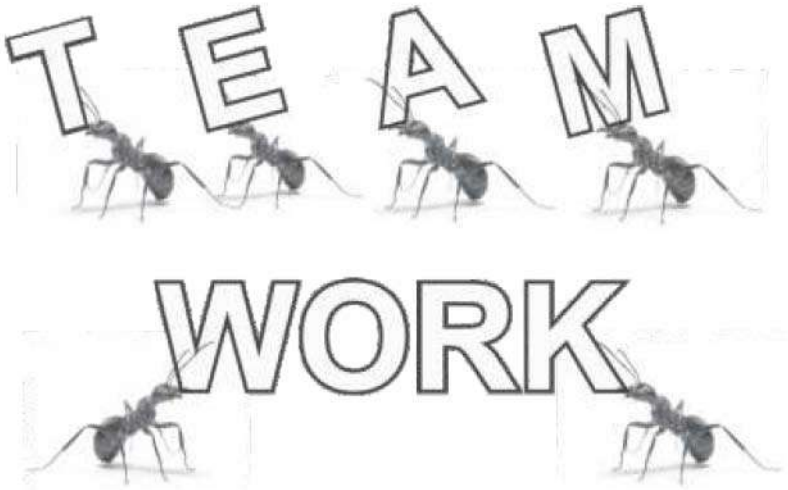
UNIT 5

Pre-task

1. Read this poem about ants. Make a list of qualities of ants as mentioned in the poem.

Working Ants
In a straight line we walk
A lot of work without talk
Under leaves and over rocks
Heavy lifts to keep our stocks
We work within an almost
sacrificial love for one another
This love so strong that
permeates our bodies willingly
Carries many times its weight
freely.
As we find a freedom in a devotion
As we build a great life together.



2. What do you know about ants? Put a cross (X) on what you think is not true about ants.

- Ants are tiny and weak creatures.
- Ants work as a crowd not as a team.
- They are harmless and nonviolent.
- They cannot grow food like farmers.
- Ants are so tiny that they cannot rule over other creatures.
- Ants can eat a huge elephant in a few minutes.
- Ants are food for other creatures.
- Ants are hunters.
- They have to collect food.
- Ants have a social life like human beings.

Read 1 ANTS

The following behaviour was noticed by a scientist who was making a study of ants. A number of ants were down in a pit, where they had killed some flies and other insects for food. The ants began fetching the small bits of these insects up to their anthill. This was arduous work for them. The sides of the pit were steep and, considering the size of the ants, the loads they were carrying were very heavy. It was as if a group of men were carrying a weight of two hundred pounds each, and climbing a cliff at the same time.

The ants immediately organised the work in this way while some were carrying up the bits of insects, the others went in front and cleared away any sand or small stone that obstructed the way. At some points where it was difficult to get a foothold, these other ants would position themselves in such a way that the ants carrying the loads could easily climb over them.

Near the top of the pit, however, there was a small part of the way which was completely

smooth and steep. Here there were no footholds. The ants came up to these points and there their progress stopped. It seemed that, after all, they had been defeated. Of the many ants which tried to climb this part, only one reached the top. This one was immediately met by a number of ants from the anthill, to whom it conveyed a message. And now an amazing thing happened. The ants at the top began climbing down into the pit backward, each holding the tail end of another ant in front. In this way an ant-chain was soon formed which slowly dropped down the steep side. When it reached the ants waiting with their loads, they easily climbed up the chain and came out at the top.

Such behaviour, showing the adeptness of ants, has been noticed and studied by many. Now science has discovered some things about ant life which seem to show that the intelligence of these tiny creatures is very close to human intelligence. Not all scientists concede to this view, but you may look at some of these facts and form your own opinion.

These are ants that do 'farming'. You may know that it was a big leap for human progress when man gave up being a full-time hunter and took to farming. Seemingly, the umbrella ants of South America have taken the same step in their small way! They are called by that name because they are often seen carrying large pieces of leaf over their heads like umbrellas. They take these pieces of leaf to their nests, where they chew them up nicely. Afterwards they make beds of these chewed -up leaves. On these beds grows a kind of fungus, which is the food of ants.

