

Date\_\_22.4.2020

Class 8 Physics

solutions of previous assignment

Chapter 1 ( Matter)

Q.1. Sublimation

Q2. Condensation

Q.3. Naphtheline

Q.4. Sublimation is the process in which a solid when heated , directly changes into its vapour state, without changing to liquid.As for example , camphor , when heated ,directly changes to vapour.

Chapter 2 ( physical quantities measurements)

Q1 The relative density of a substance is defined as the ratio of the density of the substance to the density of water.

Q2. Answer is given.

Q3. The ratio of the mass of any volume of the substance to the mass of an equal volume of water.

(b). Vertically downwards.

(c). Vertically upwards.

Q4.Buoyant force is applied by the liquid on the body , immersed in it, in the upward direction . So buoyant force is called upthrust.

## 2nd assignment

### Class 8

#### Chapter 3 (Force and pressure)

Force is a cause which tends to result in movement or change in size or shape of a body. A force when applied in a stationary body can cause motion in it or if the body is in motion, can produce motion of a body or can change both the speed and direction of motion. A force does not change the mass of the body on which it is applied. We can not see a force but we can understand the effect of force.

The S.I unit of force is newton. symbol is N. One Newton is defined as the force which when applied on a moving body of mass 1kg in the direction of its motion, increases its speed by 1 m per second in one second. We know that earth attracts each body towards its centre. The force of attraction exerted on a body by earth is called the weight of the body or the force of gravity that acts on the body.

We know that if a force is applied on a stationary body, it starts moving in the direction of the applied force but if the body is not free to move but is pivoted at a point, if the force is applied at a suitable point, it begins to turn about that point. Thus a force has a turning effect on a body which is not free to move in a straight line but is pivoted at a point about which it can turn.

The turning effect of a force on a body depends on the following factors.

1. The magnitude of the force applied\_\_\_\_ Larger the magnitude of the force applied, more is the turning effect on the body.
2. The perpendicular distance of the force from the pivoted point\_\_\_\_Larger the perpendicular distance of point at which the force is applied, from the pivoted point, more is the turning effect.

**MOMENT OF FORCE**\_\_The moment of a force is equal to the product of the magnitude of the force and the perpendicular distance of the force from the pivoted point.

Unit of moment of force\_\_\_\_ The S.I unit of moment of force is newton×metre. In short form Nm.

**Pressure** \_\_ To know about pressure first we have to know about thrust. A force can be applied in any direction. If the force is applied in a direction normal to the surface, the force is called thrust. More the effect of a given thrust on a surface more pressure is given on the surface by the thrust. Similarly opposite is also true.

Pressure is defined as the thrust per unit area. It is denoted by the letter P.

The S.I unit of pressure is Newton/metre square.

The pressure on a surface depends on the following two factors.

1. On the area of the surface on which thrust acts.
2. On the magnitude of thrust acting on the surface.

HW (Assignment)

1. Define force. Write its S.I unit.
2. Write the effects of force.
3. Define one Newton force
4. What is force of gravity? What is its another name?
5. When a force can create a turning effect?
6. On which factors the turning effect of a body depends?
7. Define moment of a force.
8. What is the unit of moment of force?
9. What is thrust?
10. What is pressure? What is the difference between thrust and pressure?
11. What are the factors on which the pressure on a surface depends?

DEPENDENCE OF PRESSURE ON THE AREA OF SURFACE.

Pressure exerted by a body depends on the surface area on which the thrust of the body acts. Smaller the surface area, more is the pressure exerted by the thrust and larger the surface area, less is the pressure exerted by the same thrust.

DEPENDENCE OF THE PRESSURE ON THE THRUST.

Greater the thrust on a surface more is the pressure on it while smaller the thrust on the surface, less is the pressure on it.

Some examples in our daily life

A nail has one end pointed and sharp while the other end is blunt. On applying force, the pointed end will exert greater pressure as the area of contact is small and hence it will go deep into the

given surface. So decrease in area increases the pressure.

Heavy truck has six to eight tyres instead of the conventional four tyres. More numbers of tyres are used to increase the area of contact and thereby reduce the pressure on the ground.

Solution of CHAPTER-1 (RATIONAL NUMBERS)

❖ EX. 1.1 → 8)

∴ Given

$$a = \frac{-11}{27}$$
$$b = \frac{4}{9}$$
$$c = \frac{-5}{18}$$

L.H.S

$$a + (b + c) = \frac{-11}{27} + \left( \frac{4}{9} + \left( \frac{-5}{18} \right) \right)$$
$$= \frac{-11}{27} + \left[ \frac{4 \times 2 + (-5 \times 1)}{18} \right] \quad \text{LCM of } 9, 18 = 18$$
$$= \frac{-11}{27} + \left[ \frac{8 - 5}{18} \right]$$
$$= \frac{-11}{27} + \frac{3}{18}$$
$$= \frac{(-11 \times 2) + (3 \times 3)}{54} \quad \text{LCM of } 27, 18 = 54$$
$$= \frac{-22 + 9}{54}$$

L.H.S =  $\frac{-13}{54}$

$$\text{R.H.S } (a+b)+c = \left(\frac{-11}{27} + \frac{4}{9}\right) + \left(\frac{-5}{18}\right)$$

$$= \frac{(-11 \times 1) + (4 \times 3)}{27} + \left(\frac{-5}{18}\right)$$

LCM of 27, 9 = 27

$$= \frac{-11+12}{27} + \left(\frac{-5}{18}\right)$$

$$= \frac{1}{27} + \left(\frac{-5}{18}\right)$$

$$= \frac{(1 \times 2) + (-5 \times 3)}{54}$$

LCM of 27, 18 = 54

$$= \frac{2-15}{54}$$

$$\text{R.H.S } = \frac{-13}{54}$$

$$\therefore \text{L.H.S} = \text{R.H.S}$$

$$a+(b+c) = (a+b)+c$$

◆ EX. 1.2 → 7)

$$x = \frac{4}{9}; \quad y = \frac{2}{5}; \quad y = -\frac{7}{12}; \quad z = -\frac{2}{3}$$

