ENGLISH ASSIGNMENT

EXPLORERS ON ICE

Learning Outcomes

- Read and comprehend the text.
- Admire the journey of the explorers and imbibe the qualities of courage, determination, patience and handwork.
- Answer extrapolatory and value based questions.
- Enhance knowledge about primitive bird "Penguins".

THEME OF THE CHAPTER

The chapter is about an adventurous journey of Dr Edward Wilson, Apsley Cherry Garrad and Lieutenant Henry Robertson Bowers to find three emperor penguin eggs.

TITLE OF THE CHAPTER

The title "Emperors on Ice" refers to the emperors penguins that live in Antarctic polar region. The title also refers to the brave scientists who went to Antarctica .They struggled to get their eggs.

REASON FOR THE EXPEDITION

At that time it was thought that the emperor penguin was one of the planet's most primitive birds and that the analysis of its embryos would reveal links between all birds and their reptiles predecessors.

ROUTE MAP OF JOURNEY

- Antarctica's Ross Island
- Base Camp – Cape Evans
- Penguin's Rookery-Cape Crozier on Ross Island

STRUGGLE DURING EXPEDITION

- The explorers had to travel 120 kms in the freezing, pitch black battered weather to Cape Crozier.
- They were suffering from frostbite.
- The sleep bag was frozen and they took 45 minutes to get into the sleep bag every night.
- Emperor penguins were hard to locate and study.
- They were trapped in violent blizzard.
- The temperature was below – 60F
- Ice was moving and splitting like glass.
- Their tent and igloo roof blew away.
- They were physically injured by extreme cold winter.
- The travel claimed the life of two of the explorers.

WORST EXPEDITION OF THEIR LIFE

- The curator of the American Museum of Natural History did not recognize the importance of eggs. He asked Cherry Garrard to take the eggs to an egg shop.
- Later it was also found that they did not add any understanding in the study of penguin embryology.

Q1 Answer the following questions

a) What did the scientists want to establish after studying the eggs?
b) What additional benefit did they expect to achieve through the journey?
c) What motivated Wilson to undertake this difficult journey?
d) What was the curator's first reaction when he saw the eggs?

ACTIVITY

Write an article for the newspaper on the Journey Of the Explorers in the extreme cold weather of Antarctica and the struggle they faced while getting the three eggs of the penguins in about 100-120 words.

VIDEO LINKS

https://www.youtube.com/watch?v=PdBT670fiCQ

https://youtu.be/A6sAgH8N7C8?list=LL

(HINDI)कक्षा 8

"अकबरी लोटा"

PLEASE WATCH THIS VIDEOS

लेखक – अन्नपूर्णानन्द वर्मा

जन्म – 21 सितंबर 1895 (काशी, उत्तर प्रदेश)

मृत्यु – 04 दिसंबर 1962

पाठ प्रवेश –

अन्नपूर्णानन्द की कहानी "अकबरी लोटा" एक हास्य पूर्ण कहानी है। लेखक ने कहानी को बहुत ही रोचंक तरीके से प्रस्तुत किया गया है और साथ के साथ बताया गया है कि परेशानी के समय में परेशान न होकर समझदारी से किस तरह से एक समस्या का हल निकाला जा सकता है और दूसरी बात इस कहानी में यह भी बताया गया है कि एक सच्चा मित्र ही मित्र के काम आता है और उसके लिए बहुत कुछ कर गुजर जाता है। कहानी के माध्यम से लेखक हमें सीख देना चाहता है कि सही वक़्त पर सही समझ का उपयोग करना कितना जरुरी है। इस कहानी के मुख्य पात्र हैं – लाला झाऊलाल और उनके मित्र पंड़ित बिलवासी मिश्र जी।

पाठ का सार –

पंडित अन्नपूर्णानद जी ने इस कहानी में बताया है कि लाला झाऊलाल नामक व्यक्ति बहुत अमीर नहीं है। पर उन्हें गरीब भी नहीं कहा जा सकता। पत्नी के ढाई सौ रूपए माँगने तथा अपने मायके से लेने की बात पर अपनी इज्जत के लिये सात दिन में रुपये देने की बात की।

