

LAKSHMIPAT SINGHANIA ACADEMY

OPEN BOOK PROJECT

SESSION: 2024 – 2025

TERM: 1

CLASS - III

THEME: Food Adulteration & Our Extinct Animal Kingdom

- ✚ All projects to be done **individually** by the students.
- ✚ Instructions given by each subject teacher to be followed.
- ✚ Hard copies of projects must be submitted to the respective subject teachers by 18th June 2024.

ENGLISH**CLASS – III****FULL MARKS - 20**

- The English project has two aspects: **Making a Badge & Poster Writing**
- Read the instructions carefully.
- Refer to the internet to gather information but you must write the matter in your own words.
- You may either draw and colour or stick relevant pictures.

THEME: Food Adulteration and Our Extinct Animal Kingdom**LEARNING OBJECTIVES**

After the completion of the project students will be able to -

- make a poster and design a badge using their creativity
- develop competence and confidence to write independently
- express themselves in grammatically correct sentences

Food Adulteration

Food adulteration is the process of intentionally adding harmful substances into food items by which the nature and quality of the given food are reduced. Examples – adding chalk powder to milk, brick powder to chilli powder, addition of pebbles and stones in rice and pulses etc.,

Adulterated food products are responsible for mild to severe health impacts. Diarrhoea, nausea, and allergic reactions are some of the illnesses caused by food adulteration.

1. WHAT YOU NEED TO DO: Design an awareness badge with a safety tip.

World Food Safety Day is celebrated on the 7th of June to make people aware of food safety issues. Imagine you are the food ambassador of your school and on the occasion of World Food Safety Day you decided to create awareness about food adulteration.

Make a badge with a safety tip written on it that will help everyone keep their life free from food adulteration.

- To make the badge you can use old cardboard.
- Be creative and give any shape to your badge.
- Don't forget to write a safety tip on the badge.

Sample of Badges



Our Extinct Animal Kingdom



In the last couple of decades, several species of our animal kingdom have been driven to extinction like the dodo, Asiatic cheetah, Javan rhinoceros etc. This has happened, in large part, due to human interference. This interference is sometimes in the form of poaching or sometimes it is deforestation and climate change.

2. WHAT YOU NEED TO DO: Poster Writing

Imagine these extinct animals have returned to earth and are making an appeal to humankind on behalf of endangered animals. Endangered animals are animals that are at a high risk of getting extinct, if not protected now.

Your poster writing must include the following:

- A suitable title/heading of your choice.
- 2 ways to protect the endangered animals so that they don't go extinct.
- A message from the extinct animals to the humans about the need to protect the endangered animals.
- 2-3 suitable illustrations

*Use either white or light-coloured Fabriano sheet to do the poster writing.

Note- Do not forget to mention your name, class, section and roll no behind the poster and the badge.

LEARNING OUTCOME

At the end of the project, students should be able to know about food safety and inform others about it, know about the need to protect animals, develop creative and research skills, and express themselves in grammatically correct sentences.

RUBRIC

CATEGORY	4	3	2	1
Accuracy of the Content	The project addresses the requirement in a meaningful and relevant way. The information is accurate and demonstrates proper research work.	The project addresses the requirement partially in a meaningful and relevant way. The information is accurate and demonstrates partial research work.	The project addresses the requirement. The information is presented but not in a cohesive manner and has scope for more research work.	The project somewhat addresses the requirement, but not in a cohesive or concise manner. Lacks proper research work.
Writing Skill – vocabulary, grammar and spellings	Used grammatically correct sentences with little to no error. Used proper and related vocabulary with negligible spelling errors.	Used sentences with partial grammatical errors. Used related vocabulary with one to two spelling errors.	Used sentences with quite a few grammatical errors. Limited use of vocabulary with three or more spelling errors.	Sentences are grammatically incorrect. Did not use related vocabulary and has plenty of spelling errors.
Art Integration	The illustrations were exceptionally done and shows creative and artistic expertise. The pictures used are absolutely relevant to the theme.	The illustrations were quite exceptionally done and shows some creative and artistic expertise. The pictures are moderately relevant to the theme.	The illustrations were average in its creative and artistic approach. The pictures are to some extent relevant to the theme.	The illustrations lack creative and artistic approach. The pictures are not relevant to the theme.

Presentation	Exceptionally neat in presentation and the layout of the project is remarkably done.	Neatly presented and the layout of the project is more or less remarkably done.	Somewhat neat in the overall presentation and in the layout of the project.	Untidy presentation and lacks a proper layout of the project.
Creativity and Originality	The project shows a large amount of creative and critical thinking.	The project shows a good amount of creative and critical thinking.	The project shows limited amount of creative and critical thinking.	The project shows lack of creative and critical thinking.

