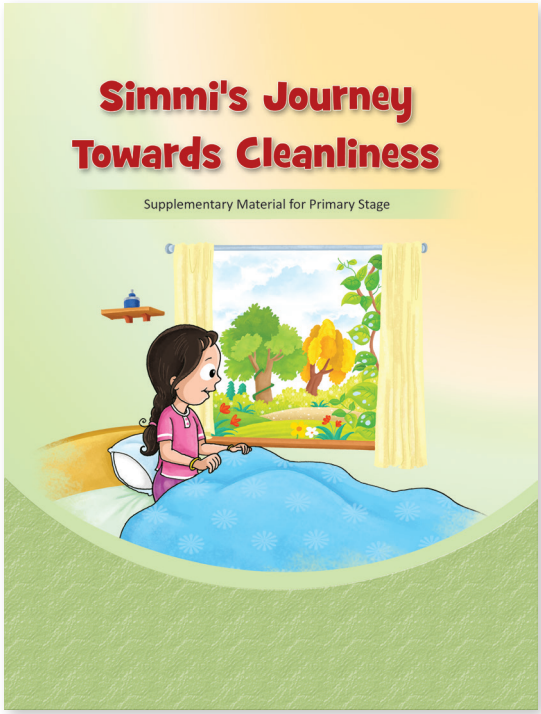
# Sanitation and Hygiene

*Supplementary Material for the Upper Primary Stage*

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***Supplementary Material for the Upper Primary Stage***

विद्यया ऽमृतमश्नुते

एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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# Foreword

The National Council of Educational Research and Training (NCERT) developed supplementary reading materials on Sanitation and Hygiene for primary and upper primary stages, based on the outline provided by the Ministry of Drinking Water and Sanitation (MODWS). For primary stage, a supplementary material in the story form titled, *Simmi's Journey Towards Cleanliness* has already been published.

The present material is for upper primary stage. The objective of this material is to build awareness in children about practices related to hygiene and sanitation and help them imbibe these practices in their daily life. It focuses on the importance of sanitation and hygiene, improper sanitation including open defecation and their impact on health. The book also discusses various types of wastes and important sanitation schemes including *Swacch Bharat Mission*. Children can read this book independently and develop healthy hygienic and sanitation practices.

The material was developed with the help of practicing teachers and teacher-educators. I appreciate the efforts made by Saroj Yadav, *Dean (Academic), Professor* and other team members in developing this material. It is hoped that children and teachers will find the material useful. Comments and suggestions are solicited for bringing out improvement in the material.

New Delhi
*July 2017*

Hrushikesh Senapaty
*Director*, NCERT

# PREFACE

The supplementary material *Sanitation and Hygiene* has been developed for students in upper primary stage (Classes VI–VIII) with the objective to encourage them to understand the importance of hygiene. The material will help students inculcate hygiene practices in their daily life. Such practices will go a long way in protecting themselves from infections and infectitious diseases.

It is envisaged that after going through this material children will acquire knowledge, attitude, skills of good hygiene behaviour and healthy living and appreciation for the importance of drinking safe water, good hygiene practices and use of safe sanitation facilities. This material will also help them realise that every member of the family has a responsibility to maintain hygiene and sanitation. It is hoped that the material will motivate students to undertake individual and collective actions by proper disposal of human and animal wastes, proper use of toilet and avoid open space defecation.

I thank the members of the Development Team for their valuable contribution in our endeavour to provide good quality material for school system. I also thank the Ministry of Drinking Water and Sanitation, Government of India for their support. I especially thank H.K. Senapaty, *Director*, *Professor* NCERT for his administrative support and keen interest in the development of the material.

We look forward to feedbacks from students, teachers and parents for further improvement of this material.

Saroj Yadav
*Professor* and *Dean (Academic)*
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# Acknowledgments

National Council of Educational Research and Training (NCERT) is grateful to the members of Development Team for their contribution in the development of this book.

Special thanks are due to Dinesh Kumar, *Professor* and *Head*, DESM for providing administrative and academic support.

We are thankful to the Ministry of Human Resource Development, Ministry of Drinking Water and Sanitation and UNICEF for initiating the idea and assigning the task to NCERT.

The council also gratefully acknowledges the support provided by administrative staff of Dean Academic, Rani Sharma, PA (Dean), Nitin Kumar Gupta, *DTP Operator*, Fajruddin, *Illustrator* and Kamal Kishore, *Layout Designer* and Ilma Nasir, *Editorial Assistant* (Contractual). Thanks are due to Azara, *Junior Research Fellow* for reading the material and for her valuable suggestion.

The efforts of the Publication Division, NCERT in bringing out this material are also appreciated.

# Contents


**Foreword** **iii**

**Introduction** **1**

**1. Sanitation and Hygiene** **3**

1.1 Sanitation 3

1.2 Hygiene 4

1.3 Meaning of WASH 5

**2. How Improper Sanitation and Poor Hygiene Practices Affect Us? 8**

2.1 Scenarios of open defecation and their impact 10

2.2 What are germs? 14

**3. Open Defecation** **16**

3.1 What is open defecation? 16

3.2 Why should I stop open defecation? 16

3.3 Why do some people defecate in the open? 16

**4. What is Open Defecation Free?** **18**

4.1 Defecation by pets and stray animals 19

**5. Improved Sanitation** **20**

**6. The F diagram** **21**

6.1 What are barriers? 23

**7. Types of Waste** **24**

**8. Important Sanitation Schemes in India** **25**

8.1 *Swachh Bharat* Mission 26

**Exercises** **28**

मिल-जुल कर स्कूल में जाएँ, साथ पढ़ें और
साथ में खाएँ। रंग-बिरंगी प्यारी दुनिया,
साथ मिलकर इसे सजाएँ।

# Introduction

Sanitation and hygiene are two major factors that affect our health. We know that health is a state of well being and is essential for a purposeful existence. Good health is not only freedom from sickness and diseases but a complete absence of anxiety, social and psychological tensions. If there is any deviation in harmonic functioning of our body, our health gets affected and we may get sick.

The factors that may affect our health are:

1. Nutrition
2. Sanitation and hygiene
3. Genetic disorders or defects
4. Social and psychological factors

In this material the focus will be on sanitation and hygiene. Let us begin exploring how clean our surroundings are, by completing Activity 1. In this activity if you get all your answers Yes, we can say that your locality have achieved a good level of sanitation and hygiene. Even if you get any one of your answers as No, it means that your surrounding needs attention individually, by the community and by the government/public agencies.