पाँच दिन बीतने पर अपने मित्र बिलवासी को यह घटना सुना कर पैसे की इच्छा रखी पर उस समय उनके पास रूपए न थे। बिलवासी जी ने उसके अगले दिन आने का वादा किया जब वह समय पर न पहुँचे तो झाऊलाल चिंता में छत पर टहलते हुए पानी माँगने लगे। पत्नी द्वारा लाये हुए नापसंद लोटे में पानी पीते हुए लोटा नीचे एक अंग्रेज पर गिर गया।

अंग्रेज एक लंबी चौड़ी भीड़ सहित आँगन में घुस गया और लोटे के मालिक को गाली देने लगा। बिलवासी जी ने बड़ी चतुराई से अंग्रेज को ही मुख बनाकर उसी लोटे को अकबरी लोटा बताकर उसे 500 रूपए में बेच दिया। इससे रुपये का इंतजाम भी हो गया और झाऊलाल की इज्जत भी बच गई। इससे लाला बहुत प्रसन्न हुए उसने बिलवासी जी को बहुत धन्यवाद दिया।

बिलवासी ने पत्नी के संदूक से लाला की मदद के लिये निकले गए ढाई सौ रुपये उसके संदूक में वापस रख दिए फिर चैन की नींद सो गए।

शब्दार्थ <mark>(किन्ही पाँच शब्दों के वाक्य)</mark>

मासिक – महीने

ढाई सौ – 250

रोब – अकड़

प्रतिष्ठा – इज्जत

गाथाएँ – कहानियाँ

दुम – पूंछ

विपदा – मुसीबत

खुक्ख – खाली हाथ

हेंकड़ी – अकड़

उधेड़-बुन – फिक्र

प्रकट – उपस्थित

बेढ़ंगी – बेकार

अदब – सम्मान

मुँडेर – किनारा

वेग – गति

ओझल – गायब

ईजाद – खोज

निरीह – बेचारा

विज्ञ – ज्ञानी

सुशिक्षित – पढ़ा-लिखा

हक – अधिकार

भूरता – कुचलना

कूँची – चाबी

पारसाल – पीछले साल

पुश्त – पीढ़ी

प्रश्न 1 – "लाला ने लोटा ले लिया, बोले कुछ नहीं, अपनी पत्नी का अदब मानते थे।" लाला झाउलाल को बेढंगा लोटा बिलकुल पसंद नहीं था। फिर भी उन्होंने चुपचाप लोटा ले लिया। आपके विचार से वे चुप क्यों रहे? अपने विचार लिखिए।

उत्तर – एक सभ्य मनुष्य अपनी पत्नी का सम्मान करता है। लाला झाउलाल सभ्य मनुष्य थे। कहानी में लाला झाउलाल छह दिनों तक भी रूपयों का इंतजाम नहीं कर पाए थे इसलिए वह बहुत दुःखी और शर्मिन्दा थे। और इसीलिए उन्होंने लोटा चुपचाप ले लिया और पानी पीने लगे।

प्रश्न 2 – "लाला झाउलाल जी ने फौरन दो और दो जोड़कर स्थिति को समझ लिया।" आपके विचार से लाला झाउलाल ने कौन-कौन सी बातें समझ ली होंगी?

उत्तर – लाला भीड़ को घर में घुसते देख ही समझ गए कि उनके हाथ से छूटा लोटा जरूर किसी पर गिरा है। जिसकी शिकायत लेकर ये भीड़ उनके घर में चली आ रही थी।

प्रश्न 3 – बिलवासी जी ने रुपयों का प्रबंध कहाँ से किया था? लिखिए।

उत्तर – बिलवासी जी ने रुपयों का प्रबंध अपनी पत्नी के संदूक से चोरी करके निकाल कर किया था। यद्यपि चाबी उसकी पत्नी की सोने की चेन में बँधी रहती थी, पर उन्होंने चुपचाप उसे उतार कर ताली से संदूक खोल लिया था और रुपए निकाल लिए थे। बाद में वे रुपए चुपचाप वहीं रख भी दिए। पत्नी कुछ न जान पाई।

प्रश्न 4 – आपके विचार में अंग्रेज ने वह पुराना लोटा क्यों खरीद लिया? आपस में चर्चा करके वास्तविक कारण की खोज कीजिए और लिखिए।

प्रश्न 5 – पं. बिलवासी मिश्र कहाँ आते दिखाई पड़े? उन्होंने आते ही क्या किया? उन्होंने अंग्रेज के साथ किस प्रकार सहानुभूति प्रकट की?