Class-III

Subject- Hindi 2nd Language

TOPIC- भोज्य पदार्थों में मिलावट एवं विलुप्त होते जीव

उद्देश्य (Objectives)

- कल्पनाशीलता का विकास
- रचनात्मकता का विकास
- भाषा शैली का विकास
- व्यावहारिक ज्ञान का विकास
- नैतिक मूल्यों का विकास
- समसामयिक समस्याओं के प्रति जागरूकता
- भाषिक क्षमता और वैचारिक क्षमता का विकास



भोजन के बिना कोई भी प्राणी जवित नहीं रह सकता। खुद को स्वस्थ रखने के लिए भोजन का पौष्टिक होना आवश्यक है। लेकिन स्वार्थी मनोवृत्ति के लोग खुद के तुच्छ लाभ के लिए लोगों के स्वास्थ्य और जीवन से खिलवाड़ कर रहे हैं। फल, सब्जी, अन्न, और पेय पदार्थों में कई तरह के मिलावट हो रहे हैं। इसी मिलावट की समस्या को दर्शाते हुए विद्यार्थी एक पत्रिका का निर्माण परियोजना कार्य के अंतर्गत करेंगे।

क) पत्रिका निर्माण

परियोजना कार्य में निम्नलिखित बिन्दुओं का समावेश होगा:-

1. पत्रिका के मुख्यपृष्ठ की चित्रात्मक रचना एक आर्कषक शीर्षक के साथ करें।
2. खाद्य पदार्थों में मिलावट को दर्शाने वाले चार चित्र चिपकाकर उनके नाम लिखें।
3. विचार कर बताएँ कि आजकल लोग भोज्य पदार्थों में मिलावट क्यों कर रहे हैं। (चार से पाँच वाक्यों में)
4. मिलावटी भोज्य पदार्थों के सेवन से होने वाली दिक्कतों को चित्रों के माध्यम से दर्शाएँ?

ख पत्रिका के अंतिम (भाग में विद्यार्थी विलुप्त व विलुप्त प्रायः प्राणियों के ऊपर एक पोस्टर का निर्माण करेंगे। पोस्टर निर्माण में निम्नलिखित बिंदुओं का समावेश होना आवश्यक है -

- पत्र A4 साइज पेज का प्रयोग करेंगे
- पोस्टर को एक आकर्षक शीर्षक दें।
- विलुप्त होते प्राणियों पर एक स्लोगन लिखें।
- पशु-पक्षी विलुप्त न हो इसके लिए कोई दो उपाय लिखें।
- चार विलुप्त या विलुप्त प्रायः प्राणियों के चित्र चिपकाएं या उनके नाम लिखें।

LEARNING OUTCOMES (अधिगम प्रतिफल)

इस परियोजना कार्य के माध्यम से विद्यार्थी खाद्य पदार्थों में हो रही मिलावट को जानने में, मानव और जीव-जगत के संघर्ष को जानने में, नारा लिखने में, प्रस्तुति की कला को सीखने में सक्षम हुए।

RUBRICS FOR CLASS 3 HINDI PROJECT(UT_1)

मानदंड	4	3	2	1
विषय-वस्तु का प्रभावी और सृजनात्मक वर्णन	विषय सामग्री से जुड़े तथ्यों पर गहरा शोध और लेख में सटीक एवं विषयानुरूप वर्णन है।	एक या दो तथ्यात्मक त्रुटियों के अलावा अधिकांश तथ्य सही एवं विषयानुरूप हैं।	कुछ तथ्य विषयानुरूप हैं पर तीन से अधिक त्रुटियाँ पाई गई हैं।	प्रयुक्त लेखों में विषय सामग्री स्पष्ट नहीं है।
कलात्मक क्षमता एवं चित्र संकलन	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए रंगों साज-सज्जा और तस्वीरों का अच्छा उपयोग।	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए रंगों साज-सज्जा और तस्वीरों का कुछ उपयोग।	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए रंगों साज-सज्जा और तस्वीरों का कम उपयोग।	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए रंगों साज-सज्जा और तस्वीरों का अच्छा उपयोग नहीं किया।

भाषा का प्रयोग	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण—विन्यास एवं विराम चिह्न संबंधी त्रुटियाँ न होना। सहज एवं बोधगम्य भाषा का उपयुक्त प्रयोग।	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण—विन्यास एवं विराम चिह्न संबंधी कुछ ही त्रुटियाँ का होना।	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण—विन्यास एवं विराम चिह्न संबंधी त्रुटियाँ के कारण भाषा की उपयुक्तता का अभाव पाया जाना।	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण—विन्यास एवं विराम चिह्न संबंधी त्रुटियाँ के कारण विषयानुसार भाषा का प्रयोग न हो पाना।
दिशा निर्देशों का पालन/ समयनिष्ठता	दिशा निर्देशों का कड़ाई से पालन एवं समयानुसार कार्य सम्पन्न होना ।	अधिकांश निर्देशों का पालन एवं समयानुसार कार्य सम्पन्न होना।	बहुत कम दिशा निर्देशों का पालन एवं अतिरिक्त समय देने के पश्चात कार्य सम्पन्न होना।	दिशा निर्देशों का पालन एवं समयानुसार कार्य सम्पन्न न हो पाना।
समग्र प्रस्तुति	परियोजना का समग्र प्रभाव रोचक और आकर्षक।	परियोजना का समग्र प्रभाव ध्यान आकर्षण के लिए पर्याप्त।	परियोजना की समग्र प्रस्तुति को आकर्षक बनाने के लिए कुछ ही प्रयास किया गया।	समग्र प्रस्तुति को रोचक बनाने के लिए विद्यार्थी ने किसी प्रकार का प्रयास नहीं किया।

