

SANSKAR SCHOOL

GRADE-IV

Assignment 31

Date: Thursday, 30th July 2020

ENGLISH:

Read the story - Tine and the Faraway Mountain and write the glossary (given in the story) in your notebook.

MATHS:

Factors and Multiples

Solve the following questions in your notebook.

Q1. Circle the even numbers.

43 , 232 , 127 , 78 , 881 , 44 , 102

Q2. Underline the odd numbers.

77 , 231 , 66 , 360 , 99 , 384 , 113

Q3. Circle the prime numbers and underline the composite numbers.

7 , 29 , 21 , 59 , 81 , 49 , 83

69 , 93 , 13 , 67 , 33 , 27 , 45

Q4. Write all the prime numbers between 30 and 50.

Q5. Fill in the blanks.

a) _____ is a unique number.


b) Numbers having only 2 factors (1 and number itself) are called _____ numbers.

c) _____ is smallest even prime number.

HINDI:

पाठ्य - पुस्तक में पृष्ठ संख्या -106 पर प्रदत्त चित्र वर्णन करिए -

3- दिए गए चित्र का 80-120 शब्दों में वर्णन कीजिए।



Below the illustration, there are ten horizontal lines for writing the description in Hindi.

UOI:

MAKING CONNECTION

How are human activities affecting different ecosystems?

Watch the following video to learn about the impact of human action on the environment.

<https://youtu.be/uJiesHnzas>

Read the following information on the negative and positive effects of human action on ecosystems

POSITIVE AND NEGATIVE HUMAN IMPACT ON ECOSYSTEMS

Key terms

Term	Meaning
Biodiversity	The variety of organisms in an ecosystem
Renewable resources	Resources that are replaced as quickly as they are used
Nonrenewable resources	Resources that are limited in supply because they are used faster than can be replaced
Conservation	The study of the loss of Earth's biodiversity and the ways this loss can be prevented
Extinction	Process during which all members of a group of organisms die out
Endangered species	Species that has been identified as likely to become extinct
Biodiversity hotspot	A biogeographic region that contains high biodiversity and is also threatened with destruction
Climate change	Measurable long-term changes in Earth's climate

NEGATIVE HUMAN IMPACT ON BIODIVERSITY

Human activity is a major threat to the planet's **biodiversity**. This is because human population growth thus far has been exponential, meaning that its growth rate stays the same regardless of population size. This makes the population grow faster and faster as it gets larger.

This threatens biodiversity because the more humans there are, the more this displaces other species and reduces *species richness*. Humans impact the environment in many ways-

- Overpopulation
- Deforestation
- Pollution (land, air and water), Global warming
- Overfishing, hunting/poaching
- Climate change due to human activities

Human-mediated causes of biodiversity loss



Deforestation for resource mining or urbanization can displace native organisms.

- **Land-use change**: Humans may destroy natural landscapes as they mine resources and urbanize areas. This is detrimental, as it displaces residing species, reducing available habitats and food sources.

- **Pollution**: Pollution can occur from the runoff or disposal of chemical substances, or from energy sources (noise and light pollution).
- **Introduced species**: Humans may unintentionally, or intentionally, introduce a non-native species into an ecosystem. This can negatively affect an ecosystem because the introduced species may outcompete native organisms and displace them.
- **Resource exploitation**: Humans consume large amounts of resources for their own needs. Some examples include the mining of natural resources like coal, the hunting and fishing of animals for food, and the clearing of forests for urbanization and wood use.

Extensive overuse of **nonrenewable resources**, like fossil fuels, can cause great harm to the environment. Recycling products made from nonrenewable resources (such as plastic, which is made from oil) is one way to reduce the negative impacts of this resource exploitation. In addition, the development and use of **renewable resources**, like solar or wind energy, can help decrease the harmful effects of resource exploitation.

Climate change and biodiversity

The current **climate change** Earth is facing is caused by the increase in global temperatures.

Human activity is changing Earth's atmosphere faster than it has ever changed during its history.



The burning of fossil fuels and the growth of animal agriculture has led to large amounts of greenhouse gases (such as carbon dioxide and methane) in the atmosphere. Higher concentrations of greenhouse gases trap more heat in the biosphere and result in global warming. In turn, this drives climate change.

When climate change affects an environment so much that it is unable to sustain organisms, they must adapt, relocate, or face extinction. Because of this, climate change can have a huge effect on biodiversity.

Acid rain results when sulfur dioxide (SO₂) and nitrogen oxides (NO_x) are emitted into the atmosphere and transported by wind and air currents. The SO₂ and NO_x react with water, oxygen and other chemicals to form sulfuric and nitric acids. These then mix with water and other materials before falling to the ground. Cause include –

- Burning of fossil fuels
- Smoke from vehicles, generators
- Smoke released in the air by oil refineries and other industries

POSITIVE EFFECTS OF HUMANS ON ECOSYSTEMS

Conservation efforts work to protect species and the places in which they live. There are many different kinds of conservation efforts e.g. wildlife sanctuaries and National parks.

Species protection is one way to help combat **extinction**. Although extinction is a natural process, it is occurring at a much faster, much higher rate than normally expected.

The creation of local, national, and international *legislation* can help prevent the loss of **endangered species**. In addition, *captive-breeding programs* may help protect endangered species by maintaining a healthy population of endangered species in captivity e.g. Longleaf Pine ecosystem, southeast America (protecting 29 endangered species).

Habitat protection, preservation, and restoration is essential in protecting biodiversity. This ensures that the protected species have places to live that can support them e.g. covering of Rhone Glacier in Swiss Alps with huge white blankets each year to slow down the melting of the glacier.

Scientists have determined several **biodiversity hotspots**, which are a high priority for protecting e.g. humans have constructed **green bridges** to provide a safe passage (prevent road killings) to the animals while crossing the roads that lie in their forest or any wildlife reserve or sanctuary e.g. Netherland has 30 wildlife bridges, Banff National park in Canada has numerous and varied wildlife crossing structures in the world (38 wildlife underpasses and 6 overpasses on 32 km stretch of Trans-Canada highway).



To summarize the ways in which human beings can positively affect ecosystems around the world-

Recycling, establishing wildlife reserves and parks, creating green/open space laws, doing reforestation, creating environmental regulations.

TASK: Reflect your understanding of the human impact on ecosystems through the following T-Chart.

Negative human impact	Positive human impact

ART:

Create a poster on save wildlife with the help of reference video given below.

<https://youtu.be/8YCsQbVt6to>

P.E.

Watch the video and practice the exercises to remain fit and healthy.

<https://youtu.be/hysAgrbQ4M0>

DANCE:

Watch the video and practice the steps.

<https://youtu.be/zkaTnlu8fRQ>