

SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA

Class – 10th (Revisional Assignment)

Date-06.01.2026

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 . 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

Proof: $\sqrt{2}$ is an Irrational Number

We will prove this by **contradiction method**.

Step 1: Assume the opposite

Assume that

$\sqrt{2}$ is a rational number.

So, it can be written in the form:

$$\sqrt{2} = \frac{a}{b}$$

where **a and b are integers, $b \neq 0$, and $\text{HCF}(a, b) = 1$** (i.e., the fraction is in the lowest form).

Step 2: Square both side

$$2 = \frac{a^2}{b^2}$$

Multiply both sides by b^2 :

$$a^2 = 2b^2$$

Step 3: Analyze the equation

From $a^2 = 2b^2$,

a^2 is even, so **a must be even**.

Let $a = 2k$, where k is an integer.

Step 4: Substitute the value of a

$$(2k)^2 = 2b^2 \quad 4k^2 = 2b^2 \quad b^2 = 2k^2$$

This shows that **b^2 is even**, hence **b is also even**.

Step 5: Contradiction

We found that:

a is even

b is even

This means **a and b have a common factor 2**, which contradicts our assumption that $\text{HCF}(a, b) = 1$

Conclusion

Our assumption is false.

$\sqrt{2}$ is an irrational number

HCF =product of smallest powers of common prime factors.

LCM =product of highest powers of all prime factors.

Irrational Numbers

- Numbers which cannot be expressed in the form $\frac{p}{q}$, where p, q are integers and $q \neq 0$.
- Example: $\sqrt{2}, \sqrt{3}, \pi$

Do Yourself.

1. find the HCF of 135 and 225.
2. Find the HCF and LCM of 72 and 120 using prime factorisation.
3. Show that $\sqrt{5}$ is an irrational number.

Quiz <https://www.proprofs.com/quiz-school/ugc/story.php?title=ndulodm0nwr1gq>

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 .

The Human Eye and the Colourful World – Class 10 Physics

Brief Content Summary (Expanded)

Human

Eye:

The human eye is a natural optical device that helps us to see objects by forming real, inverted images on the retina, which are interpreted by the brain.

Main Parts of the Eye:

Cornea: Transparent front part; provides most of the refraction.

Iris: Controls the size of the pupil.

Pupil: Regulates the amount of light entering the eye.

Eye Lens: Convex lens that focuses light on the retina.

Retina: Light-sensitive screen where image is formed.

Optic Nerve: Carries visual information to the brain.

Accommodation of the eye lens to change its focal length so that objects at different distances can be seen clearly.

Defects of Vision:

Myopia (Short-sightedness): Image forms in front of retina; corrected using a concave lens.

Hypermetropia (Long-sightedness): Image forms behind retina; corrected using a convex lens.

Presbyopia: Occurs due to ageing; eye loses accommodation power.

Dispersion of white light into seven colours (VIBGYOR) when it passes through a prism.

Scattering of light by small particles, it spreads in different directions.

Blue colour of sky is due to scattering of shorter wavelengths.

Sun appears red at sunrise and sunset due to scattering of blue light.

Atmospheric Refraction: Refraction of light by layers of Earth's atmosphere causing:

Twinkling of stars

Advance sunrise and delayed sunset

Tyndall Effect: Scattering of light by colloidal particles, making the path of light visible.

Important Formulas

Power of a Lens

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

(f in metres, P in dioptre)

Power–Focal Length Relation

$$P(D) = \frac{100}{f(cm)}$$

Lens Formula

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

Magnification

$$m = \frac{v}{u}$$

Symbols Used

f = focal length

u = object distance

v = image distance

P = power of lens

Instructions

It is must to solve quiz.

Students you have to follow the 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=ndu1njk5nqv2bv>

Social Science

Most Important Questions

Note: Doing & learning task

Q1. Before the printing press, books were rare and expensive, limiting knowledge to a few. After its invention, things changed rapidly. Compare European society before and after the spread of print culture. How did print change people's lives?

Hint: Consider access to books, diversity of opinions, and public debates.

2. How did print culture develop in India during colonial times, and in what ways did it influence social reform, religious debates, and the rise of nationalism in Indian society?

Hint: Introduced by missionaries, Expanded to Indian languages, Supported reform movements, women's education, caste inequalities. Increased literacy, colonial rule. Empowered marginalized groups.