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Consider

$$\begin{aligned}x - (y - z) &= \frac{4}{9} - \left( -\frac{7}{12} - \left( -\frac{2}{3} \right) \right) \\&= \frac{4}{9} - \left( -\frac{7}{12} + \frac{2}{3} \right) \\&= \frac{4}{9} - \left( \frac{(-7 \times 1) + (2 \times 4)}{12} \right) \\&= \frac{4}{9} - \left( \frac{-7 + 8}{12} \right) \\&= \frac{4}{9} - \frac{1}{12} \\&= \frac{(4 \times 4) - (1 \times 3)}{36} \\&= \frac{16 - 3}{36}\end{aligned}$$

$$x - (y - z) = \frac{13}{36}$$

Consider

$$\begin{aligned}(x - y) - z &= \left[ \frac{4}{9} - \left( -\frac{7}{12} \right) \right] - \left( -\frac{2}{3} \right) \\&= \left[ \frac{4}{9} + \frac{7}{12} \right] + \frac{2}{3} \\&= \left[ \frac{(4 \times 4) + (7 \times 3)}{36} \right] + \frac{2}{3} \\&= \frac{16 + 21}{36} + \frac{2}{3} \\&= \frac{37}{36} + \frac{2}{3} \\&= \frac{(37 \times 1) + (2 \times 12)}{36}\end{aligned}$$

$$= \frac{37 + 24}{36}$$

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$$(x - y) - z = \frac{61}{36}$$

$$\therefore x - (y - z) \neq (x - y) - z$$

$$P = \frac{-8}{27}, \quad Q = \frac{3}{4}, \quad R = \frac{-12}{15}$$

$$P \times (Q \times R) = (P \times Q) \times R$$

$$\begin{aligned} \text{L.H.S} &= P \times (Q \times R) \\ &= \frac{-8}{27} \times \left( \frac{3}{4} \times \left( \frac{-12}{15} \right) \right) \\ &= \frac{-8}{27} \times \left( \frac{3 \times (-12)}{4 \times 15} \right) \\ &= \frac{-8}{27} \times \left( \frac{-36}{60} \right) \\ &= \frac{-8 \times (-36)}{27 \times 60} \end{aligned}$$

$$\text{L.H.S} = \frac{8}{45}$$

$$\begin{aligned} \text{R.H.S} &= (P \times Q) \times R \\ &= \left( \frac{-8}{27} \times \frac{3}{4} \right) \times \left( \frac{-12}{15} \right) \\ &= \left( \frac{-8 \times 3}{27 \times 4} \right) \times \left( \frac{-12}{15} \right) \\ &= \frac{-24}{108} \times \left( \frac{-12}{15} \right) \\ &= \frac{-24 \times -12}{108 \times 15} \end{aligned}$$

$$\text{R.H.S} = \frac{8}{45}$$

$\therefore$  L.H.S = R.H.S, Hence verified.

$$P \times (q - r) = P \times q - P \times r$$

$$\text{L.H.S} = P \times (q - r)$$

$$= \frac{-8}{27} \times \left( \frac{3}{4} - \left( \frac{-12}{15} \right) \right)$$

$$= \frac{-8}{27} \times \left( \frac{3}{4} + \frac{12}{15} \right)$$

$$= \frac{-8}{27} \times \left( \frac{(3 \times 15) + (12 \times 4)}{60} \right)$$

$$= \frac{-8}{27} \times \left( \frac{45 + 48}{60} \right)$$

$$= \frac{-8}{27} \times \frac{93}{60}$$

$$= \frac{-8}{27} \times \frac{31}{20}$$

$$\text{L.H.S} = -\frac{62}{135}$$

$$\text{R.H.S} = P \times q - P \times r$$

$$= \frac{-8}{27} \times \frac{3}{4} - \left( \frac{-8}{27} \times \left( \frac{-12}{15} \right) \right)$$

$$= \frac{-8 \times 3}{27 \times 4} - \left( \frac{-8 \times (-12)}{27 \times 15} \right)$$

$$= \frac{-24}{108} - \left( \frac{96}{405} \right)$$

$$= \frac{-24}{108} - \frac{96}{405}$$

$$= \frac{-2}{9} - \frac{32}{135}$$

$$= \frac{(-2 \times 15) - (32 \times 1)}{135}$$

$$= \frac{-30 - 32}{135}$$

$$\text{R.H.S} = \frac{-62}{135}$$

$\therefore$  L.H.S = R.H.S ; Hence Verified.

8)

No,

$$\frac{4}{5} \times \left(-1\frac{1}{4}\right)$$

$$\frac{4}{5} \times \left(-\frac{5}{4}\right)$$

$$-1 \neq 1$$

$\therefore -1\frac{1}{4}$  is not multiplicative inverse of  $\frac{4}{5}$

$\therefore$  multiplicative inverse of  $\frac{4}{5}$  should be  $\frac{5}{4}$

9)

$$\left\{ \frac{7}{5} \times \left( \frac{-3}{12} \right) \right\} + \left\{ \frac{7}{5} + \frac{5}{12} \right\}$$

$$\frac{7}{5} \times \left\{ \frac{-3}{12} + \frac{5}{12} \right\} \quad (\because \text{distributive property})$$

$$\frac{7}{5} \times \left\{ \frac{-3+5}{12} \right\}$$

$$\frac{7}{5} \times \frac{2}{12}$$

$$\frac{7}{30}$$

$$\left\{ \frac{9}{16} \times \frac{4}{12} \right\} + \left\{ \frac{9}{16} \times \left( \frac{-3}{4} \right) \right\}$$