## Activity 1

Tick (✓) Yes or (✗) No for the following statements:

| | | Yes | No |
|---|---|---|---|
| 1. | Waste is not dumped in and around your: | | |
| | • Home | | |
| | • School | | |
| 2. | Solid waste is segregated and collected from: | | |
| | • Home | | |
| | • School | | |
| 3. | Tap water is available in your: | | |
| | • Home | | |
| | • School | | |
| 4. | The source of drinking water is a handpump/open well/pond/lake or river: | | |
| | • Home | | |
| | • School | | |
| 5. | Toilet facility is available at your: | | |
| | • Home | | |
| | • School | | |
| 6. | People in your neighbourhood do not defecate in open. Faeces and urine of human and animals (including cattle, pets and stray animals) are not seen in your neighbourhood. | | |
| 7. | There is a proper drainage system for safe disposal of liquid wastes in your neighbourhood. | | |
| 8. | The waste water from households in your neighbourhood does not get spread over in open areas. | | |
| 9. | You wash hands with soap before and after taking meals/after using toilet facility. | | |
| 10. | You take bath regularly and wear clean clothes. | | |

# Sanitation and Hygiene

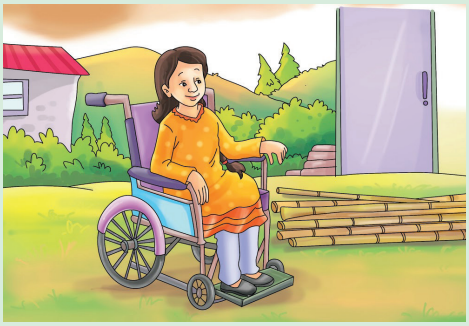
Maintaining proper sanitation and good hygiene practices are necessary for healthy living.

## 1.1 Sanitation

Sanitation means all measures that promote:

- proper disposal of human and animal wastes (solid as well as liquid wastes). It also includes disposal of hazardous wastes from hospitals/industries/other sources.
- use and proper maintenance of toilets.
- avoiding of open defecation.

### A Case Study from Assam



*Safe and clean water and sanitation facilities are a basic right of all people, including people with disabilities. Jimoni Nath, a 12 years old is a resident of Bamunijhar village in Sipajhar in Assam. She has been confined to a wheelchair due to a physical disability. A faculty member of Shishu Sarothi, a centre for rehabilitation and training for multiple disabilities decided to help Jimoni and others like her. A team of Shishu Sarothi tried to innovate and create user friendly toilets for people with such disabilities. Besides, they also took the responsibility of training as how to use such toilets. They used bamboo, a commonly available material, for constructing the toilets. This made not only Jimoni's life easier but also for others like her.*

Maintaining proper standards of sanitation are necessary for improving and protecting health and wellbeing of the people.

Sanitation includes steps to ensure access and use of toilets by everyone. It also includes ways to separate human excreta from coming in contact with other individuals. One of the important factors to maintain proper sanitation is to end the practice of 'open defecation'. This may be done by involving individuals and community members to build, maintain and use toilets. Therefore, sanitation is often associated with our surroundings or environment.

## 1.2 Hygiene

Hygiene is a set of practices performed for the preservation of health. Hygiene is often associated with our body. According to the World Health Organisation (WHO), "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases."

One of the most effective ways to protect ourselves and others from diseases is to adopt good practices of personal hygiene. These may include:

- taking bath at least once a day.
- washing hands
  - after using the toilet.
  - before preparing food or serving food.
  - before and after eating food.
  - if someone around you is infected with cold or any other infectious disease.
  - after handling pets and domestic animals.
- brushing teeth in the morning and before going to bed.
- rinsing mouth after every meal.
- wearing clean clothes.

We will now try to find out how improper hygiene can affect our health negatively. Have you come across a person with a strong unpleasant body smell. You must have experienced this in a crowded places such as bus, train, etc. You may have also felt that your body is smelly sometime.

## Steps of Proper Hand Washing

Wet hands with water.

Apply enough soap to cover all hand surfaces.

Rub hands palm to palm.

Palm to palm with fingers interlaced.

Rinse hands with water.

Dry thoroughly with a single use towel.

Use towel to turn off faucet.

...and your hands are safe.

When we do not take regular bath our body smells because of sweat. This is particularly true in summer. The foul smell is due to the action of bacteria on sweat.

Similarly, washing hands is essential to remove harmful germs, if any, sticking to our hands. These germs may stick to our body during our day to day activities. These germs are so small that we cannot see them. Regular washing of hands helps to remove these germs, some of which could be a source of disease such as common cold and diarrhoea. Wearing washed and clean clothes also protects us from harmful germs.

When we eat, some tiny food particles remain trapped in the mouth in between the teeth. The action of bacteria on them may give rise to bad breath. Bad breath may also be due to diseases of the teeth, gums and mouth. Regular brushing of teeth and rinsing of mouth removes the food particles to a large extent. If bad breath continues, one must visit the dentist.

### 1.3 Meaning of WASH

So far we have learnt about the importance of sanitation and hygiene. Did you realise that without water we cannot maintain sanitation and hygiene? Water, Sanitation and Hygiene are collectively termed as WASH (Wa— Water; S— Sanitation; H— Hygiene). Since water, sanitation and hygiene

## Activity 2

The following pictures depict some practices that we commonly observe. Try to group them as good practices and bad practices. Tick (✓) for good practices and cross (✗) for bed practices.

*Brushing teeth*

*Washing hands with soap*

*Trimming nails*

*Throwing trash from moving vehicles*

*Spitting on road*

*Disposing garbage in dustbin*

*Washing clothes*

*Rinsing mouth*

are interdependent, these are grouped together as WASH. Remember each one of them is dependent on the presence of the other.

For example, proper sanitation cannot be maintained in toilets without water. Similarly, water is essential for personal hygiene such as, washing hands, taking bath, etc. If there are no toilets, people are compelled to defecate in the open. This practice of defecation in the open may affect health in many ways. The faecal matter and the germs it contains get washed away when it rains. This may get carried to nearby water sources such as ponds, lakes, streams, rivers, etc., and contaminate water. In many cases, the toilets are not constructed as per desired norms. In such cases, it may so happen that these toilets directly discharge into water bodies. Open defecation may also be a cause of water contamination.

**Do you know?**

According to a report of the United Nations International Children's Emergency Fund (UNICEF) published in 2016, it is estimated that about 5.2 lakh children under 5 years of age die annually from diarrhoeal disease, that means, 1400 every day. Of these most are in developing countries.

