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HARVESTING RAIN

A. WARMER

Do you like to play in the rain? List the things which you do in rainwater. Have you ever seen people collecting rain water? How do they collect it?

Have you ever collected rainwater? My family used to collect rainwater in buckets and the water was put to good use. Collecting water during the June showers, especially after facing severe water shortage all summer, was a thrilling experience.

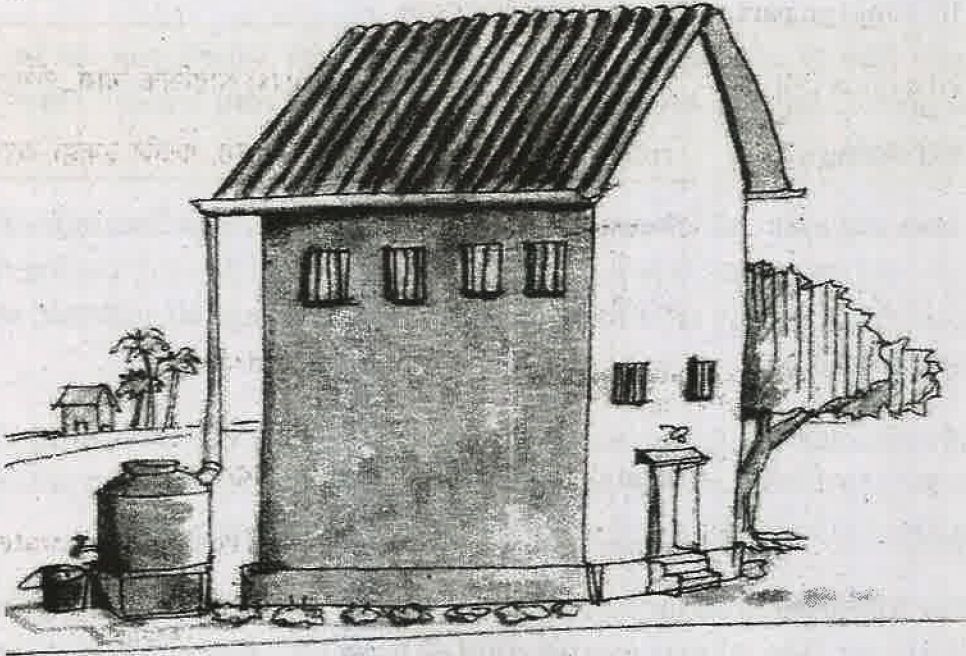
My adventure with rainwater never stopped there. While teaching at a school in the Maldives I saw rainwater harvesting. What is rainwater harvesting? It is a method of collecting rainwater for domestic purposes.

The Maldives is an archipelago in southern Asia made up of a group of 1,190 islands. The islands receive rainfall from the North East Monsoon and the South West Monsoon. The rains are unpredictable and there is no fresh water available. It is difficult to get groundwater and it is not fit for drinking. The people have been taught to set up a good system of rainwater harvesting.

Each newly built house is fitted with slopping roofs made of corrugated iron. This is ideal for collecting rainwater. Gutters are nailed to the base of the roof and the sealed off at one end. The other end of the gutter has a pipe that leads to a huge tank made of cement. The pipe is extended in such a way as to deliver the water into the tank. The tank has a tap at its base. Some houses have a system for locking the tap.

Once the tank in the house where I lived ran dry, I didn't have to worry. The school had plenty of water all through the year. Can you guess why? The area of the school roof being extremely large, the amount of

water collected is greater. After a long dry spell one night there was a heavy downpour.



I was delighted because that meant that my tank was filling up. But the next morning the tank was empty! The early rains of the season are allowed to flow to waste so as to clean the roof and the tank before the water is stored! I had never thought of that.

People all over the world are harvesting rainwater. Yet in our country large amounts of rainwater are lost. Its use should be encouraged at the family and school level. We need rainwater. It is abundant, safe and very sweet and pleasant to drink.

GLOSSARY AND NOTES

shortage (n):	not having enough अपर्याप्त, अभाव
thrilling (pr. part adj):	very happy अतिप्रसन्न
adventure (n):	an act of doing unusual thing (s) साहसिक कार्य, रोमांच
harvesting (n):	collecting, storing yields अन्न संग्रह, फसल इकट्ठा करना
domestic (adj):	household घरेलू
archipelago (n):	group of islands टापुओं का समूह
groundwater (n):	water that comes from wells and springs जल स्रोत, भूजल
corrugated (adj):	iron sheets made into folds नालीदार
gutters (n);	a long pipe fixed at the edge of a roof to carry water नाला
delighted (adj):	pleased/ feel happy प्रसन्न
downpour (n):	rain वर्षा
abundant (adj):	plenty, enough पर्याप्त
severe (adj):	too much बहुत अधिक

B. LET'S COMPREHEND

B.1. THINK AND TELL

B.1.1. Answer the following questions orally:

1. When is collecting water a very thrilling experience?
2. When does the rainwater harvesting become useful and necessary?
3. What is a necessary step before collecting rain water?