$$\frac{9}{16} \times \left\{ \frac{4}{12} + \left( \frac{-3}{4} \right) \right\} \quad (\because \text{distributive property})$$

$$\frac{9}{16} \times \left\{ \frac{1}{3} + \left( \frac{-1}{3} \right) \right\}$$

$$\frac{9}{16} \times \left\{ \frac{1}{3} - \frac{1}{3} \right\}$$

$$\frac{9}{16} \times 0 = \underline{\underline{0}}$$

◆ EX. 1.4 → 7)

$$\text{Sum of two numbers} = \frac{8}{3} + \frac{4}{7}$$

$$= \frac{(8 \times 7) + (3 \times 4)}{21} \quad \text{LCM of 3, 7 = 21}$$

$$= \frac{56 + 12}{21}$$

$$\text{Sum of two numbers} = \frac{68}{21}$$

$$\text{Product of given numbers} = -\frac{3}{7} \times \frac{14}{9}$$

$$= -\frac{2}{3}$$

$$\text{Required product} = \frac{\text{Sum of } \frac{8}{3} \text{ and } \frac{4}{7}}{\text{Product of } -\frac{3}{7} \text{ and } \frac{14}{9}}$$

$$\text{Product of } -\frac{3}{7} \text{ and } \frac{14}{9}$$

$$= \frac{68}{21} \div \left(-\frac{2}{3}\right)$$

$$= \frac{68}{21} \times \frac{3}{-2}$$

$$= -\frac{34}{7}$$

$$\text{Given } P = \frac{-3}{2}, Q = \frac{4}{5}, R = \frac{-7}{12}$$

$$(P \div Q) \div R = P \div (Q \div R)$$

$$\text{L.H.S} = (P \div Q) \div R$$

$$= \left( \frac{-3}{2} \div \frac{4}{5} \right) \div \left( \frac{-7}{12} \right)$$

$$= \left( \frac{-3}{2} \times \frac{5}{4} \right) \div \left( \frac{-7}{12} \right)$$

$$= \left( \frac{-15}{8} \right) \div \left( \frac{-7}{12} \right)$$

$$= \frac{-15}{8} \times \frac{12}{-7}$$

$$= \frac{-15}{8} \times \frac{12}{-7}$$

$$\text{L.H.S} = \frac{+45}{7}$$

$$\text{R.H.S} = P \div (Q \div R)$$

$$= \frac{-3}{2} \div \left( \frac{4}{5} \div \left( \frac{-7}{12} \right) \right)$$

$$= \frac{-3}{2} \div \left( \frac{4}{5} \times \frac{12}{-7} \right)$$

$$= \frac{-3}{2} \div \left( \frac{-48}{35} \right)$$

$$= \frac{-3}{2} \times \frac{-35}{48}$$

$$\text{R.H.S} = \frac{35}{32}$$

$$\text{L.H.S} \neq \text{R.H.S}$$

$$(P \div Q) \div R \neq P \div (Q \div R)$$

❖ EX. 1.5 → 4) YOU CAN WRITE ANY NUMBER. Such as  $\frac{-1}{4}$ , 0,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  etc.

❖ EX. 1.6 → 5)

$$\text{Total students} = 400$$

$$\text{no. of girls} = 130$$

$$\begin{aligned}\text{no. of boys appeared for exam} &= 400 - 130 \\ &= 270\end{aligned}$$

$$\begin{aligned}\text{no. of boys passed in exam} &= \frac{2}{3}(270) \\ &= 180\end{aligned}$$

$$\begin{aligned}\text{no. of boys failed in exam} &= \text{Total boys} - \text{passed boys} \\ &= 270 - 180 \\ &= 90\end{aligned}$$

$$\therefore \text{no. of boys failed in exam} = 90.$$

8)

$$\text{Perimeter of rectangle} = 15\frac{3}{7} \text{ m}$$

$$\text{length of rectangle (l)} = 4\frac{2}{7} \text{ m}$$

$$\text{perimeter} = 2(l+b)$$

$$15\frac{3}{7} = 2\left(4\frac{2}{7} + b\right)$$

$$\frac{108}{7} = 2\left(\frac{30}{7} + b\right)$$

$$\frac{30}{7} + b = \frac{108}{7 \times 2}$$

$$\frac{30}{7} + b = \frac{54}{7}$$

$$b = \frac{54}{7} - \frac{30}{7}$$

$$b = \frac{24}{7}$$

$$b = 3\frac{3}{7} \text{ m}$$

$$\text{breadth of rectangle} = 3\frac{3}{7} \text{ m}.$$

Let the money possessed by man = ₹  $x$

$$\frac{1}{10} \text{th of money donated to school} = \frac{x}{10}$$

$$\text{Remaining money} = x - \frac{x}{10} = \frac{9x}{10}$$

$$\frac{1}{6} \text{th of remaining money to church} = \left(\frac{9x}{10}\right) \times \frac{1}{6}$$

$$\begin{aligned} \text{Remaining money} &= \frac{9x}{10} - \frac{9x}{10 \times 6} \\ &= \frac{45x}{60} \end{aligned}$$

Now, the man distributed this money equally to his three sons and each one gets = ₹ 50,000

$$\frac{45x}{60} \div 3 = 50,000$$

$$\frac{45x}{60} \times \frac{1}{3} = 50,000$$

$$\frac{3x}{4} \times \frac{1}{3} = 50,000$$

$$x = 50,000 \times 4$$

$$x = 2,00,000/-$$

∴ Man possessed originally ₹ 2,00,000

Let a number be 'x'