LAKSHMIPAT SINGAHNIA ACADEMY
OPEN BOOK PROJECT (UNIT TEST-I)
2024-25

Class-III
Subject- Bengali 2nd Language

F.M. 20

TOPIC- খাদ্যে ভেজাল এবং আমাদের বিলুপ্ত প্রাণী রাজ্য

উদ্দেশ্য (Objectives)

- কল্পনার বিকাশ
- সৃজনশীলতার বিকাশ
- ভাষাশৈলীর বিকাশ
- ব্যবহারিক জ্ঞানের বিকাশ
- খাদ্যে ভেজাল ও বিলুপ্ত প্রাণী সম্পর্কে পরিচয়
- ভাষাগত ক্ষমতা এবং ধারণাগত ক্ষমতার বিকাশ



খাদ্য ছাড়া কোনো প্রাণী বাঁচতে পারে না। নিজেকে সুস্থ রাখতে হলে খাবার পুষ্টিকর হওয়া প্রয়োজন। কিন্তু স্বার্থপর লোকেরা নিজেদের ক্ষুদ্র লাভের জন্য মানুষের স্বাস্থ্য ও জীবন নিয়ে খেলা করছে। ফলমূল, শাকসবজি, শস্য ও পানীয়তে অনেক ধরনের ভেজাল মেশানো হচ্ছে।

বিলুপ্তপ্রায় প্রাণীরা এমন প্রজাতি যা সম্পূর্ণরূপে মারা গেছে। বিভিন্ন কারণে প্রাণী বিলুপ্ত হতে পারে। কিছু বিবর্তন এবং পৃথিবীতে ধীরে ধীরে পরিবর্তনের অংশ হিসাবে হাজার হাজার থেকে মিলিয়ন বছর ধরে বিলুপ্ত হয়েছে। বাসস্থানের ক্ষতি, আক্রমণাত্মক প্রজাতি, রোগ বা অন্যান্য কারণের সাথে লড়াই করার পরে সাম্প্রতিক বছরগুলিতে অসংখ্য প্রাণী বিলুপ্ত হয়ে গেছে।

প্রকল্পের কাজে নিম্নলিখিত বিষয়গুলি অন্তর্ভুক্ত থাকবে(খাদ্যে ভেজাল)

1. একটি আকর্ষণীয় শিরোনাম ও ছবিসহ ম্যাগাজিনের প্রচ্ছদ তৈরি করতে হবে।
2. খাদ্যদ্রব্যে ভেজাল দেখানো চারটি ছবি লাগাও এবং তাদের নাম লেখো
3. ভেবে লেখো কেন মানুষ আজকাল খাবারে ভেজাল দিচ্ছে।
(চার থেকে পাঁচ বাক্যে)
4. ভেজাল খাদ্যদ্রব্য সেবনের ফলে আমরা কী কী সমস্যাগুলোর সম্মুখীন হচ্ছি ছবির মাধ্যমে দেখাও।

প্রকল্প কাজের দ্বিতীয় অংশে শিক্ষার্থীরা বিলুপ্ত ও বিলুপ্তপ্রায় প্রাণীদের নিয়ে একটি পোস্টার তৈরি করবে। পোস্টার তৈরিতে নিম্নলিখিত বিষয়গুলি অন্তর্ভুক্ত করা প্রয়োজন -

- A4 আকারের পৃষ্ঠা ব্যবহার করবে।
- পোস্টারটিকে একটি আকর্ষণীয় শিরোনাম দাও।
- বিলুপ্তপ্রায় প্রাণীদের উপর একটি স্লোগান লেখো।
- প্রাণী ও পাখি যাতে বিলুপ্ত না হয় তা নিশ্চিত করার জন্য যেকোনো দুটি সমাধান লেখো।
- চারটি বিলুপ্ত বা প্রায় বিলুপ্তপ্রায় প্রাণীর ছবি লাগাও ও তাদের নাম লেখো।
- উপস্থাপনা, বানান এবং বাক্য গঠনের প্রতি বিশেষ মনোযোগ দেওয়া প্রয়োজন।

LEARNING OUTCOMES:

- এই পরियोजना কার্যের মাধ্যমে শিক্ষার্থীরা খাদ্যে ভেজাল এবং আমাদের বিলুপ্ত প্রাণী রাজ্য সম্পর্কে পরিচিত হবে।

Evaluation Rubric (2024-2025)

Skills দক্ষতা	Competency যোগ্যতা			
	4	3	2	1
বিষয়বস্তুর কার্যকরী এবং সৃজনশীল বর্ণনা	বিষয়ের সাথে সম্পর্কিত তথ্যগুলির উপর গভীর গবেষণা রয়েছে এবং নিবন্ধে বর্ণনাটি বিষয়ের সাথে সঠিক এবং প্রাসঙ্গিক।	দু-একটি তথ্যগত ভুল বাদে অধিকাংশ তথ্যই সঠিক এবং বিষয়ের সাথে সঙ্গতিপূর্ণ।	বিষয় অনুযায়ী কিছু তথ্য কিন্তু তিনটির বেশি ত্রুটি পাওয়া গেছে।	ব্যবহৃত নিবন্ধগুলির বিষয়বস্তু স্পষ্ট নয়।
শৈল্পিক ক্ষমতা এবং ছবি সংগ্রহ	প্রজেক্টের থিমকে কার্যকরভাবে বোঝাতে রং, সাজসজ্জা এবং ছবির ভালো ব্যবহার।	প্রকল্পের থিমের কার্যকরী প্রকাশের জন্য রঙ এবং ছবির কিছু ব্যবহার।	প্রকল্পের থিমের কার্যকরী প্রকাশের জন্য রঙ, সজ্জা এবং ছবির কম ব্যবহার।	প্রজেক্টের থিমের কার্যকরী প্রকাশের জন্য রং, সজ্জা এবং ছবির ভালো ব্যবহার করা হয়নি।
ভাষার ব্যবহার	উপস্থাপনায় বাক্য-বিন্যাস, বানান এবং বিরাম চিহ্নে কোনো ত্রুটি থাকা উচিত নয়। সহজ ও বোধগম্য ভাষার যথাযথ ব্যবহার।	উপস্থাপনায় বাক্য-বিন্যাস, বানান এবং বিরাম চিহ্নের কয়েকটি ত্রুটি রয়েছে।	উপস্থাপনায় বাক্য গঠন, বানান এবং বিরাম চিহ্নের ত্রুটির কারণে ভাষার উপযুক্ততার অভাব।	উপস্থাপনায় বাক্য গঠন, বানান এবং বিরাম চিহ্নের ত্রুটির কারণে বিষয় অনুযায়ী ভাষা ব্যবহার করতে না পারা।
নির্দেশিকা/সময়ানুবর্তিতা অনুসরণ করুন	নির্দেশিকাগুলি কঠোরভাবে মেনে চলা এবং সময়মতো কাজ শেষ করা।	বেশিরভাগ নির্দেশনা অনুসরণ করা এবং সময়মতো কাজ শেষ করা।	খুব কম নির্দেশনা অনুসরণ করে এবং অতিরিক্ত সময় নিয়ে কাজটি সম্পন্ন করা হয়।	নির্দেশিকা অনুসরণ এবং সময়মতো কাজ সম্পূর্ণ করতে ব্যর্থতা।
সামগ্রিক উপস্থাপনা	প্রকল্পের সামগ্রিক ছাপ প্রশংসনীয় এবং আকর্ষণীয়।	প্রকল্পের সামগ্রিক প্রভাব মনোযোগ আকর্ষণ করার জন্য যথেষ্ট।	প্রকল্পের সামগ্রিক উপস্থাপনা আকর্ষণীয় করার জন্য সামান্য প্রচেষ্টা করা হয়েছিল।	সার্বিক উপস্থাপনাকে আকর্ষণীয় করে তুলতে শিক্ষার্থী কোনো চেষ্টাই করেনি।

MATHEMATICS**CLASS – III****F.M. 20**

Make a cover page of your project mentioning the subject, topic, your name, class and section.

Write your answers in A4 size sheets mentioning the question number correctly. Do not copy the questions.