WA WATER

S SANITATION

H HYGIENE

Barriers can stop the transmission of disease; these can be primary (preventing the initial contact with the faeces) or secondary (preventing it being ingested by a new person). They can be controlled by water, sanitation and hygiene interventions.

# How Improper Sanitation and Poor Hygiene Practices Affect Us?

We have discussed the meaning of sanitation and hygienic practices. We have also discussed about some of the practices essential for maintaining sanitation and hygiene. If we do not adopt proper hygiene practices and maintain sanitation in our surroundings, we may contact some disease and fall sick. There are several ways by which we can be affected. Human faeces as well as faeces of other animals could be a source of many diseases such as, cholera, typhoid, infectious hepatitis, polio, etc.

## Menstrual Hygiene Management (MHM)

*Menstrual hygiene is an issue associated with women and adolescent girls. Lack of correct information makes people across the society uncomfortable to talk about the subject. Good menstrual hygiene is crucial for the health and dignity of girls and women. Everyone in the society including the male members must understand that this is a natural process and not a matter of shame. It is therefore, necessary that the subject be discussed without any taboos. Adolescent girls particularly need support and guidance at the initiation of menstruation. It is essential that at this time, schools and family provide them a safe environment that offers protection and guidance to ensure their basic health and well-being. Knowledge about handling of sanitary napkins/homemade pads and their proper disposal is essential for maintenance of hygiene.*

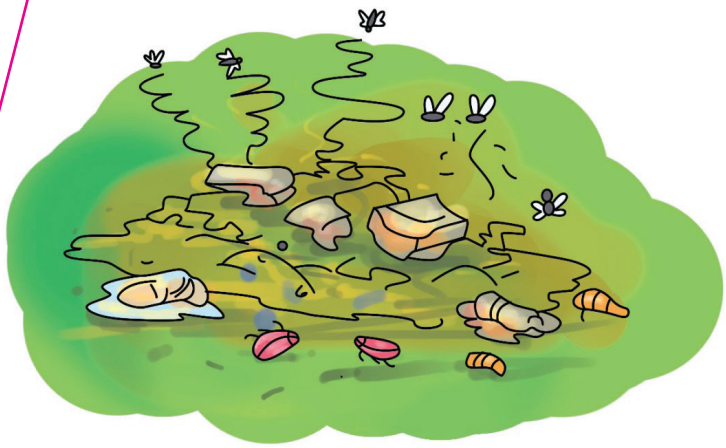
Washing clothes/ utensils/cattle near open well/ponds lakes contaminates the water source.

Plenty of waste and faecal matter allows growth of flies, mosquitoes, cockroaches, rodents, etc.

People practicing open defecation may release harmful germs in the surrounding.

Poor sanitation conditions.

Spread of infectious diseases like diarrhoea, typhoid, cholera, polio, hepatitis, etc.



## 2.1 Scenarios of open defecation and their impact

Let us consider a few scenarios that may give us an idea how open defecation can affect our health.

### Scene I

A person infected with diarrhoea defecates in the open in a grass field. Later in the day a house maker goes to the same field to collect green fodder for her cattle. Unknown to her, the infected faecal matter may come in contact to her clothes and body parts. The harmful germs get transferred to her dress and body. On returning home, her children hugs her and ask for food. She may serves food to her children and other members of the family without properly washing her hands. In the process harmful germs may enter the body of the children and family members and make them sick.

### Scene II

A group of children are playing game in a nearby ground. They may be playing a game of cricket/hockey/volleyball/football or a traditional game like seven times (*pithu*) or with glass marbles. During the play, the material used in the game, say the ball or the glass marble goes out of the play area and rolls over the faecal matter of a person who have defecated in open. The harmful germs get stuck to the ball or the marble. The harmful germs then get transferred to those children playing the game and make them sick.

## Scene III

The shoe lace of a child going to school or any person walking on a road gets loose. The string of the lace comes in contact with faecal matter or urine of an infected person who have defecated on the roadside. The harmful germs get transferred to the hands of the child or the person when she/he ties the lace. The harmful germs may enter the body of the child or the person if she/he does not wash her/his hands immediately.

## Scene IV

A person infected with diarrhoea uses a public toilet. She/he opens the door by holding the door handle and/or unlatching the bolt with unwashed hands. In the process, she/he transfers harmful germs to the latch/ door handle. The next person using the toilet locks the door by holding the handle/latch when it is still wet. Harmful germs may get transferred to her/his hands and make him/her sick.

## Scene V

A large number of persons including some infected with diarrhoea defecate in the open close to a vegetable field near a pond or an open well. The rain water or the water used for irrigating the crop spread the faecal matter to the vegetable crop and also contaminate the water of the pond/ well. The people harvesting the crop or using water from the pond/well may get infected with harmful germs and get sick.

**Project**

### Visit to a Garbage Dumping Site

Visit with your friends a garbage dumping site in your neighbourhood. Make a list of your group's observations based on the following:

(a) Did you see flies, birds or any other animals thriving on the garbage? Make a list of them.

(b) What types of wastes are thrown in the garbage dump?

(c) Were the wastes contained within the boundary of the dumping site or scattered all around it?

(d) Was the visit to the site uncomfortable? Make at least two observations.

You may add your own observations other than those mentioned above. Prepare a brief report about your visit and suggest ways to improve the sanitary conditions.

There are many more ways in which we may get infected with disease causing germs due to the practice of open defecation. In addition to this, we may also get infected with disease causing germs by coming in contact with domesticated animal dung, faecal matter of pets or stray animals, rodents and birds.

It is, therefore, essential that we wash our hands as frequently as possible to avoid entry of harmful germs to our body from different sources.

## Activity 3

Think of a scene about how open defecation can affect our health. Write down the scene.

_____

_____

_____

_____

### Malnutrition and Stunting

*Doctor checking for malnutrition*

*A poor and nutrition deficient diet or certain digestive conditions do not allow the body to get enough nutrition. The digestive conditions may be due to poor sanitation. If the conditions like improper nutrition or digestive conditions continue over a long period* **malnutrition** *may occur.*

*Stunted growth, also known as* **stunting** *and nutritional stunting, is a reduced growth rate in human development. It is a primary manifestation of malnutrition and recurrent infections, such as diarrhoea.*

*Every year in India, 26 million children are born into families that practice open defecation. Close to 0.7 million children die within 28 days of birth. Lack of safe sanitation and poor hygiene causes frequent diseases which often lead to malnutrition and stunted growth.*

Adequate sanitation and the practice of good hygiene, for example, washing hands frequently with soap particularly before taking food and after defecating and using toilet by everyone, can be a major preventive measure of malnutrition and stunting.