$\frac{1}{4}$  of a number is added to  $\frac{1}{3}$  of number

$\frac{x}{4} + \frac{x}{3}$  is 15 greater than  $\frac{x}{2}$  half of number

$$\frac{x}{4} + \frac{x}{3} = 15 + \frac{x}{2}$$

$$\frac{7x}{12} = 15 + \frac{x}{2}$$

$$\frac{7x}{12} - \frac{x}{2} = 15$$

$$\frac{x}{12} = 15$$

$$x = 15 \times 12$$

$$x = 180$$

HOTS → 2

$$\text{Rahul's 6 days work} = \frac{2}{7}$$

$$\text{His 1 day's work} = \frac{2}{7 \times 6} = \frac{2}{42} = \frac{1}{21}$$

$$\text{Suresh's 1 day's work} = \frac{3}{5} \times \frac{1}{9} = \frac{1}{15}$$

$$\text{Both's 1 day work} = \frac{1}{21} + \frac{1}{15}$$

$$= \frac{5+7}{105} = \frac{12}{105}$$

$$\text{Both's 7 days work} = \frac{12}{105} \times 7 = \frac{4}{5}$$

$$\text{Remaining work} = 1 - \frac{4}{5} = \frac{1}{5}$$

Suresh will do  $\frac{1}{5}$  of work in =  $\frac{15}{1} \times \frac{1}{5} = 3$  days.

### CHAPTER-3 (SQUARES AND SQUARE ROOTS)

If a natural number  $m$  can be expressed as  $n^2$ , where  $n$  is also a natural number, then  $m$  is a **square number**

**Example :**  $1=1^2=1\times 1$ ;  $9=3^2=3\times 3$ ;  $\frac{4}{25}=(\frac{2}{5})^2=\frac{2}{5}\times\frac{2}{5}$  etc.

Thus, we can say that square of a number is the product of the number itself.

The numbers 1, 4, 9, 16 ... are square numbers. These numbers are also called **perfect squares**.

But, remember all the natural numbers are not perfect squares.

A perfect square can always be expressed as the product of pairs of equal prime factors.

**Example 1.** Is 324 a perfect square?  
**Solution.** Given number is 324.  
It can be expressed as

$$324 = \underline{2 \times 2} \times \underline{3 \times 3} \times \underline{3 \times 3}$$

Since 324 can be expressed as the product of pairs of equal prime factors.  
Hence, 324 is a perfect square.

Prime factorisation

2	324
2	162
3	81
3	27
3	9
3	3
	1

50 ICSE Understanding ...

**Example 2.** Is 1152 a perfect square?  
**Solution.** Given number is 1152.  
It can be expressed as

$$1152 = 2 \times \underline{2 \times 2} \times \underline{2 \times 2} \times \underline{2 \times 2} \times \underline{3 \times 3}$$

Since one 2 is left unpaired,  
 $\therefore$  1152 cannot be expressed as the product of pairs of equal prime factors.  
Hence, 1152 is not a perfect square.

Prime factorisation

2	1152
2	576
2	288
2	144
2	72
2	36
2	18
3	9
3	3
	1

3 | 9  
3 | 3  
| 1

**Example 3.** Show that 676 is a perfect square. Find the number whose square is 676.  
**Solution.** Given number is 676.  
It can be expressed as

$$676 = \underline{2 \times 2} \times \underline{13 \times 13}$$

Since 676 can be expressed as the product of pairs of equal prime factors.  
Hence, 676 is a perfect square.  
Also  $676 = (2)^2 \times (13)^2$   
 $= (2 \times 13)^2 = (26)^2$   
Hence, 26 is the number whose square is 676.

Prime factorisation

2	676
2	338
13	169
13	13
	1

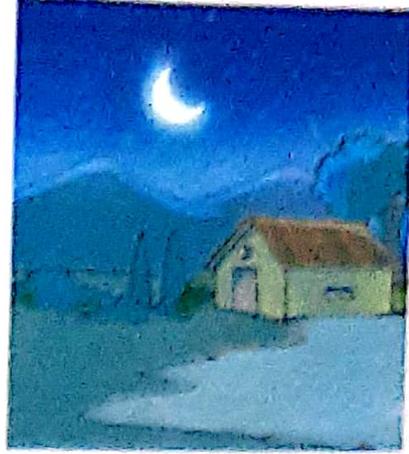


DATE - 22/04/2020

CLASS - VIII

CLASS - WORK

## विलोम शब्द (Antonyms)



- शिक्षक - बच्चों, दोनों चित्रों को देखो और इनके बारे में बताओ।  
अनामिका - एक चित्र दिन का है और दूसरा रात का।  
अदिति - एक चित्र प्रकाश का है और दूसरा अंधकार का।

अनामिका चित्र देखकर बोली-दिन और रात।

अदिति चित्र देखकर बोली-प्रकाश और अंधकार।

उपर्युक्त शब्दों के जोड़े 'दिन और रात' तथा 'प्रकाश और अंधकार' एक-दूसरे का विपरीत अर्थ बता रहे हैं। ये शब्द विपरीतार्थक या विलोम शब्द कहलाते हैं।