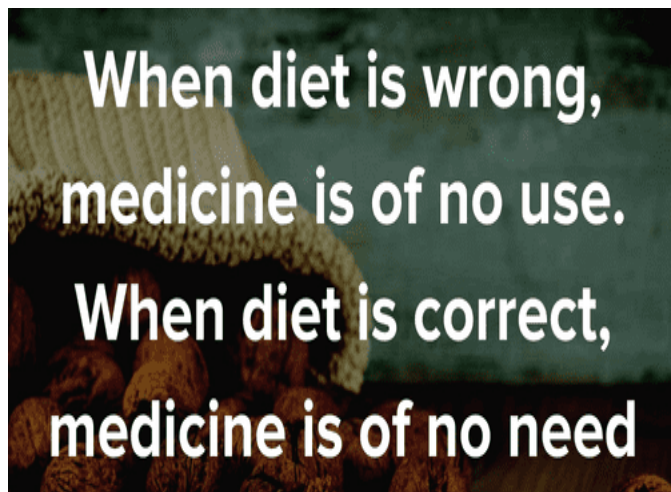
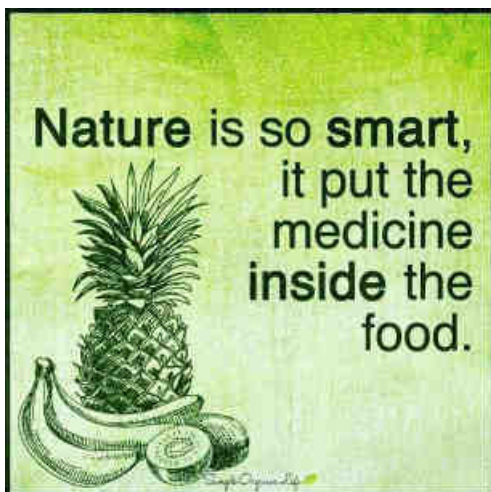
FOOD ADULTERATION AND OUR EXTINCT ANIMAL KINGDOM**LEARNING OBJECTIVES**

Through this project, students will be able to:

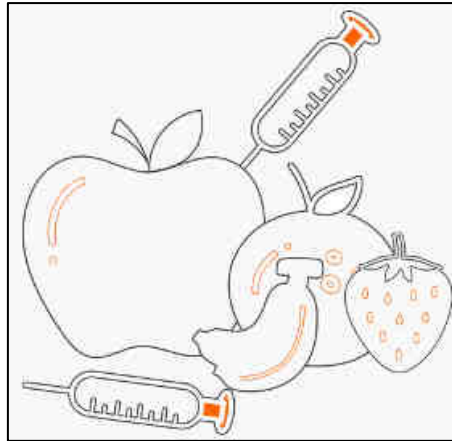
- Understand the importance of having healthy and balanced food
 - Gain knowledge about the term adulteration
 - revise the concept of large numbers and sums on mental ability
 - apply their creativity and imagination to complete their art work
 - develop critical, logical thinking and problem-solving skills
-

FOOD ADULTERATION

The health of a person is a relationship between himself and his body. A balanced diet helps a person to be healthy.



Food adulteration is generally defined as the addition or subtraction of any ingredient from food in a way that affects the normal composition and value of the food.



Food adulteration

Every year, **7th of April** is celebrated as the **World Health Day** globally. World Health Organisation (WHO) aims to bring a general awareness about the adulterations of food products, motivate and inspire everybody to have a healthy, balanced diet.

Almost every food, including milk and dairy products, fats, oil, fruits and vegetables, grains, coffee, tea, honey etc., is susceptible to adulteration. It is difficult to find food that is free from adulteration.

Q1) Find the items in which the following adulterants are used by decoding the numbers with alphabets.

a) cane sugar - _____

Ans. If 12345 is coded as EONHY then, 42315 is coded as _____

b) water - _____

Ans. If 9876 is coded as KMLI then, 8679 is coded as _____

c) chalk powder - _____

Ans. If 76543 is coded as RGSAU then, 53647 is coded as _____

d) mashed potato - _____

Ans. If 5678 is coded as EHGE then, 7658 is coded as _____

Q2) Read the information given in the table and then answer the questions.

Year	Samples analysed	Adulteration
2012-13	69949	10380
2013-14	72200	13571
2014-15	49290	8469
2015-16	65057	14179
2016-17	60671	14130
2017-18	99353	24262

- In which year more number of samples were analysed?
- In which year the number of adulterated food is a 4 digit number?
- Write number of samples analysed that are odd in number.
- In which year the number of samples analysed has a digit repeated 3 times?
- Find the total number of adulteration done in the years 2013-14 and 2014-15?
- Arrange the number of samples adulterated that has one in the ten thousands place in descending order.

Certain safety tips to avoid Adulteration:

- Avoid dark coloured junk food.
- Make sure to clean and store all the grains, pulses and other food products.
- Wash fruits and vegetables thoroughly in running water before they are used.
- Check if the seal is valid or not, before buying food products like milk, oil and other pouches.
- Always make sure to check and buy products having **list of ingredients**, **manufactured date** and **best before / date of expiry**.




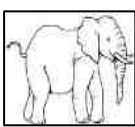




OUR EXTINCT ANIMAL KINGDOM

Animal kingdom includes a large group of organisms of different species. Some of these animals became extinct due to over hunting, exploiting, loss of habitat, pollution, climate change, by human actions etc.

