Subject – English Class –VIII

Lesson 1: Three Questions By Leo Tolstoy

Learning objectives:

At the end of the lesson, the learners will be able to know about the author Leo Tolstoy's

view about empathy, importance of empathy in life. Students will be able to understand the

human relationships and emotions being described beautifully by the author.

Keywords of the lesson with Synonyms

- 1. frail- weak, feeble
- 2. learned- educated, erudite
- 3. proclamation- announcement, declaration
- 4. convince- persuade, satisfy
- 5. heeded- pay attention to, take notice of
- 6. resolved- determined, committed
- 7. ambush- trap, a hidden place from which a surprise attack can be made
- 8. religious- sacred, spiritual
- 9. recovered- regain, bring back, retrieve
- **10.** hermit- ascetic, eremite

About Author

Leo Tolstoy. Count Lev Nikolayevich Tolstoy (9 September 1828 – 20 November 1910) was a Russian novelist and anarchist, famous for writing the books War and Peace and Anna Karenina, and many other works. He was a Christian and believed in non-violence.

Summary of the lesson

There was this certain king who believed that he would not fail if he knew what was the right time for every action, who were the right people to be with *and* what was the most important thing to do. Until he proclaimed that he would give a great reward to the person who can answer his three questions. A lot of learned men went for their answers. Unfortunately, their answers did not

satisfy the king. So the king decided to consult a wise hermit. He saw the hermit digging the ground and out of compassion, he did it for the hermit. He kept on asking

the three questions but the hermit also kept silent. Until hours passed and it was already sunset. The hermit saw a

bearded man running and his hands on his stomach. He was wounded and dying; the hermit told the king about it and they helped the bearded man. The next day, the king woke up and the bearded man saw him and apologize to him. He admit that he was an enemy of the king. The bearded man said that he heard about the king going to the hermit so he tried to kill him when he was in his way

back home but he failed.

The king asked the hermit once again then in every question, he answered:

- 1. Now is the time to do every action because now is the only time that we have power.
- 2. The right person is the one whom you are with.
- 3. The most important thing to do is to do good for the person you are with.
 - Characters mentioned in the story :
 - ≻ <u>King</u>
 - ≻ <u>Hermit</u>
 - Bearded man

Multiple Questions

- 1. The bearded man fainted because i) he was tired ii) he was wounded
- 2. Where did hermit live?
 - i) in a forest ii) in a village
- 3. The bearded wanted to kill the King because
 - i) the king has executed his brother ii) the kin had taken his kingdom

Answer the following questions in 30-40 words:

- Q1. What were the three questions that the King asked?
- Q2. What did he do to find answers to his questions?

<u>Video link</u> <u>https://youtu.be/4W4JCn0y4GI</u> https://youtu.be/fj5BcN6Blks

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Hindi

https://youtu.be/crkoEhUw_p4

Mathematics : <u>Chapter -1</u> Day -1 <u>Rational numbers</u>

• What is rational numbers?

The numbers of the form a/b, or a number which can be expressed in the form a/b, where 'a' and 'b' are integers and $b \neq 0$, are called rational numbers.

In other words, a rational number is any number that can be expressed as the quotient of two integers with the condition that the divisor is not zero.

For examples; each of the numbers 2/3, 5/8, -3/14, -11/-5, 7/-9, 7/-15 and -6/-11 is a rational number.

Numerator and denominator: If a/b is a rational number, then the integer a is known as its numerator and the integer b is called the denominator.

• Is every rational number a natural number?

Every natural number is a rational number but a rational number need not be a natural number.

We know that, 1 = 1/1, 2 = 2/1, 3 = 3/1 and so on

In other words, every natural number n can be written as n = n/1, which is the quotient of two integers. Thus, every natural number is a rational number.

Clearly, 3/2, 2/5, 1/7, 15/20, etc. are rational numbers but they are not natural numbers.

Hence, every natural number is a rational number but a rational number need not be a natural number. Let us determine whether the following rational numbers are natural numbers or not (i) 4/2

4/2 is a natural number. Since if we simplify 4/2 to its lowest term we get 2/1 = 2 which is a natural number.

(ii) 5/75/7 is not a natural number.