जो शब्द एक-दूसरे का उलटा अर्थ देते हैं, उन्हें विलोम शब्द कहते हैं।

नीचे कुछ विलोम शब्द दिए गए हैं, इन्हें याद कीजिए-

शब्द	विलोम शब्द	शब्द	विलोम शब्द	शब्द	विलोम शब्द
सरल	× कठिन	मौखिक	× लिखित	पाप	× पुण्य
शांति	× अशांति	आरंभ	× अंत	देश	× विदेश
स्वामी	× सेवक	आगे	× पीछे	न्याय	× अन्याय
हित	× अहित	सुगंध	× दुर्गंध	वीर	× कायर
अंधेरा	× उजाला	देव	× दानव	उदय	× अस्त
प्राचीन	× नवीन	उतार	× चढ़ाव	स्वाधीन	× पराधीन
ऊपर	× नीचे	आदर	× अनादर	राजा	× रंक
शाकाहारी	× मांसाहारी	स्वतंत्र	× परतंत्र	जीवन	× मरण
लाभ	× हानि	प्रकाश	× अंधकार	दोस्त	× दुश्मन
स्वस्थ	× अस्वस्थ	बहादुर	× डरपोक	जन्म	× मृत्यु
सत्य	× असत्य	धूप	× छाँव	मित्र	× शत्रु
सुख	× दुःख	सच	× झूठ	मोटा	× पतला

STUDY MATERIAL 2020-21  
CLASS-VIII  
SUBJECT- LOWER BENGALI  
HOME ASSIGNMENT 2020-21

DATE – 22.04.2020  
WEDNESDAY

**CLASSWORK**

Q.1 . ১০ টি পশুর নাম লেখো।

(Write 10 animals name )

উঃ- সিংহ , বাঘ , হাতি , জিরাফ , গন্ডার , গরু , বিড়াল , কুকুর , ভল্লুক , শিম্পাঞ্জি ।

Q .2 . ১০ টি পাখির নাম লেখো।

( Write 10 birds name )

উঃ- ময়ূর , কাকাতুয়া , ময়না , টিয়া , পেঁচা , চড়ুই , কাক , বক , মাছরাঙা , কোকিল ।

Q .3 . সাতদিনের নাম লেখো।

( Write 7 days name )

উঃ- রবিবার , সোমবার , মঙ্গলবার , বুধবার , বৃহস্পতিবার , শুক্রবার , শনিবার ।

**HOMEWORK**

Q.1 . ক থেকে ঁ পর্যন্ত লেখো। ( ২ বার )

( Write ক to ঁ 2 times )

Q.2 . ৫ টি পশু ও ৫ টি পাখির নাম লেখো।

( Write 5 animals and 5 birds name )

CLASS 8  
HISTORY

DATE:22/04/2020

INTRODUCTION

Dear students, Welcome to class 8. I hope that you all are fine and please be safe. Hope to see you all soon but till then let's start our studies.

In class 7 we studied about the Medieval Period and now in the present class we will study about the Modern Period of History.

In Europe the Modern Time Period began with the end of the Dark Age that is from 15<sup>th</sup> century and it continuous till the present day. While in India the Modern Time Period began from 18<sup>th</sup> century that is from British conquest. Many sources are available for this time period.

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A PERIOD OF TRANSITION

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For the Modern Period of History ample sources are available. These sources are again divided into two groups- 1. Primary sources and 2. Secondary sources.

**Primary Sources:** These sources provide first hand accounts or reports for an event of a time period in history. e.g administrative records, archaeological sources, surveys, legal documents, diaries and accounts of travellers and eyewitness accounts.

**Secondary Sources:** These sources are based on primary sources. They explain, discuss, describe, analyse the primary sources. e.g books, newspapers, magazines, letters and pamphlets, reports and reviews, films and photographs.

During the Dark Age the mighty Roman empire was broken, there were barbarian attacks in most part of Europe, feudalism made the life of common and poor people miserable. Churches became powerful and corrupt. They discouraged rational and scientific thinking. This was the time period when a new wave of thinking affected every aspect of life of the people and marked the beginning of the modern age. This new age was known as Renaissance.

Renaissance marked the beginning of the modern period. It began in Italy around 14<sup>th</sup> century and then spread to other parts of Europe. Renaissance was based on the characteristics of Humanism, Rationalism, Scientific spirit and Spirit of inquiry. It had its impact on every aspect of people's life and there was development in the field of art, architecture, sculpture, literature, science and technology and it also marked the beginning of the age of exploration and discovery. Also because of renaissance the Roman Catholic Church felt the need to bring about major changes within and reform the Church. This religious movement was known as Reformation.

The next part of this chapter will be continued in the next download.

## Chapter

## 1

## A Period of Transition



## Milestones

In this chapter, you will learn about:

- the main features of Renaissance.
- the impact of Renaissance on the European world.
- the geographical discoveries during the Renaissance.
- the Reformation and its impacts.
- the Industrial Revolution and its effects.



Find out the name of this famous painting.  
Who painted it and when?

*monalisa*

## Study of the Modern Period

The sources of study of the modern period in Indian history are relatively easier to obtain as compared to the ancient period. Different sources related to modern history have helped the historians to reconstruct British rule in India. These resources give valuable information on social, political, economic and cultural developments in India. There are two types of sources which help in studying the modern period in India—primary and secondary.

## Primary sources

Primary sources of studying the modern period in Indian history include the following:

- **Administrative records:** The British officials maintained written records of their meetings, policies, events, incidents and plans. They built *archives* and museums to preserve these records, for example, the National Archives of India, New Delhi, and the India Office Records, London.
- **Archaeological sources:** Monuments such as the Gateway of India, Victoria

Terminus, Parliament House and the Rashtrapati Bhawan give a detailed account of the art and architecture during the British rule.

- **Surveys:** The British government periodically carried out surveys for administrative purposes. These provided information about the people, landscape and topography of the different presidencies. This further helped the British to formulate laws and policies for an effective administration.
- **Legal documents:** Both the civil and criminal law courts during the British rule maintained their legal documents. These documents were archived at the India Office Records in London. They help the historians to gather information about the justice system under the British rule.
- **Diaries and accounts of travellers:** Accounts of the travellers, traders, missionaries and British civil servants who came to India in the eighteenth and nineteenth centuries are other useful sources of information for the historians. Sometimes, these accounts were one-sided and biased, and did not give correct information. Therefore, the historians use them with caution to reconstruct Indian history.
- **Eyewitness accounts:** The eyewitness accounts provided by the freedom fighters represent the Indian perspective of the British rule. These accounts are available at the British Library in London.