Then there are ants that domesticate 'cows' and 'milk' them! What we have called 'cow' are a kind of greenfly. These are found on rose leaves and on the leaves of beans. They give out a sweet, honey-like liquid which the ants relish a lot. So the ants take these greenflies to their nests and keep them there. They feed them, protect them from their enemies; and they 'milk' them, pressing their sides gently and making them give out their honey.

Ants, we are told, play games, nurse their sick and bury their dead. They see that each one in the nest does its share of the work, and that no one is allowed to be indolent. All this suggests that ants have a highly developed social sense and perhaps some system of government.

There are ants that keep other ants as slaves. One such type is a powerful red ant which is found in Europe. Their slaves are taken from a type of black ant which is smaller in size. When the red ants want slaves, they ambush the nests of the black ants and abduct some of their eggs. When these eggs hatch in the red ants' nests, the black ants which come out are treated as slaves. From their birth they are taught to obey. They are compelled to drudgery – they have even to carry about their masters on their backs. How surprisingly human!

The most ferocious kind of ants are the 'driver' ants of Africa. They have no fixed home but are always on the move. They are completely blind, but they march in long lines, many millions along, and they devour any animal that happens to be in their path. Even large animals like tigers and elephants live in fear of them. Often if a python, unable to move after swallowing his dinner, happens to be in the path of the marching lines, then these creatures eat both the python and the animal in its stomach. The villagers of Africa tell stories about babies who have been eaten by ants and these stories may well be true. When an army of the driver ants enters a house, the people flee into the forest and stay there until the ants have passed. When the people come back, they find that every insect and spider in the house has been cleared away!

Glossary

pit hole, ditch **bits** pieces **anthill** mound (heap of clay) made by ants, રાફડો **arduous** difficult, laborious **steep** sharp vertical slope **cliff** steep rock **clear away** to remove (something) from an area **foothold** area of rock where one can safely put one's foot while climbing **amazing** surprising, astonishing **creature** living being **chewed up** crushed **ferocious** merciless, barbarous **swallow** gulp down **took to** started, began **domesticate** tame **indolent** lazy **relish** enjoy, savour **ambush** attack **abduct** carry off **compelled** forced **drudgery** labour work **on the move** wandering **devour** eat, consume **flee** run away from a place of danger, escape

Comprehension

C.1.1 Underline three sentences and three phrases that gave you a sense of wonder.

C.1. 2 Tick mark the information about the ants described in this read.

- ☐ Ants are miserable.
- ☐ They work as a group.
- ☐ Ants do not work in winter.
- ☐ They follow their master's order.
- ☐ There are different types of ants throughout the world.
- ☐ Ants can climb the Everest too.
- ☐ Ants are afraid of flies
- ☐ Different ants have different characteristics.
- ☐ Some ants are blind.
- ☐ Some ants live life of slaves.

C .1.3 Ants are similar to human beings because...

1.

2.

3. They can accomplish a difficult task with mutual co-operation.

4.

5.

C.1.4 Classify phrases from the text according to the roles they play.

(they keep slaves, system like government, domesticate cow, live on leaves of beans, play games, nurse their babies, share work, carry their masters on their back, make beds of chewed leaves, fungus is grown)

Ants as organizers	Ants as farmers	Ants as social beings	Ants as masters/slaves

C .1.5 Match A with B.

A	B
1. South American ants	a. slave ants
2. Cow ants	b. love to eat honey like liquid
3. Red ants	c. driver ants
4. Black ants	d. king ants
5. African ants	e. umbrella ants

C.1.6 Describe the behaviour of ants in these situations as mentioned in the read.

1. Situation : Ants have to carry heavy load and the sides of pit are steep.
   Behaviour : _____
2. Situation : The way to reach the top of the pit is very smooth, steep and without footholds.
   Behaviour : _____
3. Situation : Ants have to grow their food.
   Behaviour : _____
4. Situation : Ants like to have honey - like liquid.
   Behaviour : _____
5. Situation : Some ants need followers to work for them.
   Behaviour : _____

C.1.7 Write reasons to support these statements.

No	Statements	Reasons		
1.	Ants are clever			
2.	Ants have a system like government			
3.	Driver ants are dangerous			

C.1.8 Answer these questions.