Q3) Fill in the bar graph by shading the respective blocks based on the data given below. (cut and paste the bar graph given below in your answer sheet)

Life span of some of the extinct animals-

- a) Dinosaur - 40 years
- b) African elephant - 60 years
- c) Dodo - 20 years
- d) African wild dog - 10 years
- e) Wild yak - 25 years
- f) Little blue Macaw - 50 years

Life span (in years)	70						
	60						
	50						
	40						
	30						
	20						
	10						
	Dinosaur	African elephant	Dodo	African wild dog	Little blue macaw	Wild yak	
							

animals

Q4) Solve the mental ability sums given and decode the answer to find the term referred to the study of the record of life on earth to understand different aspects of extinct and living organisms. (need to write the answer for each question and then decode with the alphabets)

- a) 3 times 10 = _____
- b) Predecessor of 13 = _____
- c) $9 + 9 =$ _____
- d) Number ends with 0, lesser than 20 = _____
- e) Successor of 2 = _____
- f) One century = _____
- g) $30 - 5 =$ _____
- h) $10 \times 9 =$ _____
- i) Take away 1 from 6 = _____
- j) $9 \times 5 + 5 =$ _____
- k) 5 sets of 3 = _____
- l) 4 more than 20 = _____

12	18	3	5	10	50	24	30	100	15	25	90
A	L	O	L	E	O	Y	P	N	G	T	O

Answer- _____



Learning outcome:

At the end of the project, students should be able to solve sums on Mental Arithmetic as well as revise the concepts of large numbers while learning about the project topics.

MATHEMATICS PROJECT GRADING RUBRICS
UNIT TEST 1
Class III

	5	4	3	2	1
Maths content	Shows a clear knowledge and application of math skills.	Shows a general knowledge and application of math skills.	Shows a limited knowledge and application of math skills.	Shows little knowledge and application of math skills.	Shows no knowledge and application of math skills.
Mental Ability and Decoding Accuracy	Is able to solve all the sums correctly to decode and find the term given on the topic accurately.	Is able to solve all the sums correctly and decode but unable to find the term given on the topic accurately.	Is able to solve all the sums correctly but unable to decode and find the term given on the topic accurately.	Is able to solve most of the sums correctly, so unable to decode and find the term given on the topic accurately.	Is unable to solve the sums correctly so unable to decode and find the term given on the topic accurately.
Art Integration	The concept in the submission is exceptionally creative and well-integrated with art.	The concept in the submission is creative and well-integrated with art.	The concept in the submission is somewhat creative and integrated with art.	The concept in the submission shows little creativity and integration with art.	The concept in the submission lacks creativity and integration with art.
Overall Presentation and Neatness	The presentation is exceptionally attractive in terms of design, layout and neatness.	The presentation is acceptably attractive in terms of design, layout and neatness.	The presentation is somewhat attractive in terms of design, layout and neatness.	The presentation is little attractive in terms of design, layout and neatness.	The presentation is not attractive in terms of design, layout and neatness.

THEME: FOOD ADULTERATION AND OUR EXTINCT ANIMAL KINGDOM

LEARNING OBJECTIVES:

Students will be able to –

- Understand the meaning of food adulteration.
- Learn about the harmful effects of food adulteration.
- Gain knowledge about the different types of adulterants.
- Learn the different ways to prevent food adulteration.
- Gain knowledge about the extinct animals.
- Understand the reason behind the extinction of animals.
- Experiential learning: Conduct an experiment to find out the adulterants present in food.
- Experiential learning: Research and prepare a booklet on the extinct animals.
- Art integration: Use relevant pictures

FOOD ADULTERATION

All living organisms need food for their survival. There are different types of food available in the market. We all depend on various food sources, including vegetables, fruits, cereals, pulses etc.



Adulteration or contamination of natural food products is one of the major challenges in today's society.

Adulteration is the practice of adding raw and other cheaper ingredients to excellent quality products to increase the quantity. There are various methods used for adulterating natural products.

Adulterants are the poor quality products added to food items for economic benefits. Addition of these adulterants reduces the value of nutrients in food and also contaminates the food, which is not fit for consumption. These adulterants can be available in all food products which we consume daily, including dairy products, cereals, pulses, grains, vegetables, fruits, oils etc. Having this adulterated food leads to several health issues.



Food Products	Adulterant	Harmful Effects
Milk and Curd	Water and starch powder	Stomach disorders
Ghee, Cheese and Butter	Mashed potatoes, Vanaspati and starch powder	Stomach disorders
Grains	Dust, Pebbles, Stones, Straw, damaged grain	Liver disorders, stomach disorders
Coffee powder	Tamarind seeds powder	Diarrhoea
Sugar	Chalk powder, Washing soda	Stomach disorders and kidney diseases

How to prevent Food Adulteration?

- We should avoid eating dark-coloured, junk and other processed foods.
- Fruits and vegetables should be thoroughly washed in running water before they are consumed.
- Food Adulteration Tests can be conducted at home.
- We should always check and buy products having an FSSAI-validated label, license number, list of ingredients, manufactured date and its expiration.