### Secondary sources

The secondary sources of studying the modern period in Indian history are:

- **Books, newspapers, magazines, letters and pamphlets:** With the advent of the printing press, newspapers, magazines, letters and pamphlets became the popular means to propagate the spirit of nationalism among the Indian masses. They made the people aware of the British policies and existing conditions in India. The first newspaper in India, *Bengal Gazette*, was published in Calcutta (now Kolkata) in 1780. It was started by James Augustus Hickey. There were vernacular newspapers too which were strongly patriotic, and the freedom fighters used them as a platform to fight against the British.
- **Reports and reviews:** The British introduced various policies, reforms and laws and maintained their written reports. These records helped the British Crown to review these policies and make changes with time.
- **Films and photographs:** The historians also use photographs and films to reconstruct Indian history.

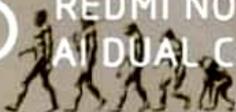


▲ A British newspaper during the Second World War, dated 16 March 1944

### Transition from Medieval to Modern Age

The ancient civilization of Rome and Greece contributed significantly to the foundation of European culture. But with the decline of the Roman Empire,

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Europe entered the Middle Ages. One of the main features of the medieval period was feudalism. It proved to be a hindrance to the free flow of thoughts and ideas and a major obstacle in the path of socio-cultural developments. Under the ethos of feudalism, much of the older traditions of culture were lost and Europe lost its intellectual vibrancy. The predominance of the Catholic Christian Church led to monopolisation of learning and education. In order to safeguard its power and position in the society, the Church propagated blind religious faith and superstitions. With the disintegration of the feudal system in the thirteenth century a new type of social system began to emerge in Europe. This new system affected every aspect of life of the people and marked the beginning of the modern age. One of the first developments that marked the beginning of the new age was Renaissance.

### Now You Know

India also witnessed a phenomenon that was termed as the Indian Renaissance during the nineteenth century. Like the European Renaissance, which began in Italy and then spread to other parts of Europe, in India too, Renaissance began in Bengal and later spread to other parts of the country.

### Renaissance

The term Renaissance is a French word which means rebirth. The period of Renaissance marked a new interest in the learning of the ancient civilizations of Greece and Rome. It saw a series of new developments in the fields of art, literature, religion, architecture, philosophy, science and politics. It began in Italy and later spread to France, England, Germany and the other parts of Europe. In the centuries between 1300 CE and 1600 CE, revolutionary changes and new discoveries swept over European culture. It brought rapid changes in the mindset of people and marked the end of the medieval age. It ushered in what is called the **modern period of history**.

### Spread of Renaissance

Italy was the birthplace of the Renaissance. Cities such as Venice, Florence, Milan and Genoa emerged as rich and prosperous centres. The prosperity and economic certainty was conducive to the development and growth of art and literature. Artists, scholars, philosophers and scientists in these cities began to rediscover the glorious past in the fields of classical arts, architecture, philosophy and literature.

The Western Roman Empire declined in 476 CE. The capital of the Eastern Roman Empire, Constantinople, emerged as the new centre of learning and intellectual activities. After about 1000 years, in 1453 CE, the Ottoman Turks captured



▲ Florence in Italy was an important centre where art flourished during the Renaissance

Constantinople. As a result a large number of scholars from Greece escaped to Rome. These learned men were welcomed in Italy and other European countries and played a significant role in reviving classical learning in Europe.

## Characteristics of Renaissance

### Humanism

An important feature of the Renaissance was **Humanism**. Humanism focused on nature, achievement and human potential rather than on the power and mystery of divinity. The **humanists** emphasised the study of **classics** and believed in man, his intellect and his life on Earth. This was drastically different from the ideas of medieval period where religion was central to human existence. People were more concerned with spiritual matters and **afterlife** rather than worldly affairs.

Humanism was the main source of inspiration for all the cultural changes that happened during Renaissance. It had considerable influence on literature, history, painting, sculpture and political ideas. Humanism remained dominant in education till the end of the nineteenth century. Some of the famous humanist thinkers of this period were **Francesco Petrarch**, **Giovanni Boccaccio** and **Pico della Mirandola**.

### Rationalism

During the Renaissance, a new approach began to emerge. People began to question the established ideas and principles of religion and developed a **rational** outlook. Everything that was blindly accepted in the past was now being questioned. **Rationalism** became the basis of modern thinking. The scholars who belonged to this age were called **rationalists**.



▲ Francesco Petrarch

### Scientific spirit

The Renaissance scholars acquired knowledge through scientific approach. Knowledge acquired in the Renaissance was based on a scientific approach which was based on a systemic process of observation, experimentation and conclusion.

### Spirit of inquiry

The desire of the Renaissance scholars to find answers based on scientific approach gave rise to a spirit of inquiry. It led them to explore and discover knowledge. This spirit of inquiry led to **explorations**, **experimentations** and **discoveries**.

### Impact of Renaissance

Renaissance was characterised by scientific developments, explorations of new worlds, development of art and architecture and emergence of modern political philosophy.

## Painting

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## Painting

In the medieval period the artists mainly painted scenes or portraits inspired by religious and divine ideas. Their art was **unrealistic**. The Renaissance artists were inspired by the spirit of **humanism**. They looked upon art as an **imitation of life** and thus their paintings were natural and realistic.