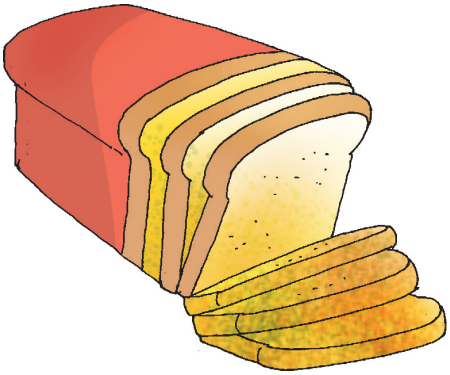
In conclusion, safe sanitation prevents diseases by:

- isolating the user from their own and other people's faeces.

- preventing the carriers of disease causing germs (e.g., flies, mosquitoes, cockroaches) from contacting the faeces and subsequently transmitting diseases to humans.
- preventing the faeces from contaminating our surroundings.

It is important to understand that sanitation can act at different levels, protecting the individual, the household, and the community from germs and infection.

### 2.2 What are Germs?



Sometimes when any food falls on ground, elders usually advise us not to eat it as germs may be present on it. This is because germs are found in air, water, soil, food, plants, animals, and on any surface including our body. But we cannot see these germs without the help of a magnifying device. During rainy season you might have noticed that bread gets spoilt easily. Its surface gets covered with grayish white patches. If you observe these patches through a magnifying glass, you may observe tiny, blackish, grayish rounded structures. These are fungi.

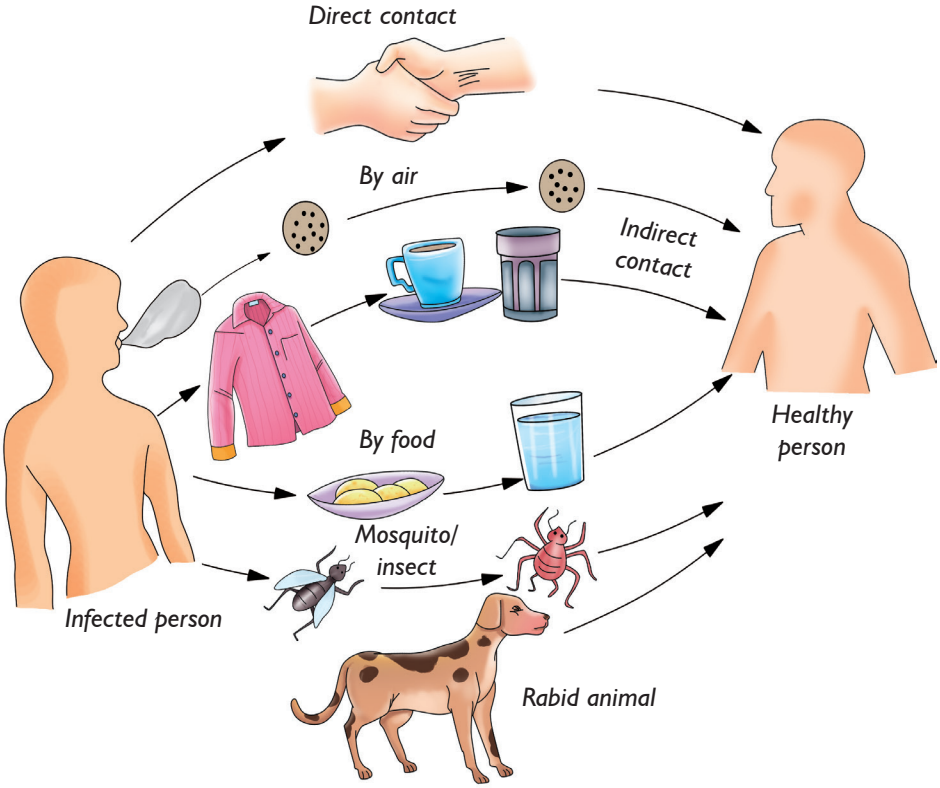
Similarly, tiny organisms can be seen in water as well. For example, take a few drops of water from a pond or a well and spread it on a glass slide and observe under a microscope. You may find tiny organisms moving in the water. Obviously, these organisms are so small in size that they cannot be seen without a microscope. The germs present in food, the fungus on bread and the tiny organisms in water are known as micro-ogranisms or microbes. Some of these microbes may cause disease and are called germs. Usually most of the germs do not harm us because our immune system protects us against them. But the same germs can cause disease if our immune system is weak.

There are also some microbes that are beneficial in many ways. Some of them help in setting of curd and baking of bread and cake. Do you know that a large number of microbes reside in our body? Some of these help in the digestion of the food we eat.

**How germs spread?**

Germs can spread in several ways. Some common ways are:

- Nose, mouth or eyes to hands and then to others.
- Food to hands.
- Hands to food.
- Animals to people.
- People to animals.
- Infected child to hands to others.
- Through air, water and disease carriers.



# Open Defecation

### 3.1 What is open defecation?

Open defecation is the practice of defecating outside in the open rather than using a toilet. The germs in the faeces and urine often find their way into sources of water and food which may lead to disease.

### 3.2 Why should I stop open defecation?

Open defecation causes public health problems in areas where people defecate in fields, along railway lines, open spaces near dwelling places, near ponds and rivers.

Some of the health problems that may arise due to open defecation have been discussed earlier.

### 3.3 Why do some people defecate in the open?

There are many reasons why some people defecate in the open. The reasons may include one or more of the following:

- Some household do not have toilets and cannot afford to build one.
- In some cases toilet is available but is of low quality and are not well maintained.
- People prefer not to use toilets to delay the toilet pit filling up, in the case of a pit latrine.

**Do you know?**

Even a drop is dangerous.
One gram of faeces may contain 10,000,000 viruses, 1,000,000 bacteria, 1,000 parasites cysts and 100 parasite eggs.

**More to know**

**Problem of Open defecation in the World and in India**

About one billion people or 15 per cent of the global population follows the practice of open defecation (WHO/UNICEF report 2014).

India has the highest number of people practicing open defecation, around 500 million. Out of these, about 52 per cent of them reside in rural areas while 7.5 per cent is estimated to be in urban areas.