B.1. 2. State whether the following statements are true or false:

1. The islands of Maldives receive rainfall from North West monsoon.
2. The people in Maldives depend entirely on rainwater harvesting for their needs for water.
3. All houses in Maldives have the sloping roofs made of corrugated iron.
4. The author's school had water round the year.
5. Rainwater is highly dependable.

B.2. THINK AND WRITE**B.2.1 Given below are the steps for harvesting rain in Maldives. But they are not in proper order. Put them in proper order:**

1. The tank has a tap at its base.
2. Each newly built house is fitted with sloping roofs made of corrugated iron.
3. Some houses have a system for locking the tap.
4. This is ideal for collecting rainwater.
5. The pipe is extended in such a way as to deliver the water into tank.
6. Gutters are nailed to the base of the roof and sealed off at one end.
7. The other end of gutter has a pipe that leads to a huge tank made of cement.

B.2.2. Answer each of the following questions in about 30 words:

1. Groundwater is becoming scarce and still its uses are many in our daily life. How can we gather and save water?
2. All of us enjoy rain. We get drenched in it. We play with the paper boats. What was the author's experience of collecting rain water?

3. Our parents and teachers instruct us not to drench ourselves in the 1st rain shower. Why according to the author the early rain water in the season should be allowed to go a waste?
4. Huge amount of rainwater is lost in our country. It is the wastage of natural resource. Do you agree with this view? Give reasons.

C. WORD STUDY

C.1. Correct the following words to make them meaningful:

Experiance, corragated, dilighted, incouraged, abundant

C.2. Match the words in A with their meanings in B.

A

huge

hailed

set up

sealed up

plenty

B

to establish

abundant

very big

praised

completely closed from all sides

C.3. Pick out from the text the words which are opposite in meaning to the following words:

plenty

wet

empty

always

lost

C.4. Find out the sentences in which the following words have been used in the lesson. Then use these words in your own sentences.

shortage thrilling experience groundwater

D. GRAMMAR

D.1. Participles used as adjectives

Look at the following sentence:

collecting water during the June showers, especially after facing severe water shortage all summer was a thrilling experience.

Here, 'thrilling' is a present participle (verb + **-ing**) used as an adjective. The past participle (verb + **ed** or **-en**) is also used as an adjective; e.g., 'broken leg'. Look at some more examples:

Present participles	Past participles
We saw an entertaining movie	I kept the tickets in sealed envelopes.
Robot is an exciting movie.	The maid was given a burnt chapati.
Robot has amazing visuals.	He sat on a broken chair.

In some cases, both the present participle and the past participle of the same verb can be used as adjectives. For example:

amazing	amazed	frightening	frightened
boring	bored	interesting	interested
exciting	excited	surprising	surprised
convincing	convinced	terrifying	terrified
tiring	tired	disappointing	disappointed

Past participles, when used as adjectives, can be found in phrases such as the following:

a broken leg

a known fact

a closed door

a locked door

a crowded bus

an injured soldier

an air-conditioned building

a broken promise

a married woman

an educated person

a used car

a sealed envelope

An adverb can be placed before past participle adjectives:

a well known fact

a well educated person

a well behaved child

a slightly used book

a closely watched experiment

closely related languages

a well dressed woman

a highly paid actor

D.2. Difference between almost and nearly.

Almost and **nearly** have similar meanings. They are both used to express ideas connected with progress, measurement or counting.

He slipped and **almost** fell to the ground.

OR

He slipped and **nearly** fell to the ground.

Dinner is **almost** / **nearly** ready. (= Dinner will soon be ready.)

Sometimes **almost** shows more 'nearness' than **nearly**.

Compare:

It is nearly 12 o'clock. (= perhaps 11.45)

It is almost 12 o'clock. (= perhaps 11.55)

Nearly can be used with **very** and **pretty**. **Almost** cannot be used with **very** and **pretty**.

I have **pretty nearly** finished. (NOT I have pretty almost finished.)

Nearly suggests progress towards a goal. **Almost** suggests ideas such as similarity.

He is **almost** like a father to me. (NOT He is nearly like a father to me.)

She has got a good accent. She **almost** sounds American.

Almost is never used with a negative: you could say "A is almost as good as B" or "A is nearly as good as B", but you can't say "A is almost not as good as B".

Nearly is not normally used before negative words like **never**, **nobody**, **nothing**, **any** etc. Instead we use **almost** or **hardly** with **ever**, **anybody**, **anything** etc.

The speaker said **almost nothing**.

OR

The speaker said **hardly anything**. (= The speaker said only a few words of little importance.) [NOT The speaker said nearly nothing.]

Almost nobody came.

OR

Hardly anybody came. (NOT Nearly nobody came.)

D.2.1. Fill in the blanks with the correct participle (present or past) of the verb given in brackets. One has been done for you.

Ex: I was bored (bore) during the movie and fell asleep.