WHAT YOU NEED TO DO:

- Use the information and links provided to do a research work on food adulteration. After your research work do the following:

1. A food safety campaign has been organized in your neighbourhood where you have been given the responsibility to spread awareness about the harmful effects of food adulteration.

a. Refer to the given links and conduct an experiment to find out the adulterants in any one of the following food items.

- Milk
- Turmeric
- Sugar
- Salt

b. Write the procedure of the experiment under the following subheadings. Use A4 size papers (coloured or white) and staple them together.

- Aim
- Materials required
- Procedure
- Observation
- Conclusion

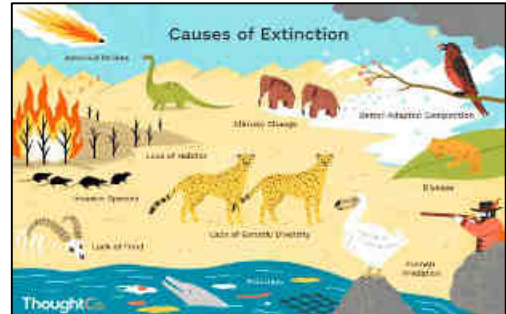
c. Stick pictures (at least two) of the procedure of the experiment.

OUR EXTINCT ANIMAL KINGDOM

Extinct animals are animal species that have died and no longer exist. Over 99% of all the species that once lived on the Earth are estimated to be extinct. This could happen naturally due to a change in the climate or because of human activities like overhunting or the destruction of habitat.

The important causes of extinction include:

- Asteroid Strikes
- Climate Change
- Diseases
- Loss of habitat
- Pollution
- Hunting and poaching



Some animals that have become extinct:

- Dinosaurs
- Dodo
- Tasmanian Tiger
- Baiji White Dolphin
- Woolly Mammoth
- Sabre-toothed Cat



WHAT YOU NEED TO DO:

- Use the information and links provided to do a research work on our extinct animal kingdom. After your research work do the following:

2. Imagine that you are a member of a group of palaeontologists (people who study extinct animals) and you have discovered some fossils recently.

a. Prepare a booklet on your findings. Use A4 size papers (coloured or white) and staple them together. Your booklet should contain the following:

- A suitable cover page with title.
- An introduction on extinct animals. (within two to three lines)
- Name any two extinct animals. Stick or draw relevant pictures.
- Write about the cause of their extinction. (within three to four lines each)

LEARNING OUTCOME:

At the end of the project, the students –

- Should be able to understand the meaning of food adulteration.
- Should be able to learn about the harmful effects of food adulteration.
- Should be able to gain knowledge about the different types of adulterants.
- Should be able to learn the different ways to prevent food adulteration.
- Should be able to gain knowledge about the extinct animals.
- Should be able to understand the reason behind the extinction of animals.
- Should be able to conduct an experiment to find out the adulterants present in food.
- Should be able to research and prepare a booklet on the extinct animals with relevant pictures.

SOME USEFUL LINKS:

- <https://eatrightindia.gov.in/dart/#:~:text=in%20sella%20rice-.Testing%20Method%3A,grains%20will%20form%20red%20colour.>
- <https://www.youtube.com/watch?v=avrvBPOZXEQ>
- <https://www.natgeokids.com/uk/discover/animals/general-animals/extinct-animals/>
- <https://kids.britannica.com/students/article/extinct-animals/603772>

RUBRICS**EVS 3 – OPEN BOOK PROJECT – UT1 (2024-25)**

	4	3	2	1
Content - Accuracy and understanding of the theme	Demonstrates a clear understanding of the theme. The content is concise and accurate.	Demonstrates an adequate understanding of the theme. The content is adequately concise and accurate.	Demonstrates limited understanding of the theme. The content is somewhat accurate.	Demonstrates no understanding of the theme. The content lacks accuracy.
Creativity and Originality - Art integration	The submission reflects originality and is exceptionally creative and well-integrated with Art.	The submission reflects originality to some extent and is adequately creative and integrated with Art.	The submission is somewhat creative and displays little integration with Art. Shows little originality.	The submission lacks creativity and integration with Art. Originality is lacking.
Research Work – Use of technology and media (links provided)	Accessed suggested media and employed technology exceptionally for research work.	Accessed suggested media and employed technology adequately for research work.	Suggested media was somewhat accessed. Research work was inadequate.	Suggested media was not accessed at all. Research work is lacking.
Guidelines followed with timely submission	Guidelines have been strictly followed. The project was submitted on time.	Most of the instructions have been followed. The project was submitted on time.	Followed very few guidelines. The project was submitted beyond time.	Guidelines have not been followed. The project was submitted beyond time.
Overall Presentation – Layout of the project	Presentation includes relevant pictures/drawings to support the content. The presentation is exceptionally attractive and appealing in terms of design, layout and neatness.	Graphics used in the presentation support the content to some extent. The presentation is quite attractive in terms of design, layout and neatness.	Graphics are somewhat related to the content. Some attempt has been made to make the presentation somewhat attractive.	Graphics are not related to the content at all. Little or no effort has been made to make the presentation attractive.