(iii) -15/5

-15/5 is not a natural number. Since if we simplify -15/5 to its lowest term we get -3/1 = -3 which is an integer but not a natural number.

(iv) -8/-4

-8/-4 is a natural number. Since if we simplify -8/-4 to its lowest term we get 2/1 = 2 which is a natural number.

(v) 1/101/10 is not a natural number.

(vi) 0/1

0/1 is not a natural number. Since 0/1 = 0 which is not a natural number.

(vii) 10/10

10/10 is a natural number. Since if we simplify 10/10 to its lowest term we get 1/1 = 1 which is a natural number.

(viii) 81/36

81/36 is not a natural number. Since, if we simplify 81/36 to its lowest term we get 9/4 which is a rational number but not a natural number.

Note:

So, from the above explanation we conclude that every rational number is not a natural number.

Yes zero is a rational number.

We know that the integer 0 can be written in any one of the following forms.

For example, 0/1, 0/-1, 0/2, 0/-2, 0/3, 0/-3, 0/4, 0/-4 and so on In other words, 0 = 0/b, where b is any non-zero integer

Thus, 0 can be written as, where a/b = 0, where a = 0 and b is any non-zero integer.

Hence, 0 is a rational number.

• Is every rational number an integer?

Every integer is a rational number but a rational number need not be an integer.

We know that 1 = 1/1, 2 = 2/1, 3 = 3/1, 4 = 4/1 and so on

also, -1 = -1/1, -2 = -2/1, -3 = -3/1, -4 = -4/1 and so on

In other words, any integer a can be written as a = a/1, which is a rational number.

Thus, every integer is a rational number.

Clearly, 3/2,-5/3, etc. are rational numbers but they are not integers.

Hence, every integer is a rational number but a rational number need not be an integer. Let us determine whether the following rational numbers are integers or not:

(i) 2/5

2/5 is not an integer. Since we cannot express 2/5 without a fractional or decimal component

(ii) 8/4

8/4 is an integer. Since if we simplify 8/4 to its lowest term we get 2/1 = 2, which is an integer.

(iii) -5/-5

-5/-5 is an integer. Since if we simplify -5/-5 to its lowest term we get 1/1 = 1, which is an integer.

(iv) -15/2

-15/2 is not an integer. Since we cannot express -15/2 without a fractional or decimal component

(v) -32/8

-32/8 is an integer. Since if we simplify -32/8 to its lowest term we get -4, which is an integer.

So, from the above explanation we conclude that every rational number is not an integer Is every rational number a fraction?

• Every fraction is a rational number but a rational number need not be a fraction.

Let a/b be any fraction. Then, a and b are natural numbers. Since every natural number is an integer. Therefore, a and b are integers. Thus, the fraction a/b is the quotient of two integers such that $b \neq 0$.

Hence, a/b is a rational number.

We know that 2/-3 is a rational number but it is not a fraction because its denominator is not a natural number.

Since every mixed fraction consisting of an integer part and a fractional part can be expressed as an improper fraction, which is quotient of two integers.

Thus, every mixed fraction is also a rational number.

Hence, every fraction is also a rational number. Let us determine whether the following rational numbers are fractions or not:

(i) 1/3

1/3 is a fraction. Since both the numerator (1) and the denominator (3) are natural numbers.

(ii) 6/3

6/3 is a fraction. Since both the numerator (6) and the denominator (3) are natural numbers.

(iii) (-5)/(-3)

(-5)/(-3) is not a fraction. Since both the numerator (-5) and the denominator (-3) are not natural numbers.

(iv) (-17)/9

-17/9 is not a fraction. Since the numerator is -17 and which is not a natural number.

(v) 35/(-4)

35/(-4) is not a fraction. Since the denominator is -4 and which is not a natural number.

(vi) 41/1

41/1 is a fraction. Since both the numerator (41) and the denominator (1) are natural numbers.

(vii) 0/1

0/1 is not a fraction. Since the numerator is 0 and which is not a natural number.

(viii) 1/10

1/10 is a fraction. Since both the numerator (1) and the denominator (10) are natural numbers.

So, from the above explanation we conclude that every rational number is not a fraction.