3."The Vernacular Press Act of 1878 was introduced by the British to curb the influence of Indian-language newspapers. "Why was the Vernacular Press Act seen as repressive by Indians?

Hint: It allowed censorship and control over Indian-language newspapers, restricting freedom of expression and nationalist discourse.

4. Imagine you are living in the 19th century when reformers like Raja Rammohan Roy and others used print to reach the masses. In what ways did the spread of printed materials help reform Indian society?

Hint: Consider the accessibility of ideas, debates, and public opinion.

5. Martin Luther's Ninety-five Theses were quickly printed and distributed across Europe. Mention two ways in which print culture helped the spread of the Protestant Reformation.

Hint: Think about accessibility and speed of information.

6. Printing technology developed independently in Asia and Europe, leading to cultural revolutions. In Europe, Gutenberg's printing press led to the mass production of which famous book?

Hint: It was the Latin version of a sacred text.

7. Reformers in colonial India used newspapers and journals to challenge traditional practices and promote modern thinking. Satyarth Prakash was a journal that played a key role in the _____ movement.

Hint: This movement was started by Swami Dayanand Saraswati.

Quiz

<https://wayground.com/join?gc=20445542>



English

Note: Doing & learning task

1. You read a newspaper report that says the number of cases of child labour has gone up this year. Write a letter to the editor complaining the rise of child labour in your locality. Also give suggestion on how to prevent child labour and promote Right To Education policy. You are Arsh/ Arshita. (100-120 words)
2. You had recently bought a Bluetooth from Vision Electronics, Kolkata. A few days after the purchase, the Bluetooth developed some operational snag. Write a letter to the manager of the store complaining about the product and exchange it as soon as possible. You are Raj/ Rani.
3. Sleep is a much under-rated aspect of a healthy lifestyle. As a student, you too didn't prioritize sleeping. But when you read the poster, you understand the importance of a good night's sleep. Write a letter to the Counsellor of your brother's school, requesting him/ her to give a talk to the students of classes 9 to 12, on "The importance of sleep for the mental, emotional and physical health of a student". Using ideas from the given poster, from unit on Health and Medicine and your own, write the letter. (120 words)
4. Technology has come as a boon to school students helping them in learning and comprehending the concepts in an easy and effective manner. Using the ideas from the unit on Science and your own ideas, write a letter to Minister of Education on how free access to internet, computers and the interactive panel boards are helpful to school students. Also urge the ministry to extend more technological tools to reduce the burden of books.
5. You are Sunitha/Sunil, residing in 210, 2nd Floor, STAR Apartments. Write a letter to the Secretary, Resident Welfare Association of your apartment to initiate a 'cleaning drive' of the lake near your locality. Highlight the need for keeping our water bodies clean, ill-effects of garbage dumping near it and the positive effect on people when they are involved in cleaning and restoring water bodies. Using ideas from the unit on Environment and your own, write the letter in about 120 words.

Quiz link : <https://wayground.com/join?gc=33293670&source=liveDashboard>

Code: 33293670

Hindi

Learning -Work

प्रश्न -वाच्य किसे कहते हैं?

उत्तर -वाच्य का शाब्दिक अर्थ 'जो कहा जाए' या 'जो व्यक्त किया जाए' है. व्याकरण में, यह क्रिया के उस रूपांतरण को कहते हैं, जिससे यह पता चलता है कि क्रिया का मुख्य विषय (प्रधान) कर्ता है, कर्म है, या क्रिया का भाव है. यह वाक्य की संरचना और अर्थ को स्पष्ट करता है.

वाच्य के प्रकार

कर्तृवाच्य :

परिभाषा: जब क्रिया का लिंग और वचन कर्ता (Subject) के अनुसार बदलता है, तो वह कर्तृवाच्य कहलाता है. इसमें कर्ता की प्रधानता होती है.

उदाहरण: राहुल पतंग उड़ाता है। (क्रिया 'उड़ाता है' राहुल के अनुसार है).

राधिका चाय बनाती है। (क्रिया 'बनाती है' राधिका के अनुसार है).