प्रश्न 6. इस कहानी में लेखक ने अनेक मुहावरों का प्रयोग किया है। कहानी में से पाँच मुहावरे चुनकर उनका प्रयोग करते हुए वाक्य लिखिए।

1. चैन की नींद सोना – (निश्चिंत सोना)

2. आँखों से खा जाना – (क्रोधित होना)

3. आँख सेंकने के लिए भी न मिलना – (दुर्लभ होना)

4. मारा-मारा फिरना – (ठोकरें खाना)

5. डींगे सुनना – (झूठ-मूठ की तारीफ सुनना)

मूल्यपरक प्रश्न

MATHEMATICS – Square and Square Root

Please watch these video:
https://www.youtube.com/watch?v=N3CXE7u9adA
https://www.youtube.com/watch?v=NFcOa-DBJj0

Learning Outcomes:

i. Students will understand the concept of square root.
ii. Students will be able to find the square root of a number through repeated subtraction and through prime factorization method.

Square Roots

Square root is the inverse operation of square. Positive square root of a number is denoted by the symbol $\sqrt{}$

The square root of a number 'a' is that number which when multiplied by itself gives that number 'a' as product.

Thus, if b is the square root of a;

then $b \times b = a$ or $b^2 = a$

Symbolically, we write $b = \sqrt{a}$

Note: $b = \sqrt{a} \Leftrightarrow b^2 = a$

i.e., b is the square root of a if and only if a is the square of b.

For example, $3^2 = 9$ gives $\sqrt{9} = 3$

Finding square root through repeated subtraction

We subtract successive odd number starting from 1 from the given square number till we get zero. The number of times, we have to make subtractions, is called the square root of the given square number.

Consider $\sqrt{81}$. Then,

(i) 81 − 1 = 80 (ii) 80 − 3 = 77 (iii) 77 − 5 = 72 (iv) 72 − 7 = 65
(v) 65 − 9 = 56 (vi) 56 − 11 = 45 (vii) 45 − 13 = 32 (viii) 32 − 15 = 17
(ix) 17 − 17 = 0
From 81 we have subtracted successive odd numbers starting from 1 and obtained 0 at 9th step.
Therefore $\sqrt{81}$ = 9.

Finding square root through prime factorization

We find the prime factors of the given perfect square and arrange in pairs. Then, we choose one factor from each pair and multiply together. The product thus obtained gives the required square root.
Note: A square number has complete pairs of its prime factors.

Example: Find the square root of 324.

Solution:

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

We know that the prime factorisation of 324 is
324 = 2 × 2 × 3 × 3 × 3 × 3

By pairing the prime factors, we get
324 = 2 × 2 × 3 × 3 × 3 × 3 = $2^2 \times 3^2 \times 3^2 = (2 \times 3 \times 3)^2$
So, $\sqrt{324}$ = 2 × 3 × 3 = 18

Example: Find the smallest square number which is divisible by each of the numbers 6, 9 and 15.
Solution: First find the smallest common multiple and then find the square number needed. The least number divisible by each one of 6, 9 and 15 is their LCM. The LCM of 6, 9 and 15 is 2 × 3 × 3 × 5 = 90.

2	6, 9, 15
3	3, 9, 15
3	1, 3, 5
5	1, 1, 5
	1, 1, 1

Prime factorisation of 90 is 90 = 2 × 3 × 3 × 5.
We see that prime factors 2 and 5 are not in pairs. Therefore 90 is not a perfect square.
In order to get a perfect square, each factor of 90 must be paired. So we need to make pairs of 2 and 5. Therefore, 90 should be multiplied by 2 × 5, i.e., 10.

Hence, the required square number is 90 × 10 = 900.