• Positive Rational Number

A rational number is said to be positive if its numerator and denominator are either both positive integers or both negative integers.

In other words, a rational number is positive, if its numerator and denominator are of the same sign.

Each of the rational numbers 1/4, 2/9, -7/-11, -3/-13, 5/12 are positive rationals, but 2/-5, -3/10, -4/7, 11/-23 are not positive rationals.

Determine whether the following rational numbers are positives or not:

(i) (-11)/3

(-11)/3 is not a positive rational. Since both the numerator and denominator are of the opposite sign.

(ii) (-5)/(-7)

(-5)/(-7) is a positive rational. Since both the numerator and denominator are negative integers.

(iii) 13/1913/19 is a positive rational. Since both the numerator and denominator are positive integers.

(iv) 21/(-17)

21/(-17) is not a positive rational. Since both the numerator and denominator are of the opposite sign.

(v) (-105)/(-8)
(-105)/(-8) is a positive rational. Since both the numerator and denominator are negative integers.

• Negative Rational Number

We will learn about the negative rational number.

A rational number is said to be negative if its numerator and denominator are of opposite signs such that, one of them is positive integer and another one is a negative integer.

In other words, a rational number is negative, if its numerator and denominator are of the opposite signs.

Each of the rational numbers -1/6, 2/-7, -30/11, 13/-19, -15/23 are negative rationals, but -11/-18, 2/5, -3/-5, 1/3 are not negative rationals.

Determine whether the following rational numbers are negatives or not:

(i) 3/(-8)

3/(-8) is a negative rational. Since both the numerator and denominator are of the opposite sign.

(ii) (-1)/(-5)

(-1)/(-5) is not a negative rational. Since both the numerator and denominator are of the same sign.

(iii) 11/29

11/29 is not a negative rational. Since both the numerator and denominator are of the same sign.

(iv) 11/(-15)

11/(-15) is a negative rational. Since both the numerator and denominator are of the opposite sign.

(v) (-71)/(-9)

(-71)/(-9) is not a negative rational. Since both the numerator and denominator are of the same sign.

WORKSHEET -1 (Day -1) Rational numbers

1. Write down the numerator of each of the following rational numbers:

(i) (-7)/5

(ii) 15/(-4)

- (iii) (-17)/(-21)
- (iv) 8/9

(v) 5

2. Write down the denominator of each of the following rational numbers:

(i) (-4)/5

(ii) 11/(-34)

(iii) (-15)/(-82)

(iv) 15

(v) 0

3. Write down the rational number whose numerator is $(-3) \times 4$, and whose denominator is $(34 - 23) \times (7 - 4)$.

4. Write the following rational numbers as integers: 17/1, (-23)/1, 35/1, (-77)/1, 91/1.

5. Write the following integers as rational numbers with denominator 1: -19, 27, 71, -101.

6. Write down the rational number whose numerator is the smallest four digit number and denominator is the largest five digit number.

7. Separate positive and negative rational numbers from the following rational numbers: (-5)/(-7), 12/(-5), 7/4, 13/(-9), 0, (-18)/(-7), (-95)/116, (-1)/(-9)

8. Which of the following rational numbers are positive?(i) (-8)/7(ii) 9/8(iii) (-19)/(-13)(iv) (-21)/13

9. Which of the following rational numbers are negative? (i) (-3)/7 (ii) (-5)/-8 (iii) 9/(-83) (iv) (-115)/-197

10. Which is the following statement are true or false?

- (i) Every whole number is a rational number.
- (ii) Every integer is a rational number.
- (ii) 0 is a whole number but it is not a rational number.

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Science:

CLASS 8

SCIENCE

Crop Production And Management

Crop

Plants of the same kind that are grown and cultivated as a source of food in a large cultivable land is called crop.

Types of Crops

Crops which are grown in the winter season (from Oct to March) are called Rabi crops. The crops which are sown in the rainy season (from July to Oct) are called Kharif crops.

Preparation of Soil

- Preparation of soil is the first step in cultivating crop for food production.
- The soil is prepared for sowing the seeds of the crop.
- This is carried out using various processes and tools.

Tilling or Ploughing

The process of loosening and turning of the soil is called tilling or ploughing and is done by using a plough.

