Lens (P)

$$P = \frac{1}{f}$$

Unit: Diopetre (D)
 f in metres

Sign Convention (Lens)

Distances measured in direction of incident light are positive

Distances measured opposite are negative

Convex lens: $f > 0$

Concave lens: $f < 0$

Applications

Convex lens: magnifying glass, camera, microscope

Concave lens: spectacles for myopia

Instructions

Students you have to follow link to start the quiz. After completion of quiz you will get the certificate of participation and grade marks .you have to save it for further assessment in future .

Quiz Link

<https://www.proprofs.com/quiz-school/ugc/story.php?title=ndu2mdi4nga2h1>

Social Science

1.Explain the role of Otto Von Bismark in the Unification of Germany.

Ans.Prussia took on the leadership of the movement for national unification. Its chief minister, Otto von Bismarck, was the architect of this process carried out with the help of the Prussian army and bureaucracy.

Three wars over seven years with Austria, Denmark and France ended in Prussian victory and completed the process of unification.

In January 1871, the Prussian king, William I, was proclaimed German Emperor in a ceremony held at Versailles.

2. “Napoleon had destroyed democracy in France, but in the administrative field he had incorporated revolutionary principles.” Justify the statement with suitable arguments.

Ans. Following were the reforms brought by Napoleon in the administrative system:

The Civil Code of 1804, usually known as the Napoleonic Code, did away with all privilege based on birth.

It established equality before law and secured the right to property.

Napoleon simplified administrative division, abolished the feudal system and freed peasants from serfdom and manorial dues.

In the towns too, guild restrictions were removed.

Transportation and communication system was improved.

3. Why in the years after 1848, did the autocrats of Central and Eastern Europe begin to introduce the changes that had already taken place in Western Europe before 1815? Explain

Ans. The autocrats of Central and Eastern Europe restored the old order but could also suppress the liberal movements in 1848 as the monarchs were beginning to understand that the cycles of revolution and repression could only be terminated by granting concessions to the liberal-nationalist revolutionaries.

Hence, in the years following 1848, the autocratic monarchies of Central and Eastern Europe started introducing the changes that had already taken place in Western Europe prior to 1815.

Thus, the bonded labour and serfdom were abolished both in Russia and the Habsburg dominations.

In 1867, the Hungarians were granted more autonomy by the Habsburg rulers.

English

1. Your school has recently built a new computer room and installed five new machines. Write a factual description of the computer, in about 100 words.

2. Write a factual description on your new Yoga Teacher, in about 100 words

3. Describe a calculator in your own words.

4. Write a descriptive paragraph about your favourite cartoon character based on the hints given below.

Name of the character - description - qualities - what you like the most about it.

5. Write a descriptive paragraph on your role model based on the clues given below.

Name of the role model - why do you admire him/her-his/her qualities that appeal to you the most - his/ her, traits,

achievements etc.

Hindi

Learning -Work

यह दंतुरित मुस्कान कविता का भावार्थ-इस कविता में कवि ने नवजात शिशु के मुस्कान के सौंदर्य के बारे में बताया है। कवि कहते हैं की शिशु की मुस्कान इतनी मनमोहक और आकर्षक होती है की किसी मृतक में भी जान डाल दे। खेलने के बाद धूल से भरा तुम्हारा शरीर देखकर ऐसा लगता है मानो कमल का फूल तालाब छोड़कर मेरी झोपड़ी में आकर खिल गए हों। तुम्हारे स्पर्श को पाकर पत्थर भी मानो पिघलकर जल हो गया हो यानी तुम्हारे जैसे शिशु की कोमल स्पर्श पाकर किसी भी पत्थर-हृदय व्यक्ति का दिल पिघल जाएगा। कवि कहते हैं की उनका मन बांस और बबूल की भांति नीरस और ठूँठ हो गया था परन्तु तुम्हारे कोमलता का स्पर्श मात्र पड़ते ही हृदय भी शेफालिका के फूलों की भांति झड़ने लगा। कवि के हृदय में वात्सल्य की धारा बह निकली और वे अपने शिशु से कहते हैं की तुमने मुझे आज से पूर्व नहीं देखा है इसलिए मुझे पहचान नहीं रहे। वे कहते हैं की तुम्हें थकान से उबारने के लिए मैं अपनी आँखे फेर लेता हूँ ताकि तुम भी मुझे एकटक देखने के श्रम से बच सको। कवि कहते हैं की क्या हुआ यदि तुम मुझे पहचान नहीं पाए। यदि आज तुम्हारी माँ न होती तो आज मैं तुम्हारी यह मुस्कान भी ना देख पाता। वे अपनी पत्नी का आभार जताते हुए की तुम्हारा मेरा क्या सम्बन्ध यह तुम इसलिए नहीं जानते क्योंकि मैं इधर उधर भटकता रहा, तुम्हारी ओर ध्यान ना दिया। तुम्हारी माँ ने ही सदा तुम्हें स्नेह-प्रेम दिया और देखभाल किया। पर जब भी हम दोनों की निगाहें मिलती हैं तब तुम्हारी यह मुस्कान मुझे आकर्षित कर लेती हैं।

Quiz Link

<https://docs.google.com/forms/d/e/1FAIpQLSezfXHWvxRShccwellfQqlKMV7T6to5JCYEQsMLbD17Ww/viewforusp=publish-editor>