Solve the following Questions:

Q-1) $\sqrt{5625}$ = ?

    a. 55
    b. 65
    c. 75
    d. 85

Q-2) What could be the possible 'one's' digits of the square root of 9801?

    a. 4 or 6
    b. 2 or 8
    c. 1 or 9
    d. 3 or 7

Q-3) _____is the inverse operation of square.

    a. Cube root
    b. Square root
    c. Perfect square
    d. None of these

Q-4) What could be the possible "one's digit" of the square root of 625?

    a. 0
    b. 4
    c. 6
    d. 5

Q-5) By which smallest number 90 must be multiplied so as to make it a perfect square?

Q-6) Which is the smallest square number that is divisible by each of the number 4, 9 and 10?

Q-7) Find the square root of 121 by repeated subtraction method.

Q-8) Find the square root of 9216 by Prime Factorisation method.

Activity :

Observe the following pattern and find the missing numbers;

$1^2 =$ 1

$11^2 =$ 1 2 1

$111^2 =$ 1 2 3 2 1

$1111^2 =$ 1 2 3 4 3 2 1

$1111^2 =$ 1 _ _ _ 5 _ _ _ 1

Write the square of 1111111 using above pattern.

Q-1) In a school, students of class VIII collected ₹9216 to give a donation to an NGO working for the education of poor children. If each student donated as many rupees as the number of students in class VIII. Find the number of students in class VIII.
Why should we donate money for the education of poor children? What values are being promoted?

SUBJECT –SCIENCE

CHAPTER- COMBUTION AND FLAM

Objective /Learning outcome-Students will know the different types of fuel. They will use fuel judicially.

LINK-https://youtu.be/YheB51LPg44

Q1.Good fuels have
(a) low ignition temperature and high calorific value.
(b) low ignition temperature and low calorific value.
(c) high ignition temperature and high calorific value.
(d) high ignition temperature and low calorific value.

ANS-(a) low ignition temperature and high calorific value.
Good fuels should have low ignition temperature (the lowest temperature at which a substance catches fire) and high calorific value (produce a large quantity of heat).

Q2.Calorific value of a fuel is the heat energy produced when
(a) any amount of the fuel is completely burnt.
(b) one kilogram of the fuel is completely burnt.
(c) one milligram of the fuel is completely burnt.
(d) hundred grams of the fuel are completely burnt.

ANS-(b) one kilogram of the fuel is completely burnt.

The amount of heat energy produced on complete combustion of 1 kg of a fuel is called its calorific value.The calorific value of a fuel is expressed in kilojoule per kg (kJ/kg)

Q3.Which poisonous gas is formed as a result of incomplete combustion?
(a) coal gas
(b) carbon monoxide
(c) carbon dioxide
(d) nitrogen oxide

ANS-(b) carbon monoxide

Incomplete combustion of fuels produces carbon monoxide gas. It is dangerous to burn coal in a closed room because it produces carbon monoxide gas, which can kill persons sleeping in that room.

Q4.Acid rain can be caused by the burning of
(a) petrol.
(b) CNG.
(c) diesel.
(d) coal.

ANS-(d) coal

Sulphur is found as a trace element in coal. When coal is burnt, sulphur combines with oxygen to form sulphur dioxide (SO_2). SO_2 does not react with most chemicals found in the atmosphere and can travel long distances. Further, it reacts with water vapors in the atmosphere and causes acid rains

Q 5-To extinguish a flame, which of these methods can be used?
(a) reduce temperature to below ignition temperature
(b) remove combustible substance
(c) cut off air supply
(d) any one of these

ANS-(d) any one of these

Job of a fire extinguisher is to cut off the supply of air, or to bring down the temperature of the fuel, or both. In some cases, a flame can also be extinguished by just removing the combustible substance

Q6.The hottest zone of a candle flame is
(a) non-luminous zone.
(b) luminous zone.
(c) dark zone.
(d) blue zone at the base of the wick.

ANS-(a) non-luminous zone.

Non-luminous zone is a zone of complete combustion. It is the outermost and the hottest zone of the flame with plenty of oxygen available from the surrounding atmospheric air.