A study by Water Aid estimated as many as 157 million Indian or 41 per cent of Indians living in urban areas, live without adequate sanitation.

(Source: Swachhata Status Report 2016 Ministry of Statistics and Programme Implementation, Government of India 2016, p69–70.)

- Toilets are not available at the workplace or public places, e.g., during farming activities.
- Some people are ignorant about the benefits of using toilets.
- Cultural or habitual preference for defecation in the open.
- Sometimes the toilet buildings are encroached upon and are used for some other purpose.

In view of the above it is imperative that concerted efforts be made to bring about behavioural change among large section of people who are defecating in the open and not using toilets. This can be achieved if children from very beginning are trained in proper use of toilets.

# What is Open Defecation Free?

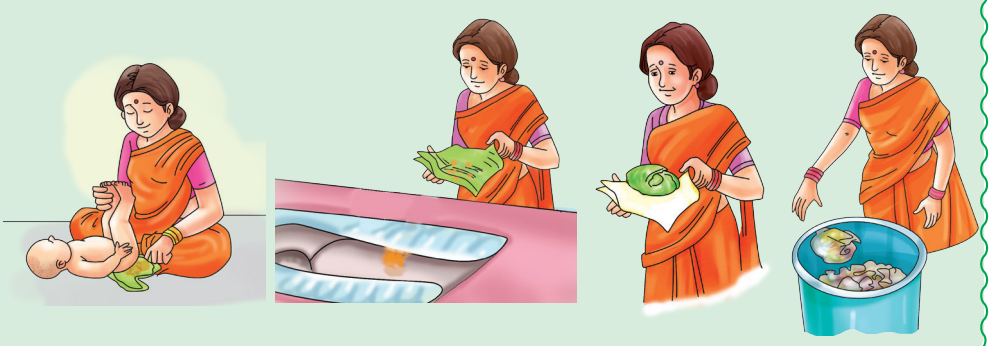
The Government of India has defined, Open Defecation Free (ODF), as the termination of faecal-oral transmission, defined by no visible faeces found in the environment or surroundings and every household and public/ community institutions are using safe technology options for disposal of faeces.

This will be possible only when no one defecates in the open.

This definition is part of the *Swachh Bharat Mission* (Clean India Campaign). The fundamental idea is that no one should defecate in the open, and always use toilets.

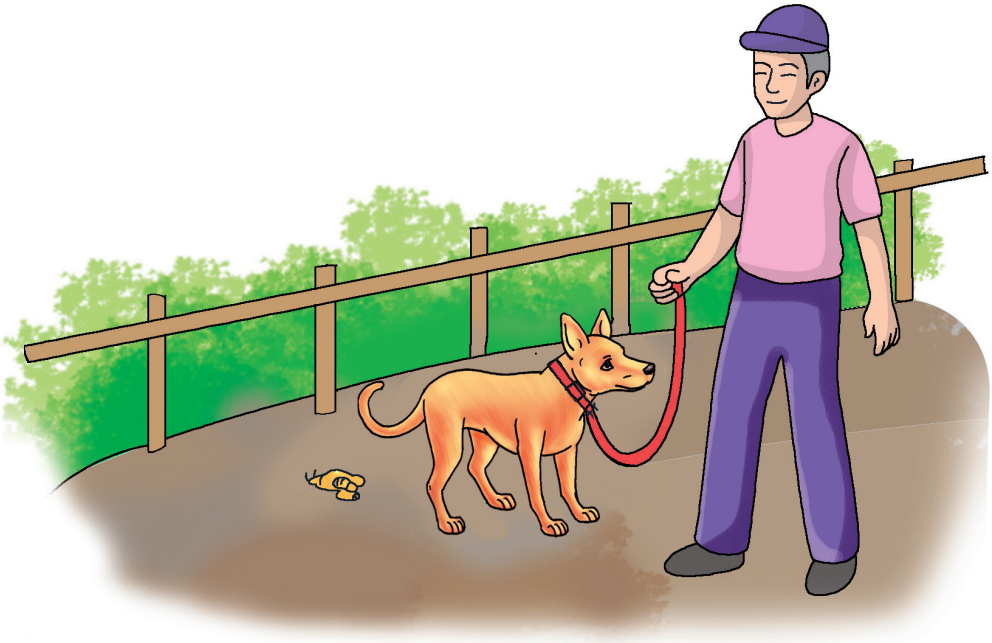
## How to Dispose Faeces from Used Diapers and Nappies?

*Now-a-days diapers are being used for babies, for sick patients and also for aged people. In many households homemade nappies are used for infants. In either case, it is important to get rid of faeces from the diaper/nappies by dropping it in the toilet. This will reduce foul odors and spread of germs. One can use the sticky tape sections of the diaper to wrap it up properly in a used paper before throwing it in a garbage bin. One should never throw used diapers in an open area because these are harmful for environment. After handling a used diaper/nappies wash hands with soap. Proper sanitation habits are very important.*



## 4.1 Defecation by pets and stray animals

All animals other than human beings defecate in the open. However, some of them like pets and domesticated animals being closer to human population can be a source of disease causing germs. You may have seen people taking their pets such as dogs to defecate in the open. This is quite a common practice in urban areas. You might have also come across faeces of stray animals in the neighbourhood, in the streets or in the open fields. These faeces from animals can also carry disease causing germs. The germs can spread to humans just as human faeces transmit diseases. One of the essential conditions to make India open defecation free is to provide improved sanitation facilities including toilets.



# Improved Sanitation

An improved sanitation facility is the one that hygienically separates human faeces and urine from human contact. Usually this include:

(a) A flush toilet connected to a piped sewer system.