1. After washing clothes for two hours, I felt _____ (tire).
2. Last night I saw an _____ (interest) movie.
3. I didn't enjoy watching Godzilla. It was a _____ (frighten) movie.
4. My friend was _____ (surprise) when he saw people wearing sweaters in June in Shimla.
5. Learning a new language is sometimes very _____ (frustrate).
6. The children were _____ (excite) to see the tigers at the circus.

D.2.2. Fill in the blanks with an appropriate past participle. One has been done for you.

Ex: I can't go to the library because the door is locked.

1. Where is the *Golghar* _____ ?
2. Last night I slept only for five hours. I'm so _____ today.

3. My room isn't _____, so it's hot in the summer.
4. I have two sisters. One is single. The other is _____.
5. Anuj wasn't _____ in Patna. He came here when he was six years old.
6. Many movies are _____ in Bollywood.
7. Which director was _____ in making the movie?
8. Our school bus is always _____.
9. Children shouldn't be _____ to watch movies late at night.
10. Manoj Bajpai is a well _____ actor.

D.3. Sequence of tenses

If one clause follows another, its verb takes form according to certain rules. This is what we call sequence of tenses. The term sequence of tenses refers to the systematic way in which we alter the speaker's verb tenses to make clear that all events, past or future, are not simultaneous.

For example : The speaker says, "I am tired of hearing that song."

We correctly report it: He said he **was tired** of hearing the song.

Here, changing the tense of the speaker from present to simple past constitutes about most of the process we call sequence of tenses.

We do not say: He says he **is tired** of hearing the song.

The source says: "The weather **is bad**."

We then would say/write: He **said** the weather was bad.

Some rules regarding the sequence of tenses are:

1. If the main clause of a complex sentence is in the present tense or future tense, the verb of the dependent clause may take any form any tense. For example,
 - (i) I know that he **is** a good singer. (present tense after a present tense)
 - (ii) I know that Anshu **will help** me. (future tense after a present tense)
 - (iii) I **will see** whether Sabiha **finished** her homework or not. (past tense after a future tense)
2. When the independent clause is in the past tense, the dependent clause must also be in the past tense. For example,
 - (i) Anu **asked** me why I **was** late. (past tense after a past tense)
 - (ii) Aslam **told** me that he **was** very tired. (past tense after a past tense)
 - (iii) Ayesha **replied** that she **had missed** her train. (past tense after a past tense)
3. If the main clause is in the past tense, the dependent clause can be in the present tense only if it states a universal truth. For example,
 - (i) My mother **taught** me that honesty **is** the best policy.
 - (ii) We **learnt** in school that the earth **is** round in shape.

Tense in Independent Clause	Purpose of Dependent Clause/ Tense in Dependent Clause	Example(s)
Simple Present	To show same-time action, use the present tense.	I <i>am</i> eager to see the zoo because I <i>love</i> animals.
	To show earlier action, use past tense.	I <i>know</i> that I <i>made</i> the right choice.
	To show a period of time extending from some point in the past to the present, use the present perfect tense.	They believed that <i>they have used</i> the right form of the verb.
	To show action to come, use the future tense.	The Principal <i>says</i> that he <i>will allow</i> us to use his computer.
Simple Past	To show another completed past action, use the past tense.	I <i>wanted</i> to go home because I <i>missed</i> my parents.
	To show an earlier action, use the past perfect tense.	She <i>knew</i> she <i>had</i> the right choice.
	To state a general truth, use the present tense.	Scientists <i>knew</i> that the earth <i>attracts</i> everything towards its centre.
Present Perfect or Past Perfect	For any purpose, use the past tense.	She <i>has grown</i> five inches since she <i>turned</i> nine.
		The crowd <i>had become</i> restless before the ticket counter <i>opened</i> .
Future	To show action happening at the same time, use the present tense.	I <i>will be</i> so happy if they fix my TV today.
	To show an earlier action, use the past tense.	You <i>will</i> surely <i>pass</i> this exam if you <i>studied</i> hard.
	To show future action the action of the independent clause, use the present perfect tense.	The college <i>will</i> probably <i>close</i> admissions next week if students <i>have not paid</i> their fees.

D.3.1. Fill up the blanks with the correct tense of the verb given in brackets.

- (a) Anil ran as fast as he _____ (can, could)
- (b) Just as we _____ the station, the train came. (reach, reached)
- (c) You will pass the exam if you _____ (try, tried).
- (d) He waited for his sister until she _____ (come, came).
- (e) The teacher taught us that green leaves _____ chlorophyll. (contain, contains, contained)
- (f) Peter said that it _____ him an hour to reach the station. (take, took)

D.3.2. Fill in the blanks with the correct auxiliary verbs.

- (a) Paras said that he _____ write the essay.
- (b) Sabiha told me that she _____ come.
- (c) Parvez says that he _____ sing a Hindi song.
- (d) I wished that I _____ buy a new bicycle.

E. LET'S TALK

Discuss the following in groups or pairs:

No water, no life.

F. Composition

Write a letter to your friend describing how water can be saved through rain harvesting.

G. TRANSLATION

Translate the first two paragraphs of the lesson in Hindi or your mother tongue.

H. ACTIVITY

List some ways to save water.