1. What did the ants do to carry heavy food?
2. Suppose you are playing a role of South American ants, how will you play your role?
3. Why do some ants protect green flies?
4. Which ants are called master ants and slave ants?
5. Which ants are called cow ants? Why?
6. Do you have sympathy for servant ants? How are they treated by their masters?
7. Are people afraid of driver ants? Why?
8. How would you know that an army of ants has passed from this place?
9. What should we learn from ants?

Read 2

NO MEN ARE FOREIGN

- James Kirkup

Remember, no men are strange, no countries foreign
Beneath all uniforms, a single body breathes
Like ours: the land our brothers walk upon
Is earth like this, in which we all shall lie.
They, too, aware of sun and air and water,
Are fed by peaceful harvests, by war's long winter starv'd.
Their hands are ours, and in their lines we read
A labour not different from our own.
Remember they have eyes like ours that wake
Or sleep, and strength that can be won
By love. In every land is common life
That all can recognise and understand.
Let us remember, whenever we are told
To hate our brothers, it is ourselves
That we shall dispossess, betray, condemn.
Remember, we who take arms against each other
It is the human earth that we defile.
Our hells of fire and dust outrage the innocence
Of air that is everywhere our own.
Remember, no men are foreign, and no countries strange.

Glossary

beneath under, below **harvest** produce, fruitage **starved** suffering **recognize** identify somebody **dispossess** deprive **betray** be disloyal **condemn** criticize **defile** spoil, taint **outrage** violate

Comprehension

C.2.1 Here are some words/phrases Expressing Oneness (EO) and words Harming Oneness (HO). Write EO or HO in the box.

- ☐ single body
- ☐ arms against each other
- ☐ not different from
- ☐ hells of fire
- ☐ everywhere our own
- ☐ our brothers
- ☐ no men are strange
- ☐ hate our brothers
- ☐ eyes like ours
- ☐ common life
- ☐ no men are foreign

C.2.2 Words have literal meaning (denotation) and suggestive meaning (connotation). Fill in the missing parts in the table.

Words/Phrases	Connotation	Denotation
single body	similar body	same type of human beings
harvest		prosperity
starved	go hungry	
labour		toil
recognize	identify	make out
betray		let down
defile	pollute	
outrage	anger	
dispossess		deprive
condemn	censure	

C.2.3 Write whether these sentences are T(True) or F(False).

1. The poem is about universal brotherhood and establishment of peace. ☐
2. We should take arms against each other in times of war. ☐
3. Every land is strange and it is difficult to understand their people. ☐
4. The kind of labour people do varies from country to country. ☐
5. We can achieve strength by means of love and understanding. ☐
6. When a war breaks out between nations, it is our mother Earth that we pollute. ☐

C.2.4 Answer these questions.

1. How does the poet suggest that all people on the earth are same?
2. Find five ways in which all are alike. Pick out the words which convey this.
3. "…whenever we are told to hate our brothers…" When do you think this happens? Why?
4. How is the theme of humanity highlighted in the poem?
5. "Beneath all uniforms…" What uniforms do you think the poet is speaking about?
6. What is the message of the poem?

Vocabulary

V.1 Circle the letter of each correct answer. There may be one to four correct answers.

1) Which behaviour of ants shows their adeptness?
   (a) farming fungus (b) conceding to views
   (c) carrying load (d) helping one another in carrying load
2) The ants relished _____
   (a) helping each other (b) tasty food
   (c) farming (d) attacking the nest of black ants
3) The driver ants are known as the most _____ amongst all the ants.
   (a) fierce (b) violent (c) intelligent (d) amicable

4) The construction which is a habitation of the ants is called _____

(a) antelope (b) ambush (c) anthill (d) anthouse

5) The ants are used to _____ work.

(a) compelled (b) amazing (c) domestic (d) arduous

V.2 Make a list of the sentences from Read 1 wherein the synonyms of these words are used.

(assault, precipice, crumb, hard labour, incredible, ditch, precipitous)

1) _____

2) _____

3) _____

4) _____

5) _____

6) _____

7) _____

V.3 Replace the underlined words with the words that have opposite meaning from the brackets. (liquid, abduct, relish, indolent, fled, ferocious, arduous)

Example: This detergent is available in **solid** or powder form.

Answer: This detergent is available in **liquid** or powder form.