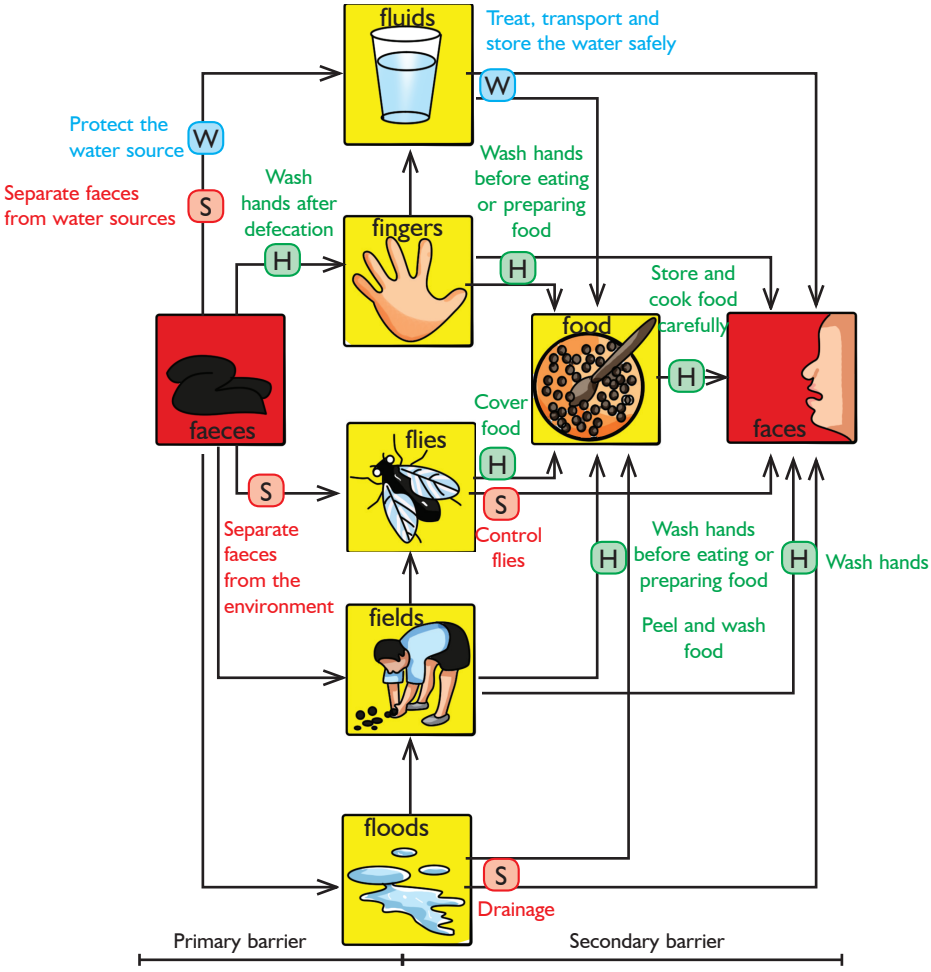
(b) A flush/pour-flush toilet connected to a septic tank or pit latrine.

(c) A composting toilet—a dry toilet that treats human excreta, by composting or managed aerobic decomposition. These toilets generally use little or no water and may be used as an alternative to flush toilets.

# The F Diagram

The **F** diagram depicts how germs spread and how that can be prevented. The letter 'F' in F diagram refers to **f**luids, **f**ingers, **f**lies, and **f**ields; the modes through which the diseases from faecal matter can spread.

(a) Through fluids mainly water: Germs from faeces on the ground can get into the water (fluids) that may be used for drinking.




*Common modes of transmission of disease causing germs*

(b) Through fingers: Through fingers, or hands that haven't been washed after going to the toilet. These dirty hands can transmit the germs on the foods to be eaten.

(c) Through flies: Flies can transfer germs from faeces to food. So it's important to keep flies and other insects out of the kitchen or where food is kept.

(d) Through fields or floors: Germs can seep into the crops and other sources of food, or come into homes through animals or poultry, if faeces are not disposed of properly. To prevent field contamination, it's important that faeces are disposed in the toilets.

## Activity 4

Let us test our knowledge about types of barriers. Tick (✓) the correct type of barrier in the following situations:

| | | Primary | Secondary |
|---|---|---|---|
| 1. | Not letting flies come in contact with the faecal matter. | | |
| 2. | Not letting flies sit on the food. | | |
| 3. | Keeping water bodies clean by not letting it come in contact with faecal matter. | | |
| 4. | Washing hands after defecation. | | |
| 5. | Washing hands before eating. | | |
| 6. | Washing fruits before eating. | | |
| 7. | Washing vegetables before making salad. | | |
| 8. | Controlling the cockroach population. | | |
| 9. | Covering the food properly. | | |
| 10. | Using toilet properly. | | |

## 6.1 What are barriers?

We have seen that diseases can get spread from the faecal matter through different sources classified as the Fs. Therefore, in order to prevent such spread of diseases, we need to create some efforts or interventions to check the spread of diseases through all the Fs. These are called **barriers**. Based on where we create the barriers, they are grouped into two types:

(i) **Primary barriers (PB)**: We can create barriers between unclean fluids, fingers, flies and fields by eliminating **open defecation.**

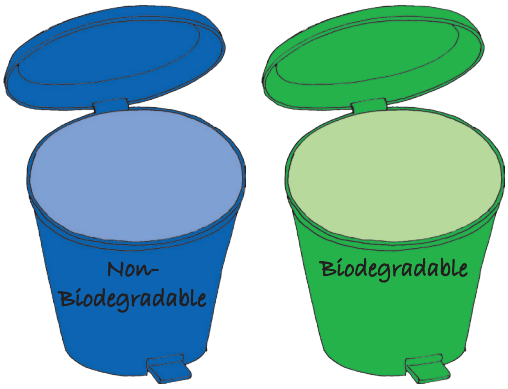
(ii) **Secondary barriers (SB)**: We can create barriers between unclean fluids, fingers, flies and the food we eat, by maintaining **hygiene** and keeping our surroundings, our hands and our foods clean and safe.

We therefore need to ensure that effective barriers exist in our activities and surroundings that can prevent the transmission of germs from faeces to human.

# Types of Waste

Faecal matter is not the only waste that can affect our health. In fact, waste is any material, solid or fluid/liquid that is thrown away as unwanted material.

As per physical properties, waste can be categorised as solid and liquid wastes.




### (a) Solid waste

Any waste other than human faeces, urine and waste water, is called **solid waste**. Solid waste generally includes—household waste, garden waste, cattle dung and waste from cattle sheds, agro waste, broken glass, scrap metal, waste paper, plastics, cloth, rubber, waste from markets and shopping areas, hotels, hospitals, etc.

Some of the above wastes which are products of plants and animals are called biodegradable while the products from non-living are categorised as non-biodegradable.

- **Biodegradable:** Waste that are completely decomposed by biological processes either in presence or in absence of air are called biodegradable, e.g., kitchen waste, animal dung, agricultural waste, etc.
- **Non-biodegradable:** Waste which cannot be decomposed by biological processes is called non-biodegradable waste e.g., broken glass, plastics, etc.