Three of the greatest artists of the period were **Leonardo da Vinci, Michelangelo and Raphael**. **Leonardo da Vinci** was a **versatile artist of the Renaissance from Italy**. He was a painter, engineer, architect, musician, inventor, mathematician, **anatomist**, philosopher and scientist. He is best known for his two paintings—**The Last Supper** and **Mona Lisa**. *who studied body of human*

- **Michelangelo** was an Italian painter, sculptor, architect and poet. Some of his greatest masterpieces are present on the ceiling of the Sistine Chapel in the Vatican and the statues of Pieta, Moses and David. He was the main architect of Saint Peter's Basilica.
- **Raphael** was a master painter and architect of the Italian Renaissance. He is best known for his Madonnas and for his large figure compositions in the Vatican.



▲ Pieta



▲ A carpet painting in the Vatican of The Last Supper

## Literature

Literature also witnessed various changes during the Renaissance.

- The spirit of inquiry led to a demand for books. The invention of the printing press by John Guttenberg brought revolutionary changes in learning. For centuries, books were handwritten and available only in limited number. With the invention of the printing press, books became available to a large number of people. 3
- The Renaissance period marked the emergence of **modern European languages**. The language spoken by



▲ William Shakespeare



the common people such as Italian, Spanish, French, German and English started being used in literature.

- Subjects like history and literature were studied closely. These subjects dealt with the affairs of the human being and their life. One of the first important works of the period in the modern European language was the *Divine Comedy* by **Dante**, written in Tuscan, which later became the Italian language. The other significant writers of the age were **Petrarch**, **Erasmus**, **Machiavelli**, **Shakespeare** and **Francis Bacon**.

### Science and technology

The Renaissance spirit of inquiry led to many important discoveries and progress in the field of science and technology.

- **Copernicus** was an **astronomer** who proved that the Earth rotated on its axis and revolved around the Sun. He was among the first who challenged the traditional thought. Roman Catholic Church, which taught that the Earth was at the centre of the universe, condemned him. Copernicus's theory was confirmed a century later by Galileo who validated this by inventing a telescope.
- **William Harvey** discovered the system of circulation of blood from the heart to other parts of the body.
- **Kepler**, a German, explained that the planets moved around the Sun. **Isaac Newton** carried forward the work started by Kepler. He proved that all the celestial bodies moved according to the law of gravitation.
- In the seventeenth century microscope, telescope and thermometer were invented.
- The **mariner's compass** was used by explorers and sailors to navigate the sea. It helped tremendously in the discovery of new areas around the world.

### Geographical discoveries

Before the discovery and opening up of sea routes, trade between the **East** and Europe was dominated entirely by the Arab traders. There was a great demand for Indian goods such as spices, textiles, tea, indigo, sugar, coffee, saltpetre and luxury items. Until the fifteenth century these items were traded westwards by the Arabs to Egypt via the Red Sea. The Arab traders sold them to Italian merchants who sold these goods



▲ Nicolaus Copernicus



▲ Isaac Newton

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across Europe. The monopoly of selling these goods made the Italians extremely rich. The European sailors and geographers now wanted to search for an alternative sea route so that they could cut out the Arabs and trade directly with the East.

In mid-fifteenth century, Asia Minor was captured by the Ottoman Turks. Thus, the trade route that linked Europe with Asia was completely cut off. The Ottoman Turks also took control of the main sea ports in the eastern Mediterranean Sea, attacked and plundered European ships and imposed heavy taxes on goods that passed through their land. As a result, European trade with the East suffered a major blow. The need to find an alternative trade route became absolutely necessary.

European rulers, whose profits were being greatly affected by trade, encouraged sailors to explore new sea routes. The ships, crew and money were funded by rich merchants and rulers. Thus, European sailors, especially from Portugal and Spain, undertook unprecedented explorations of sea routes.

### Portuguese explorers

Portugal was the first European country to discover a new sea route to India and the Far East.

- The first great systematic attempt to explore unknown regions came about largely through the efforts of **Prince Henry the Navigator** of Portugal. He financed many well-planned expeditions and sent sailors to explore the west coast of Africa.
- In 1488 CE **Bartholomew Diaz** reached the southern tip of Africa and it was named the Cape of Good Hope.
- **Vasco da Gama**, a Portuguese sailor, followed the same route and reached the Cape of Good Hope. He explored further from there and reached **India (Calicut) in 1498**. Vasco da Gama finally opened the trade route from Europe to India, which proved to be extremely lucrative.



▲ Christopher Columbus (left)



▲ Ferdinand Magellan

### Discovery of America

- In 1492, **Christopher Columbus**, an Italian living in Spain, decided to sail westwards across the Atlantic Ocean to find a route to India. Since his calculation of distance from Europe to Asia was wrong, he landed on an island which blocked the westward movement to the East. This new land was named the **West Indies**.
- **Ferdinand Magellan** presented a plan for a voyage to King Charles I of Spain, who gave his blessing. On 20 September 1519, he set out with a fleet of five fully supplied ships. The fleet sailed first to Brazil and then down the coast of South America to Patagonia. By October 1520, Magellan

and his men had entered what is now called the Strait of Magellan. The Spanish crew reached the Spice Islands in November 1521. Magellan's voyage became the first successful attempt to **circumnavigate** the Earth in history.



▲ The sea route discovered by some explorers

## Reformation

**Reformation was a religious movement of the sixteenth century which questioned the traditional beliefs and practices of the Church.** It roughly spanned from 1517 to 1648. The leading figure of this movement was **Martin Luther**. It had far-reaching political, economic and social effects.

During the Middle Ages, the Roman Catholic Church dominated politics, controlled kings and became very wealthy. The Pope was the supreme head of the Church. The Church had its own sources of income from huge lands. It also imposed taxes on the people. **The accumulation of wealth and indomitable power led to the corruption of the Church.**

Gradually, the Pope and the **papacy** came under the scrutiny of the common man. They began to demand reforms in the Church. **Religious reform movements eventually divided the Church between those who remained loyal to the Pope and those who broke away from Roman Catholic Church to form a new branch of Christianity.** Those who broke away and became followers of this new faith were known as the Protestants.