Q 7-Which of these is a solid pollutant?
(a) SPM
(b) carbon monoxide
(c) nitrogen oxides
(d) sulphur dioxide

ANS-(a) SPM

Suspended Particulate Matter (SPM) consists of mist, dust, fumes and smoke. Common chemicals that

constitute SPM are nickel, arsenic and lead. When these particles are inhaled, they tend to accumulate in the lungs and cause respiratory problems and damage the lungs.

Q 8-Which of these fuels has the highest calorific value?
(a) CNG
(b) coal
(c) hydrogen
(d) petrol

ANS-(c) hydrogen

Q 9-What is the process of burning of substances with the evolution of heat and light called?

ANS-The process of burning of substances with the evolution of heat and light is called combustion.

ACTIVITY-To show that metal conducts heat.

Velue based question-Why should we use CNG vehicles instead of diesel or petrol vehicles?

GEOGRAPHY

CHAPTER 4:AGRICULTURE   STUDY MATERIAL

LEARNING OUTCOMES: Sudents will be able to know about various activities, different types of cultivation and inputs required in agriculture, various operations performed in agriculture and output of farming.

Points to remember:

- Economic activities are of three types: (i) Primary Activities, (ii) Secondary Activities, (iii) Tertiary Activities.

- **Primary activities** are those activities which are connected with extraction and production of natural resources, for example, agriculture, fishing, etc.

- **Secondary activities** are concerned with the processing of natural resources to manufacturing products like baking of bread, weaving of cloth, etc.

- **Tertiary activities** provide services like transport, trade banking, insurance, advertising, etc.

- Agriculture is a primary activity which include growing crops, fruits, vegetables, flowers and rearing of livestock.

- 50% of persons in the world are engaged in agricultural activity.

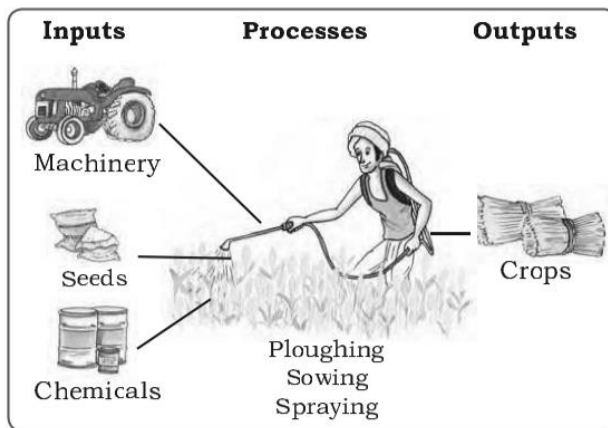- 2/3 of India's population is still dependent on agriculture.

- Favourable topography of soil and climate are vital for agricultural activity. The land on which the crops are grown is known as arable land.
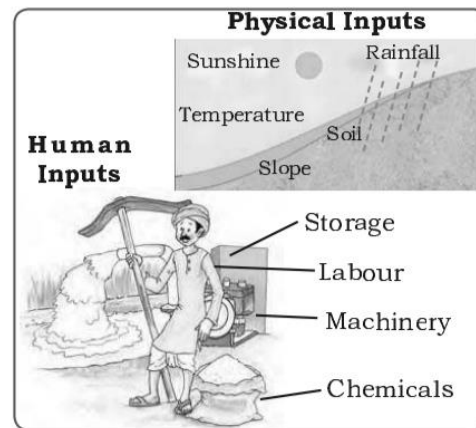
Various types of cultures:

1. Agriculture: raising crops and rearing livestock

2. Sericulture: rearing of silk worms and silk production

3. Pisciculture: Breeding of fish

4. Viticulture: Cultivation of grapes

5. Horticulture: Growing of vegetables, flowers and fruits

Farm System:

1. Agriculture or farming is a system in which seeds, fertilizers, machinery, and labour are important inputs.

2. Ploughing, sowing, irrigation, weeding, and harvesting are some of the operations.

3. The outputs from the system include crops, dairy, wool and poultry products.

4. Farming includes the rearing of crops as well as animals.

5. Farming removes the concern of farmers of bad crops and crop loss as well.

Fig 4.2: The farm system of an arable farm   Fig 4.3: Physical and human farm inputs