### (b) Liquid waste

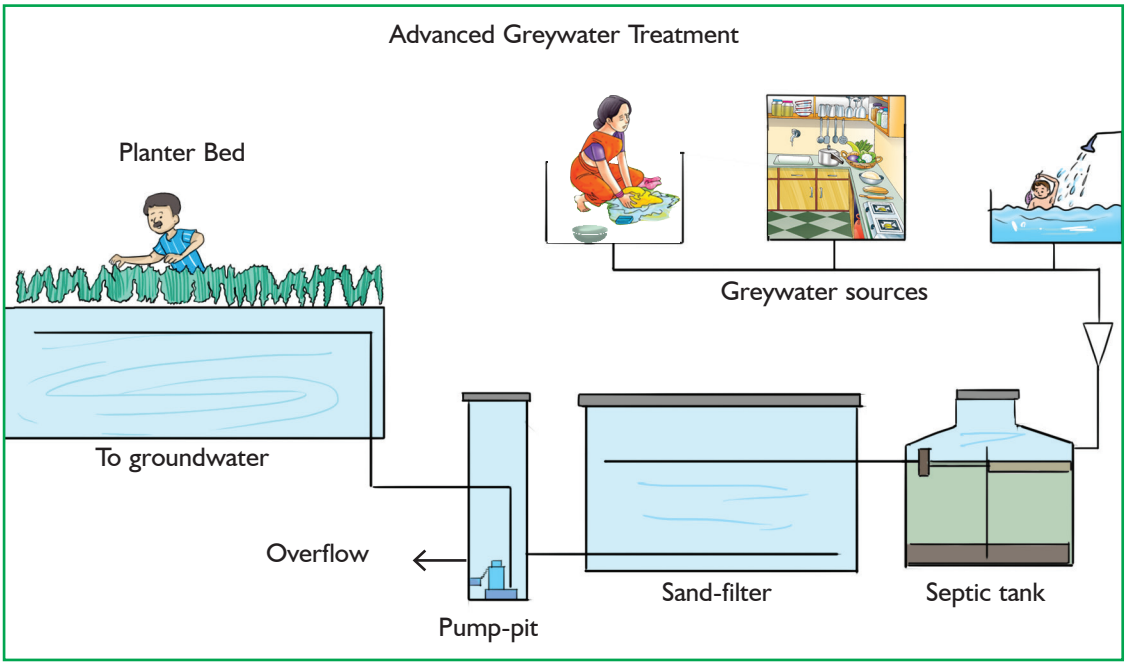
Used and unwanted water is called waste water. Waste water is of two types:

- Black Water: Waste water generated in the toilets is called black water. It contains harmful germs.
- Greywater: Waste water generated in the kitchen, bathroom and laundry is called greywater. It may also contain harmful germs. Greywater can be reused for gardening and toilets after simple treatment.

# Important Sanitation Schemes In India

The period 1981–1990 was celebrated worldwide as the International Decade of Water and Sanitation. It reflected global concern about sanitation.

In India, sanitation services in urban areas are provided by municipal bodies. In rural areas these services are provided through state government departments and gram panchayats. In rural areas, the Government of India started the Central Rural Sanitation Programme (CRSP) in 1986, followed by the Total Sanitation Campaign (TSC) in 1999, and the Nirmal Bharat Abhiyan in 2012. The objective of all these schemes was to encourage rural households to build and use toilets, so to accelerate sanitation coverage. Households were provided financial incentives for this.




According to the Ministry of Drinking Water and Sanitation (MDWS), Government of India's Baseline Survey 2013, the above efforts resulted in

India's sanitation coverage in rural areas to reach close to 40 per cent. This progress however was not satisfactory as most of the efforts focused more on construction of toilets and not enough on ensuring their use. The *Swachh Bharat Mission* launched by the Government is an effort to address this issue.

### 8.1 *Swachh Bharat Mission*

On 2nd October 2014, the Prime Minister, Shri Narendra Modi, launched the *Swachh Bharat Mission* (SBM). The Mission is being implemented both in urban and rural areas, and aims to create an Open Defecation Free India by 2nd October 2019, which is the 150th birth anniversary of Mahatma Gandhi, the Father of the Nation. It also aims at creating cleaner cities, towns and villages across the country.

स्वच्छ भारत

एक कदम स्वच्छता की ओर

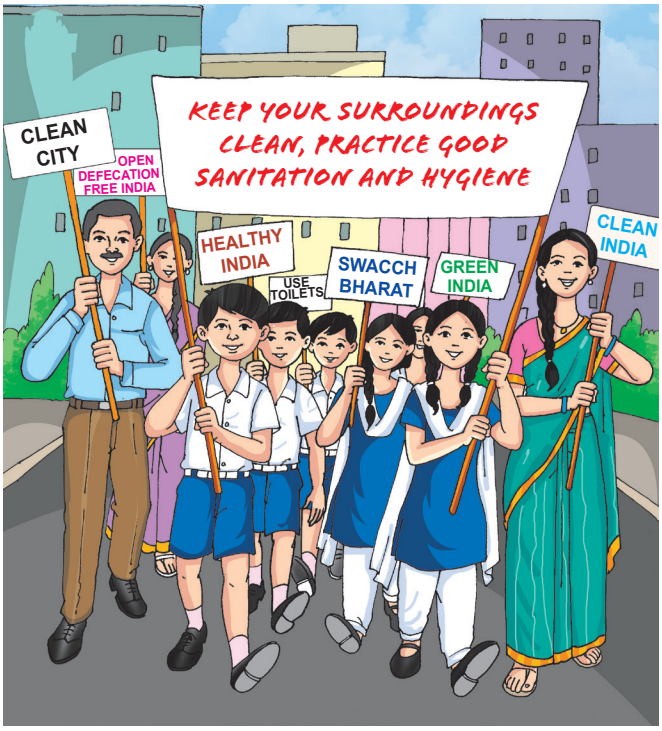
*Ek Kadam Swachhata Ki Aur*

The *Swachh Bharat Mission* logo consists of Gandhiji's spectacles and the slogan, *Ek Kadam Swachhata Ki Aur*. The *Swachh Bharat Mission* aims to provide toilet facilities to all, and promote their use at all times. Under the programme, the government provides incentives to households to build and use toilets.