▲ Martin Luther

## Causes of Reformation

A number of causes led to the Reformation. The Church supported numerous **unethical**

practices which greatly undermined the reputation of both the Church and the clergy. The Church also collected money from the common people by selling Indulgences. **Indulgences were letters of pardon.** The Church preached that anyone who bought a Letter of Indulgence would be forgiven and would not have to do **penance** for their sins. This suggested that the rich could buy their way into heaven while the poor could not. The rulers resented the interference of the Church in the affairs of their states. Kings like Henry VIII considered powerful Church as a check on their authority. These rulers were willing to provide support to any movement which was against the Pope.

The Renaissance set in motion a new spirit of learning and enquiry. It encouraged independent and original thinking on scientific lines. The invention of the printing press also played a big role in the Reformation. The Bible was translated from Latin to many regional languages.

### **Martin Luther's Contribution to Counter Reformation**

Martin Luther (1483-1546) was a German priest and theologian. In 1517 he published his work **Ninety-Five Theses** and nailed it on the church door at Wittenberg. In his theses, he emphasised on the true principles of Christianity and the role of faith. The invention of the printing press quickly led to the spread of his writings throughout Europe.

### **Impact of Reformation**

The impact of the Protestant Movement changed the religious beliefs, practices, culture and society in Europe.

### **Industrial Revolution**

Industrial Revolution refers to the period of rapid social, economic and technological changes that took place in Britain from the latter half of the eighteenth century to the first half of the nineteenth century. The Industrial Revolution began in England but gradually spread to Western Europe and North America. Rapid scientific, technological and commercial innovations, a rising population, improved transportation and expanding domestic and international markets led to the development of mills, factories, mines and workshops.

### **Causes of the Industrial Revolution**

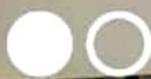
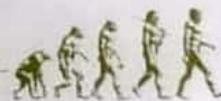
Some of the causes of the Industrial Revolution are discussed here.

#### **Transportation**

In the eighteenth century, construction of canals and an improved



▲ James Watt



2nd HOME ASSIGNMENT – 2020-2021

CLASS –VIII SUBJECT – ENGLISH LANGUAGE

(SOLUTIONS TO THE EXERCISES OF CHAPTER- 3 ADJECTIVES DATE- 21.04.20 )

**EXERCISE 1.** Fill in the blanks with the Adjectives opposite in meaning to the bold words :-

1. The bread is not **fresh** . It is stale .
2. A **live** ass is better than a **dead** lion .
3. A well is **deep** whereas a pond is shallow .
4. The land was not **fertile** , it was barren .
5. You will not succeed if you are **lazy** . You must be active .

**EXERCISE 2 .** Pick out the Adjectives in the following sentences by underlining them and identify their kinds :-

1. The cricketers had enough practice .                      Quantity
2. Please give me some rice .                                      Quantity
3. Ten passengers got into the bus .                              Number
4. Ripe mangoes are tasty .    Quality
5. The drama was enjoyable .                                      Quality
6. The chimpanzee is an intelligent animal .                      Quality
7. It was dangerous to continue the journey in this torrential rain .      Quantity
8. I was several miles away from the sea .                      Number
9. You take great care of your younger brother .                      Quantity
10. This is the second edition of the book .                      Demonstrative , Number
11. He lives in yonder house .    Demonstrative
12. We don't like such friendship .                                      Demonstrative
13. Rekha and Rani are in the same class .                      Demonstrative
14. Some girls don't participate in the games .                      Number
15. The mansion has an indoor pool .                                  Quality

3rd HOME ASSIGNMENT 2020-2021

CLASS -VIII SUBJECT – ENGLISH LANGUAGE

CHAPTER -3 THE ADJECTIVES

DATE – 22.04.20

5 . DISTRIBUTIVE ADJECTIVES

Adjectives that show the particular persons or things from a group are taken one at a time .

e.g. **Every** player did his best in the match .

### **6. INTERROGATIVE ADJECTIVES**

If an **INTERROGATIVE PRONOUN** is followed by a **NOUN** in an **INTERROGATIVE SENTENCE** it becomes an **INTERROGATIVE ADJECTIVES** . e.g. **Whose** bag did the thief steal ?

**NOTE :- WHAT ,WHICH and WHOSE are INTERROGATIVE ADJECTIVES .**

### **7. POSSESSIVE ADJECTIVES**

**POSSESSIVE ADJECTIVES** show **POSSESSION** or **OWNERSHIP** . They answer the question – **WHOSE ?** e.g. **My** car needs repairs .

### **8. PROPER ADJECTIVES**

**Proper adjectives** are **PROPER NOUNS** used as **Adjective form of PROPER NOUNS** .

e.g. He is an **Indian** . (Proper Noun )

He is an **Indian** soldier . ( Proper Adjective )

**NOTE :- A, AN and THE** are sometimes called **DEMONSTRATIVE ADJECTIVES** and are also called **ARTICLES** . They are placed before **Nouns** in sentences .

**EXERCISE 1.** Fill in the blanks with **Proper Adjectives** :-

1. Priya is an \_\_\_\_\_ citizen .
2. The \_\_\_\_\_ batsman played well .
3. My friend introduced me to \_\_\_\_\_ cuisine .
4. The church is an excellent example of \_\_\_\_\_ architecture .
5. I enjoyed the \_\_\_\_\_ food .

**EXERCISE 2.** Correct the errors in the following sentences :-

1. She had only few rupees left .
2. This is the last edition of the book .
3. The boy has not any book .
4. I like to eat France fries .
5. The four first boys were selected .
6. I ate whole apple .