Plough

- Plough is a device that is used by farmers for different purposes such as adding of fertilizers, tilling and loosening of the soil.
- It is also used for adding fertilizers to the soil, removing weeds, scaping of soil etc.
- The ploughshare is the triangular iron strip.
- A ploughshaft is the main part of the plough which is made using a log of wood.
- The other end of the shaft has a handle.
- The other end is attached to a beam which is placed on the bull's necks.
- A wooden, traditional plough can be operated by a pair of an ox and a man.
- Nowadays these wooden ploughs are being replaced by the iron ploughs.



A traditional wooden plough

Hoe

A hoe is a tool that used to dig up soil to remove weeds and also loosen up the soil before planting a sapling.



Cultivator

- A cultivator is attached to the tractor and helps in loosening soil.
- Cultivators are used instead of ploughs since they are faster.



A modern-day cultivator

Sowing

- Sowing the process of planting the seeds in the soil.
- The seeds are sowed in the soil that is loosened by cultivator or plough.

Quality of the Seeds

- Quality of the seed is an important factor that determines the crop yield.
- Selection of good seeds is done by putting the seeds in water.
- The dead and damaged seeds become hollow and float on water whereas the good seeds sink.

Traditional Tools

- Before the advent of modern agricultural machinery, traditional tools were used by farmers.
- These include ploughs, shovels, scythes and pickaxes.
- The traditional tool used to sow the seeds was like a funnel.
- Once seeds put into this funnel, they would go to 2-3 tubes having sharp ends.
- The ends will pierce into the soil and place the seeds there.

Seed Drill

- Seed drills are used for sowing with the help of tractors.
- It ensures that seeds are sown uniformly, at a particular depth and are covered by soil after sowing.

Nursery

- A nursery is a place where young plants and trees are grown for planting elsewhere.
- Nursery acts as a repository of saplings.

Germination of Seeds

- Germination of the seed happens when the seed is sowed in the land and watered.
- A plant starts to emerge from the seed and starts to grow.

Adding Manure and Fertilisers

Manure/Fertilizers

• Manures and fertilizers are the substances that are added to the soil to increase their fertility.

• While manures are made by decomposition of organic substances, fertilizer is made of inorganic chemicals.

Fertilizer	Manure
Fertilizer is an inorganic salt	Manure is prepared from organic matter such as human waste, cow dung and farm waste
Fertilizers are manufactured in factories	Manures can be prepared in farms
Fertilizers are added in comparatively smaller quantities	Manures need to be added in large quantity as the nutrient content is less
Fertilizers do not provide any humus to the soil	Manures provide a lot of humus to soil

Difference between Manure and Fertilizers

Disadvantages of Using Fertilizers

- Excessive use of fertiliser can cause pollution.
- It can also change pH of the soil in certain rare cases.

Leaving the Land Fallow

- When land is left fallow for a certain period of time, the land replenishes its nutrients by itself.
- This land can be used for agriculture again.

Crop Rotation

- Crop rotation ensures that the same crop will not grow continuously and lead to the erosion of the soil fertility.
- By growing crops that require different sets of nutrient, we can ensure the soil fertility is restored.

Protecting from Weeds

Weeds

Weeds are undesirable plants that may grow naturally along with the crop.

• Weeds compete with the crops by absorbing all the water, nutrients, space and light.

Tilling

• Tilling is a process done before sowing of crops that helps in uprooting and killing of weeds.

Manual Removal

• Manual removal includes physical removal of weeds by uprooting them from the soil or chopping them off to ground level periodically.

Weedicides

- Chemicals used to kill the weeds are known as weedicides.
- They usually don't damage the crop.

Harvesting

• Harvesting is the process of cutting the crop after it is mature.

Methods of Harvesting

- Harvesting is done by 2 methods.
- First is the manual method where a sickle is used.
- Second is the mechanical method where a huge machine called harvester is used.

Threshing

- Threshing is the process of loosening the grains from the chaff.
- While it can be done manually, these days a machine is used that separates all the grain seeds.



Manual Threshing of Crops

Winnowing

- Winnowing is the process of separation of grain seeds from the chaff using the help of the wind.
- Due to the wind, the lighter chaff flies away and the heavier grains fall down.