Class: III

Full Marks: 10

TOPIC: Food Adulteration and Our Extinct Animal Kingdom

General instruction:-

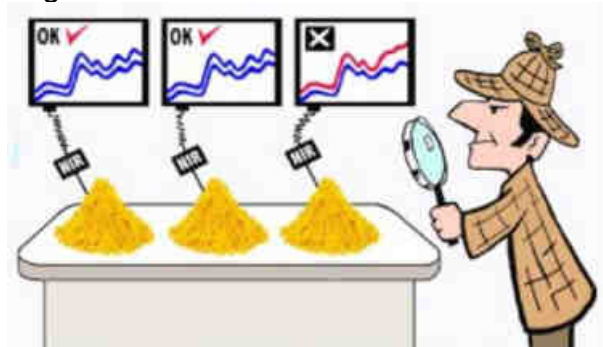
- Present your project in an A4 size fabriano paper.
- Follow **To Do** instructions
- Follow resource links to explore and research
- Write your name, class and section at the top of the paper.
- Submit the paper to your CE teacher.

Learning Objective

- Understand the concept of food adulteration and its impact on human health.
- Learn about the extinct animal kingdom.
- Develop 21st centuries skills.
- Explore the data representation tools like chart and table.
- Develop critical thinking skill and research based learning.

Introduction

Greetings from a wonderful journey of exploration and education! We are going to explore two significant subjects in this project: food adulteration and the extinct animal kingdom. The term "food adulteration" describes the practice of contaminating food products with dangerous or subpar components that could be hazardous to human health. Animal extinction, on the other hand, is the permanent loss of a species from the planet, frequently as a result of human actions like poaching and habitat degradation.



Detection of adulteration of food ingredients and raw materials by NIR spectroscopy and chemometrics



To Do:-

Take a fabriano paper. Divide it vertically into 2 equal parts, Section A and Section B.

- *Section A:* Extinct animals
- *Section B:* Food Adulteration.

Section A: In computer we can use pie chart to represent a group of data. Remember that data given in pie chart always adds up to 100. Draw a pie chart to represent the

given data of extinct animals and their life span. Create the chart with two different colour pulses /chip paper mosaic. Decorate by pasting a small image of the extinct animal around the pie chart. Sample of pie chart given for your reference.

Name of the animal	Life span (In years)
African Elephant	60
Dinosaur	40



Section B: In computer, we can represent data in the form of a table using MS Word. Draw a table in section B of the same page with two columns. Write examples of common food adulterants, such as artificial colours, preservatives, pesticides, and harmful chemicals. Explain in one sentence how these adulterants can affect human health and contribute to food-related illness. Support your answers with a small picture (drawing will be appreciable).

Food adulterant	Effect on human health

Submission:

Submit your project paper to your CE teacher. Do not forget to write your name.

Learning Outcome

Students will be able to

- Identify different types of food adulterants and their potential health effects.
- Gain awareness of extinct species
- Present data using table and chart which they will use in computer
- Present their findings and insights on food adulteration and animal extinction in a clear and engaging manner.

Resources:-

<https://naturalhistory.si.edu/education/teaching-resources/paleontology/extinction-over-time>

https://en.wikipedia.org/wiki/List_of_recently_extinct_mammals

<https://www.geeksforgeeks.org/food-adulteration/>

Marking Rubrics:-

Criteria	2.5	1.5	1
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Section A: Extinct Animals	The bar graph is accurately drawn with three distinct bars representing the duration of extinction for each animal. Small images of extinct animals are neatly pasted.	The bar graph is mostly accurate, but may lack some clarity or precision. Small images of extinct animals are present but could be better integrated.	The bar graph is somewhat accurate but may contain errors in representation. Images of extinct animals are present but poorly integrated or unrelated.
Section B: Food Adulteration	The table is well-constructed with two clear columns listing common food adulterants and their effects on human health. Each entry is accompanied by a small, relevant picture.	The table is adequately constructed, but may lack some clarity or completeness. Entries are mostly accompanied by relevant pictures.	The table is somewhat constructed but may lack clarity or coherence. Some entries are missing or incomplete. Pictures may be unrelated or poorly integrated.
Explanation of Food Adulterants' Effects on Health	Each explanation provides a clear and concise sentence describing how the adulterant affects human health and contributes to food-related illnesses.	Most explanations are clear and concise, but may lack some detail or specificity.	Some explanations are unclear or lack detail in describing the effects of adulterants on health.
Overall Understanding of the Project	Demonstrates a comprehensive understanding of both extinct animals and food adulteration. Clearly presents information and effectively supports explanations.	Demonstrates a good understanding of both topics. Presents information adequately, with some room for improvement in clarity or detail.	Demonstrates a basic understanding of the topics, but lacks clarity or coherence in presentation. Explanations may be superficial or incomplete.