Punjabi

ਪ੍ਰਸ਼ਨ : 'ਜੰਗ ਦਾ ਹਾਲ' ਰਚਨਾ ਦਾ ਸਾਰ ਲਿਖੋ ।

ਉੱਤਰ : 'ਜੰਗ ਦਾ ਹਾਲ' ਰਚਨਾ ਬੀਰ ਕਾਵਿ-ਧਾਰਾ ਦੇ ਮਹਾਨ ਕਵੀ ਸ਼ਾਹ ਮੁਹੰਮਦ ਦੀ ਰਚਨਾ ਹੈ। ਇਸ ਵਿੱਚ ਉਹ ਦੱਸਦੇ ਹਨ ਕਿ ਸਿੱਖ ਫ਼ੌਜਾਂ ਨੇ ਫੇਰੂ ਸ਼ਹਿਰ ਵਿੱਚ ਅੰਗਰੇਜ਼ਾਂ ਨਾਲ ਹੋਈ ਲੜਾਈ ਵਿੱਚ ਉਹਨਾਂ ਦਾ ਬਹੁਤ ਨੁਕਸਾਨ ਕੀਤਾ ਸੀ। ਸਿੱਖਾਂ ਨੇ ਅੰਗਰੇਜ਼ ਫ਼ੌਜੀਆਂ ਦੇ ਆਹੂ ਲਾਹ ਦਿੱਤੇ ਸਨ। ਅੰਗਰੇਜ਼ਾਂ ਦੇ ਗਵਰਨਰ ਜਨਰਲ ਲਾਰਡ ਨੇ ਇਸ 'ਤੇ ਗੁੱਸਾ ਖਾ ਕੇ ਸਿੱਖਾਂ 'ਤੇ ਵੱਡਾ ਹਮਲਾ ਕੀਤਾ, ਪਰ ਸਿੱਖ ਬਹੁਤ ਹੀ ਬਹਾਦਰੀ ਨਾਲ ਅੱਗੇ ਵਧ ਰਹੇ ਸਨ। ਲੇਖਕ ਲੜਾਈ ਸੰਬੰਧੀ ਆਖਦਾ ਹੈ ਕਿ ਜੇਕਰ ਇਸ ਸਮੇਂ ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਜ਼ਿੰਦਗੀ ਵਿੱਚ ਹੁੰਦੇ, ਤਾਂ ਉਹ ਆਪਣੇ ਬਹਾਦਰ ਸਿੱਖਾਂ ਨੂੰ ਵੱਡੇ ਇਨਾਮ ਦੇ ਕੇ ਉਹਨਾਂ ਦੀ ਬਹਾਦਰੀ ਦਾ ਮੁੱਲ ਪਾਉਂਦੇ। ਕਵੀ ਅਖੀਰ 'ਤੇ ਆਖਦਾ ਹੈ ਕਿ ਸਿੱਖ ਫ਼ੌਜਾਂ ਦੀ ਅਗਵਾਈ ਕਿਸੇ ਕਦਰਦਾਨ ਦੇ ਹੱਥ ਨਾ ਹੋਣ ਕਾਰਨ ਸਿੱਖ ਅੰਤ ਵਿੱਚ ਇਹ ਜੰਗ ਹਾਰ ਗਏ ਸਨ।

***ਪ੍ਰਸ਼ਨ 2. ਸਿੱਖਾਂ ਤੇ ਅੰਗਰੇਜ਼ਾਂ ਦੀ ਦੂਸਰੀ ਜੰਗ ਕਦੋਂ ਤੇ ਕਿੱਥੇ ਹੋਈ ਸੀ ।**

ਉੱਤਰ : ਸਿੱਖਾਂ ਅਤੇ ਅੰਗਰੇਜ਼ਾਂ ਵਿੱਚ ਦੂਸਰੀ ਜੰਗ ਫੇਰੂ ਸ਼ਹਿਰ ਨੇੜੇ 21 ਦਸੰਬਰ, 1845 ਈ. ਨੂੰ ਹੋਈ ਸੀ। ਇਹ ਸ਼ਹਿਰ ਸਤਲੁਜ ਦਰਿਆ ਤੋਂ ਪਾਰ ਮੁੱਦਕੀ ਦੇ ਕੋਲ ਜ਼ਿਲ੍ਹਾ ਫ਼ਿਰੋਜ਼ਪੁਰ ਵਿੱਚ ਹੈ। ਖ਼ਾਲਸਾ ਫ਼ੌਜਾਂ ਨੇ ਸ਼ਹਿਰ ਦੀ ਕੰਧ ਤੋਂ ਬਾਹਰ ਖੇਤਾਂ ਵਿੱਚ ਮੋਰਚਾ ਲਾਇਆ ਹੋਇਆ ਸੀ । ਇਸ ਲੜਾਈ ਵਿੱਚ ਦੋਵੇਂ ਧਿਰਾਂ ਬਹਾਦਰੀ ਨਾਲ ਲੜੀਆਂ ਸਨ ਤੇ ਅਖੀਰ ਅੰਗਰੇਜ਼ਾਂ ਦੀ ਜਿੱਤ ਹੋਈ ਸੀ ।

Quiz Link

<https://docs.google.com/forms/d/1F46JlgtV1MZBss0IMa7OwVNklWrvSQiHCpyOqzj9fg8/edit>