Winnowing of Rice

Storage

- Storage of the grains is an important step in agriculture.
- After harvesting steps, the ready grains are stored in granaries or silos.
- The grains have to stored in a dry place that does not have a rodent or fungal infestation.
- Fumigation of storage places is carried out to make it free from microbes.

Granaries

• Granaries are the place where the freshly obtained food grains are stored.

Animal Husbandry

• Animal husbandry is the management and care of farm animals for milk, egg or meat.

VIDEO LINK-https://www.youtube.com/watch?v=CengNmA

I. MULTIPLE CHOICE QUESTIONS

Choose the correct option:

- **1.** Watering the crops is called:
- (a) sowing
- (b) manuring
- (c) tilling
- (d) irrigation
- **2.** Weeds are the:
- (a) main crop plants
- (b) insects and pests
- (c) unwanted plants growing along the crop
- (d) chemical substances
- **3.** Combines are used for:
- (a) sowing of seeds
- (b) harvesting the crops
- (c) threshing
- (d) harvesting and threshing both.
- **4.** Separating grains from chaff is called:
- (a) winnowing
- (b) threshing
- (c) fallow
- (d) harvesting.
- 5. Weedicides are used to destroy:
- (a) insects
- (b) weeds
- (c) pests
- (d) none of these.
- 6. Kharif crops are sown in
- (a) March, April
- (b) May, June
- (c) October, November

- (d) Any time.
- 7. Wheat and gram belong to
- (a) Rabi crops
- (b) Kharif crops
- (c) Both of these
- (d) None of these.

8. Examples of kharif crops are

- (a) Wheat and maize
- (b) Gram and maize
- (c) Paddy and maize
- (d) All of these.
- **9.** 2-4D is a
- (a) Pesticides
- (b) Insecticides
- (c) Fungicides
- (d) Weedicides.
- **10.** Seed drill is used to
- (a) sow the seeds
- (b) remove the weeds
- (c) remove the pest
- (d) mix manure in the soil.

NCERT Solutions for Crop Production and Management

Q1. Select the correct word from the following list and fill in the blanks. float, water, crop, nutrients, preparation

- (a) The same kind of plants grown and cultivated on a large scale at a place is called_____
- (b) The first step before growing crops is______ of the soil.
- (c) Damaged seeds would_____ on top of water.

(d) For growing a crop, sufficient sunlight,_____and _____from the soil are essential.

Ans. (a) crop (b) preparation (e) float (d) water, nutrients. **Q2.** Match items in Column A with those in Column B.

Q2. Match items in Column A with those in Column E

Column A	Column D
(i) Kharif crops	(a) Food for cattle
(ii) Rabi crops	(b) Urea and super phosphate
(iii) Chemical fertilisers	(c) Animal excreta, cow dung, urine and plant wastes
(iv) Organic manure	(d) Wheat, gram, pea
	(e) Paddy and maize
Ama	

Ans.

Column A

Column B

- (i) Kharif crops (e) Paddy and maize
- (ii) Rabi crops (d) Wheat, gram, pea
- (iii) Chemical fertilisers (b) Urea and super phosphate

(iv) Organic manure (c) Animal excreta, cow dung, urine and plant wastes

Q3. Give two examples of each:

- (a) Kharif crop
- (b) Rabi crop

Ans. (a) Paddy and maize. (b) Wheat and gram.

Q.4. Write a paragraph in your own words on each of the following:

- (a) Preparation of soil
 - (b) Sowing
 - (c) Wedding
 - (d) Threshing

Ans. (a) **Preparation of soil:** Soil is prepared before sowing the seeds. The soil is loosened to increase the absorption of water and manures. Loosening of soil particles adds humus and nutrients in the soil that increases crop yields. Tilling or loosening the soil is done by ploughs which are pulled by a pair of bulls. Tractor driven cultivators are also used to loosen the soil.

(b) Sowing: After preparation of soil it is ready for sowing of seeds. The healthy and clean seeds should be selected. The sowing is done by seed drills or funnel shaped tools. Seed drills are the modern instruments which sow the seeds at proper depth and proper distance.