1) Ten million people **stood their ground** from East to West Germany between 1945 and 1991.
2) Lion is a **gentle** animal.
3) Rajul ate the meal with **dislike**, and asked for the meal again.
4) He served on the most comfortable stations, and avoided the more **easy** work of the navy.
5) The boy was **released** by his father and taken out of the country without his mother's permission.
6) Although Ankit can be **industrious** on his days off, he gives one hundred percent at work.

V.4 The word 'anthill' is a compound word made from 'ant' and 'hill'. Match 'A' with 'B' to form compound words and use them in your sentences.

A	B	Compound word and your Sentences
ant	time	Example: Valmiki was covered by an anthill.
life	rocket	
eye	break	
check	table	
sky	fast	
side	**hill**	
break	out	
time	ball	
foot	dose	
over	line	
out	sight	
super	dance	

V.5 Replace the underlined word with the most appropriate one from the brackets.

(crushed, maybe, believe, domesticated, shadowy, creature, trapped, forced, lawn, thought, amazing, unexpectedly, almost, thriving)

It was the most **astonishing** kite in the world, a **tame** living being always wagging its tail, shaking its ears, sitting down on the tops of houses, getting stuck in trees, entangled in hedges, flopping down on ponds, or lying flat on the **grass** and mostly **chewed up** at the end. I have often **wondered** who its father and mother were. **Perhaps** they were very poor people, just made of newspaper and little bits of common string knotted together, **compelled** to fly day and night for a living, and never being able to give any time to their children or to bring them up properly. The kite **stuck** itself on a roof one day, a common red roof with a broken chimney and three tiles missing. It stuck itself there, and it would not move; the children tugged and pulled but still it would not move. At last they brought a ladder, and had **nearly** reached it when **suddenly** the kite started and flew away, right away over the field and over the heath, and over the far far woods, and it never came back again-never -never.

Dear, that is all. But I **think** sometimes that perhaps beyond the **dark** pines and the **roaring** sea the kite is flying still, on and on, farther and farther away, forever and forever.

V.6 Frame meaningful sentences using all the words given in the set.

1. steep – cliff – amazing
2. love – ferocious – creature – domesticate
3. success – take to – arduous – relish
4. compelled – devour
5. ambush – clear away – terrorist
6. work – interest – drudgery

V.7 Choose the correct form of the word given in brackets.

All people are _____ (essential) same. Underneath any colour of any soldier's uniform belonging to any nation, another human being _____ (breathe)the same air just like any other person. All walk on the same kind of land and will be _____ (bury) in it. All are _____ (feed) by the harvest and the harvests are _____(ruin) by war. All do the same kind of work; sleep and walk on their own native soil. In times of war or peace, even the international foes are _____ (force) to undergo the same trials. All people are _____(feed) abundantly on the _____(prosper) of agriculture and farming. Love is something that _____ (conquer) all the people.

V.8 Find words from the poem indicating the meaning of the words given below. Then use them in sentences of your own.

Example: **yield – harvest**

To harvest their crops, they need equipment and suitable storage facilities.

- **identify :** _____
- **work :** _____
- **quiet :** _____
- **taint :** _____
- **under :** _____
- **cheat :** _____
- **vigour :** _____
- **criticize :** _____

Function (Describing Process: Doer not important)

F.1 Read the process of sorting letters.

First of all, postcards and envelopes are collected in bags from various post offices through post office vans. They are then taken to the sorting office, where the bags are emptied and the letters are separated from the packets. The letters are stamped properly. In the next stage, the sorting of the letters takes place, according to the county they are addressed to. At the secondary sorting frames, the letters are put into towns in the county. Later, the letters are tied in bundles and a label is put on showing the towns they are addressed to. Finally, the letter bundles are placed in bags, which have the Post Office seal, Pin Code etc on them, and then these are sent to the railway station for delivery.

Can you guess where these letters are sorted?

F.2 Here are some sentences from the Read. Study the underlined verb forms given in these descriptions.

(a) The following behaviour <u>was noticed</u> by a scientist who was making a study of ants.

(b) It seemed that, after all, they <u>had been defeated</u>.

(c) They are called by that name because they <u>are</u> often <u>seen</u> carrying large pieces of leaf over their heads like umbrellas.