VIDEO LINK

https://youtu.be/W21Toek-8Is

https://youtu.be/9UtW8KPbY-0

MCQ

1. What is cultivation of grapes called'?
(a) Sericulture
(b) Viticulture
(c) Floriculture
(d) Horiculture

2. The important inputs like seeds, fertilisers, machinery etc form a system called as?
(a) Barter system
(b) Water system
(c) Farm system
(d) All of these

3. Which Of the following are primary activities?
(a) Agriculture
(b) Mining
(c) Fishing
(d) All of these

4. **- Around ___ of Indian population depends on agriculture.**
A) 2/3
B) 1/5
C) 4/5
D) 1/3

5. **Arable land is**
A) land where crops are grown.
B) land where trees are cut.
C) land which is cleared for agriculture
D) land where mining takes place

6**. Which of the following physical input is required in agriculture?**
A) labour
B) slope
C) rainfall
D) Sunlight.

7. **An example of tertiary activity is**
A) Advertising
B) Hunting
C) Agriculture
D) fishing

8.**- Fishing is an example of**
A) Primary activity
B) Secondary activity
C) Tertiary activity
D) Agriculture activity

9. The word 'agriculture' has been derived from Latin word
A) ageri
B) ager
C) agri
D) agar

10- Growing flowers are identified under
A) Horticulture
B) Pisciculture
C) Sericulture
D) Viticulture

II. SHORT ANSWER TYPE QUESTIONS

1.Define agriculture.

2. Distinguish between primary and tertiary activities.

3. What is meant by arable land?

4. How was the word agriculture coined?

III. LONG ANSWER TYPE QUESTIONS

1.Explain the farm system.

2. What are the different kinds of cultivation?

Activity: Find out the difference between the life style of farmers in the USA AND India on the basis of pictures collected from magazines ,books,newspapers etc.

Subject-civics

Sub teacher-Poonam Pathak

Topic:- Chapter 4 – Understanding Our Criminal Justice System

Sub Topic :-   Criminal Justice System

Learning Objectives:- To make Students aware about the Judiciary System and division of Laws

Methodology:-PPT, Video and word file

You tube link:-https://youtu.be/Gr8-_uShMlE

Understanding Our Criminal Justice System

Criminal justice is the system of practices and institutions of governments directed at upholding social control, deterring and mitigating crime, or sanctioning those who violate rlaws with criminal penalties and rehabilitation efforts.

There are four people who play a key role in our criminal justice system. They are- Police, Public Prosecutor, the defence lawyer, and the Judge.

According to the Constitution, every individual charged of a crime has to be given a fair trial.

Key terms :-

Witness: It refers to the person who is called upon in court to give a first-hand account of what he/she has seen, heard or knows.

Detention: It refers to the situation when the police forcibly keeps someone in custody.

Offence: Any act that is defined by the law as a crime.

Investigation: It refers to an official examination of the facts about a crime.

Memo: It refers to an official note.

Cognizable: It refers to an offence for which the police may arrest a person without the court's permission.

Cross-examine: To question the witness carefully who has already been examined by the opposite side to determine the truth of his/her testimony.

Evidence: It refers to the facts or signs that make you believe that something is true.

Confession: Acceptance of an offence.

Assignments:

1. Describe the criminal justice system in India?
2. State four key players in criminal justice system.
3. Define:-
   a. Detention
   b. Cognizable
   c. Cross-examine
   d. Offence
   e. Detention

SANSKRIT

PLEASE WATCH THIS VIDEO https://youtu.be/5vmGg2QEWcc

अधिगम बिंदू : -

। छात्रो को पत्र लेखन का ज्ञान ।

२ छात्र वाक्य रचना सीखे गे।

3 पत्र के ज्ञान से विषय रुचिकर होगा ।

4 . छात्र पर्यावरण की सुरक्षा के विषय मे . जागरूक होगें।

पत्रलेखनम्

प्र . भवान देव दासः अस्ति । स्वानुजरामदासम् पत्रम लिखत । पत्रे अनुजम् पर्यावरणस्य सुरक्षा अस्माकं कर्तव्यं अस्ति इति लिखत ।