कर्मवाच्य

परिभाषा: जब क्रिया का रूप कर्ता के अनुसार न बदलकर कर्म (Object) के लिंग और वचन के अनुसार बदलता है, तो वह कर्मवाच्य कहलाता है। इसमें कर्म की प्रधानता होती है।

उदाहरण: चिट्ठियाँ भेजी गई। (क्रिया 'भेजी गई' चिट्ठियों (कर्म) के अनुसार है)।

राम के द्वारा आम खाया जाता है। (क्रिया 'खाया जाता है' आम (कर्म) के अनुसार है)।

भाववाच्य

परिभाषा: जब वाक्य में क्रिया का प्रयोग न तो कर्ता के अनुसार हो और न ही कर्म के अनुसार, बल्कि क्रिया के भाव (अक्षमता, असमर्थता, क्रियाशीलता) के अनुसार हो, तो वह भाववाच्य कहलाता है। इसमें क्रिया हमेशा एकवचन, पुलिंग और अकर्मक होती है।

उदाहरण: उससे पढ़ा नहीं जाता। (भाव: पढ़ने की अक्षमता)।

सीता से चला नहीं जाता। (भाव: चलने की अक्षमता)।

बुढ़िया से सोया नहीं जाता। (भाव: सोने की अक्षमता)।

Punjabi

अरोड़र

1. पूँड़ी- पूँड़ीस्त, पूँड़ीबु़ल, पूँड़ीकिरिआ

2. पुनर-पुनरजनम, पुनरविआह, पुनरवास, पुनरनिरमाण, पुनर-विचार, पुनर-गठन, पुनर-मुलांकन।

3. पैम-पैम-पॅर, पैम-विआह, पैम-पुजारी, पैम-रेग, पैम-पिआला, पैमबरगती।

4. पੜ-ਪੜदਾਦਾ, ਪੜਨਾਨਾ, ਪੜਪੇਤਰਾ, ਪਰਛੱਤੀ,

5. ਬਹੁ-ਬਹੁਅਰਥਕ, ਬਹੁਗਿਣਤੀ, ਬਹੁਵਿਕਲਪ, ਬਹੁਪਰਤੀ, ਬਹੁਪੱਖੀ, ਬਹੁਮੰਤਵੀ ਬਹੁਉਪਯੋਗੀ, ਬਹੁਰੰਗੀ।

6. ਬਦ-ਬਦਕਿਸਮਤ, ਬਦਅਸੀਸ, ਬਦਸ਼ਗਾਨ, ਬਦਸੂਰਤ, ਬਦਸ਼ਕਲ, ਬਦਨਾਮ, ਬਦਕਾਰ, ਬਦਜਾਤ, ਬਦਇਖਲਾਕ, ਬਦਅਮਨ, ਬਦਰੰਗ, ਬਦਬੁ, ਬਦਨੀਅਤ, ਬਦਜ਼ਬਾਨ, ਬਦਤਮੀਜ਼।

7. ਬਾ-ਬਾਇੱਜਤ, ਬਾਅਸੂਲ, ਬਾਦਮੜੂਰ, ਬਾਕਮਾਲ, ਬਾਕਾਇਦਾ, ਬਾਰਸੂਖ।

8. ਬੇ-ਬੇਸਮਝ, ਬੇਹੋਸ਼, ਬੇਕਸੂਰ, ਬੇਗੁਨਾਹ, ਬੇਅੰਤ, ਬੇਸੱਕ, ਬੇਵਕਤ, ਬੇਚੈਨ, ਬੇਪਰਵਾਹ, ਬੇਫ਼ਿਕਰ, ਬੇਸੁਆਦਾ, ਬੇਜਾਨ, ਬੇਦਿਲ, ਬੇਰੁਖੀ, ਬੇਜੋੜ, ਬੇਝਿਜਕ, ਬੇਰੰਗ, ਬੇਧਿਆਨ, ਬੇਰੌਣਕ, ਬੇਈਮਾਨ, ਬੇਇੱਜਤ, ਬੇਬੁਨਿਆਦ, ਬੇਬਾਕ, ਬੇਅਰਾਮੀ, ਬੇਡੋਲ, ਬੇਮੁਖ, ਬੇਰੈਰਤ, ਬੇਘਰ, ਬੇਖੌਫ਼, ਬੇਮੱਸਮੀ, ਬੇਸਿ...

Link for quiz

https://docs.google.com/forms/d/1tm0c7e5oZk5w1iAowVdDEt2fljJM_0_moD3x3jaAkQE/edit