(c) Weeding: The unwanted plants in the crops are called weeds. These weeds absorb the nutrients from the soil. So it is necessary to remove them. Weeds are either removed manually or by mechanical tools. The process of removal of weeds is called weeding. Some chemicals like 2, 4-D are also used to kill the weeds.

(d) **Threshing:** Separation of grains from the chaff is called threshing. When the crop is harvested, it is cut along with the stalks. They are then separated and the grains are removed. Winnowing machine is used to separate grains from chaff.

Q5. Explain how fertilisers are different from manures.

Ans. (i) Manures are organic substances while fertilisers are chemical substances.

- (ii) Manures are prepared in fields while fertilisers are prepared in factories.
- (iii) Manures contain all the nutrients while fertilisers are rich in certain nutrients.
- (iv) Manures provide humus while fertilisers do not provide any humus.
- **Q6.** What is irrigation ? Describe two methods of irrigation which conserve water.

Ans. The process of watering the crops is called irrigation.

Two methods of irrigation are:

(i) Sprinklers: Sprinklers work as fountains. Long perpendicular pipes have holes at regular distances. When water is supplied, it comes out of these holes and spray water in field. These holes have rotating nozzles which sprinkle water in all directions. They control wastage of water.

(ii) Drip System: This system is used to save water as it allows the water to flow drop by drop at the roots of the plants. It is the best technique for watering fruit plants, gardens and trees. Water is not wasted at all.

Q.7. If wheat is sown in the kharif season, what would happen? Discuss.

Ans. Wheat crop does not require much water to grow, so wheat would not grow in kharif season. The seeds would get destroyed in excess water due to rainy season.

Q8. Explain how soil gets affected by the continuous plantation of crops in a field.

Ans. If we sow continuously in a field then the lacking of nutrients takes place in the soil. The field becomes unfertile. It does not give any time to soil to replenish the nutrients.

Thus the soil is unable to sustain any further healthy and good crop.

Q9. What are weeds? How can we control them?

Ans. Weeds are unwanted plants. They grow with crops. They compete for nutrients and water with main crop. So weeds are very harmful. Process of controlling the weed is called weeding. Weeding is done manually by using khurpi and by using mechanical machines. Weeds are also controlled by using

some chemical substances like 2, 4-D. These chemicals are called weedicide and used to kill and destroy the weed.

ASSIGNMENT FOR PRACTICE

- 1. What are the basic practices of crop production?
- 2. What are crops? Explain the two crops in detail.
- **3.** Write a short note on weeding.
- 4. Explain how fertilizers are different from manures?
- 5. Give examples of two Rabi and two Kharif crops.
- 6. Explain modern method of sowing.
- 7. What is crop rotation and why is it important?
- 8. How are grains stored and protected?
- 9. Mention names of any two fertilizers.
- 10. Why is it necessary to sow seeds at appropriate depth?

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Social Science

Chapter – 01 History class 8 notes

How, When and Where

- How important are dates:
- (i) History is synonymous with dates.
- (ii) We compare the past with present.
- (iii) We continue to associate history with a string of dates.
- Which Dates:
- (i) Selection of date depends on the story of past.
- (ii) Focusing on a particular set of events is important.
- How do we Periodise:

(i) James Mill divided the Indian history into three periods: Hindu, Muslim and British. (ii) British rule represented all the forces of progress and civilization.

• What is colonial:

(i) Colonial refers to the British rule.

(ii) British rule brought about changes in values and tastes, customs and practices.

• How do we know Administration:

(i) One important source is the official records of the British administration.

(ii) The British felt all important documents and letters needed to be preserved.

(iii) Specialized institutions like archieves and museums were established to preserve

important records.

• Surveys become important:

(i) The practice of surveying became commone under colonial administration.'

(ii) Surveys like botanical zoological, archaeological, anthropological and forest survesys

were in the list of British administration.

• What do Official Records not Tell:

(i) The official records do not tell about the needs of people of India.

(ii) Many official records hide the truth and only show one aspect of the event.

Video link - https://youtu.be/LDwZ35l1G8M

Worksheet:

https://www.studiestoday.com/worksheet-history-cbse-class-8-history-revision-1-216776.html