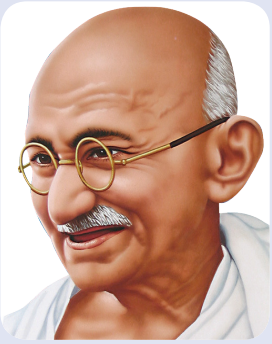
Cleanliness of homes and surroundings and public places like schools, hospitals, offices, bus stands, railway stations and markets, etc., are also important components of the Mission. Good hygiene practices like hand washing after defecation

and before meals are being promoted. Hand washing facilities in schools are being set up so that children can wash their hands before and after having their mid day meal.

The *Swachh Bharat Mission* has created a lot of excitement and enthusiasm among citizens. Students in particular have come forward and are participating in awareness and cleanliness activities across the country. Government departments, public and private enterprises, civil society, youth organisations and the general public are participating in the activities. Various events are being held in which mass participation in cleanliness activities and its promotion is seen. Many celebrities have also supported and participated in the programme.



Gandhiji was a devoted campaigner for cleanliness and sanitation. He made cleanliness and sanitation an integral part of the way of living. His dream was total sanitation for all. According to him, cleanliness was most important for physical well-being and healthy environment.
To read more about Gandhiji's efforts on sanitation you may read the book Bahuroope *Gandhi* written by Anu Bandopadhyaya in 1964. Read the book online by following this link: mkgandhi.org/bahurupi/bahurupi.htm



# EXERCISES

## Answer the following questions:

1. Why is sanitation so important for us? Mention any two reasons.
2. What are the common sources of germs? Name any two.
3. List any three ways by which germs may spread.
4. Give two examples each of biodegradable and non biodegradable wastes.
5. No one should defecate in open. Justify the statement.
6. People usually let their pet dog to defecate in open. Suggest a way to prevent them from littering public places.
8. How has the surrounding of your home and school changed after the launch of *Swachh Bharat Mission*?
9. If you have participated in an event on *Swachh Bharat Mission* write your personal experience.
10. What do you understand by open defecation free?

## Extended Activities

1. Every citizen of the country needs to contribute towards the success of *Swachh Bharat Mission*. Discuss with your friends what steps need be taken to ensure that:
   - everyone uses toilets all the time, and
   - wastes are disposed off in such a manner that it enhances cleanliness.

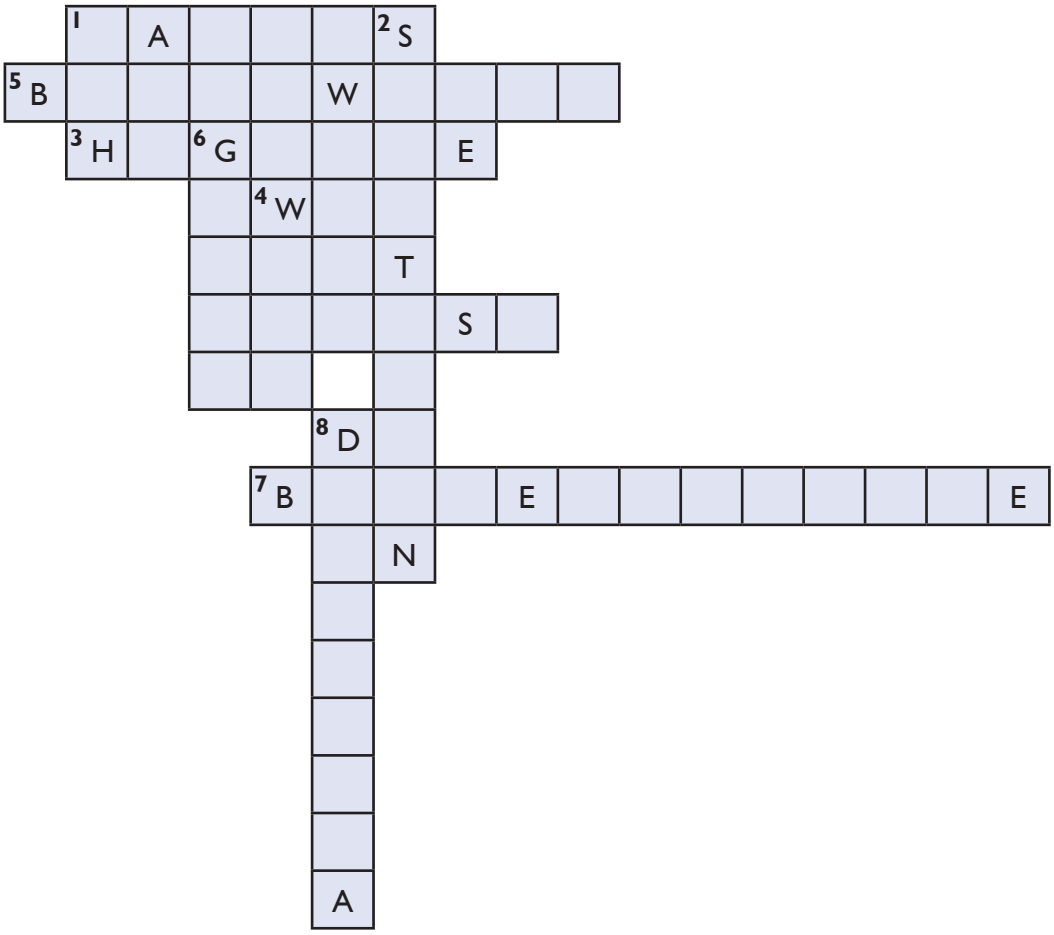
II. Solve the crossword.

Across

1. Undigested and unabsorbed solid waste excreted.
2. Practice of keeping oneself clean.
3. Waste water generated in the toilets.
4. Waste that completely gets decomposed by biological processes.

Down

1. Proper disposal of human and animal wastes.
2. The collective term for water, sanitation and hygiene.
3. Can be transmitted to others by coughing or sneezing.
4. A common digestive disorder associated with unhygienic conditions.



III. Several terms related to Swachh Bharat Mission are hidden in the figure. Spot at least five. One example is shown for you.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| W | C | L | E | A | N | T | W | B | P | Z |
| O | A | B | C | I | D | K | M | L | N | B |
| D | G | K | A | T | E | W | T | A | G | M |
| K | E | T | N | O | F | A | E | C | E | S |
| I | H | Y | G | I | E | N | E | K | R | A |
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| I | H | R | N | Y | A | F | I | D | P | O |
| R | E | C | Y | C | L | E | N | R | T | N |

IV. Try to do!

1. Depict *Swacch Bharat* Mission as you perceive in the form of cartoon/ drawing.
2. Write a slogan on *Swacch Bharat* Mission.

स्वच्छ भारत

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एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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