Answer the questions.

a) Who noticed what?_____

b) What happened to them? _____

c) Who called them by that name? Why? _____

F. 3 Read the passage to comprehend what happened at the New C K Road.

Harry was waiting for a bus at the crossroads. He saw an accident. A bus carrying school children in it was driven very fast by its driver. At the cross road, a short and sudden brake was needed to save a push cart puller. The driver lost control and the bus dashed with an electric pole. The pole was uprooted. The children were injured badly. Fortunately, no loss of life was reported. The ambulances were called for help. The injured children and the driver were taken to the hospital immediately. It was a terrible scene!

Write whether the sentences are true or false. From above paragraph write the sentences that have same meaning.

A	T/F	B
1) The driver drove the school bus fast.		
2) The bus needed a brake suddenly.		
3) The accident damaged the electric pole badly.		
4) Someone did not call the ambulance.		
5) The ambulance authorities admitted the injured to the hospital.		

F.4 Last Sunday, I visited *a brick bhattha* (kiln). I observed the process of making bricks. I have described the process in the paragraph but I have removed some verbs. Fill in the blanks with proper forms of the verbs and find out what I saw.

(pack, use, heat, move, break, turn, add, put, take, deliver, dig up, place, pile up)

To begin, the brick makers _____the clay from the ground by a large digger. They **placed** this clay onto a metal grid, which _____ up the clay into smaller pieces. They _____ a roller in this process.

Then, they _____ sand and water to the clay, and _____ this mixture into a mould. Next, the workers _____ these raw bricks in an oven to dry for 24 – 48 hours. Then the brick makers _____ lunch in the recess time. I went to them and asked, "Are the bricks ready? What will you do now?"

They said, "In the next stage tomorrow, we _____ the bricks for a heating and cooling process. We _____ these bricks in a *bhattha* at a moderate and then a high temperature, followed by a cooling process in a chamber for 2 – 3 days. Finally, we _____ and _____the bricks to their destinations."

The same process of making bricks is given below in a different way. Fill in the blanks using proper options.

(pack, use, heat, move, break, turn, add, put, take, dig up, deliver, place, pile up)

To begin, the clay _____ from the ground by a large digger. This clay **was placed** onto a metal grid, which _____ up the clay into smaller pieces. A roller _____ in this process.

Then, sand and water _____ to the clay, and this mixture _____ into a mould. Next, these raw bricks _____ in an oven to dry for 24 – 48 hours. Then lunch _____ by the brick makers in the recess time. I went to them and asked, "Are the bricks ready? What will you do now?"

They said, "In the next stage tomorrow, the bricks _____ for a heating and cooling process. They _____ in a *bhattha* at a moderate and then a high temperature, followed by a cooling process in a chamber for 2–3 days. Finally, the bricks _____ and _____ to their destinations."

F.5 The teacher will prepare 10 chits for different actions to mime.

Drink water	Eat a chilly	Lift a bicycle	Write a letter	Read a newspaper
Prepare tea	Cut an apple	Wash clothes	Put a pen on the table	Play tennis

Students will mime one by one in the class. The teacher will ask questions to the class in passive voice and student should answer in active voice. One is done for you.

a) Drink water

Teacher : By whom was water drunk? OR Who was water drunk by?

Student : Ketan drank a glass of water.

The teacher should enrich the list of actions for more practice.

F.6 It is very easy to make popcorn if you follow the correct process. Arrange the steps to make popcorn. Fill in the blanks with proper verb forms. Write the number in the box.

• Then the pot _____ (remove) from the stove, which _____ (turn off).	
• In the next stage, the flame _____ (reduce) and the pot _____ gently _____ (shake) until the corn pops.	
• The first step is that three tablespoons of oil _____ (put) in a large pot.	
• Finally, the popcorn _____(empty) into a large bowl, where melted butter and salt _____ (add).	
• Next, one kernel of popcorn _____ (add).	
• Next, the pot _____ (place) on the stove and the oil _____ (heat) on a high flame.	
• After this kernel pops, a quarter cup of popcorn _____ (put) into the pot. The pot _____ (cover) with a lid.	

F. 7 The teacher divides the class into two. The members of group A will stand before the class and read from the chit given by the teacher. It will have a description of something. The member/s of group B will identify what is going on. The roles can be reversed.

Group **A** reads: The view was set. The button was pressed. The shutter sounded 'click'.

Group **B** answers : A photograph was taken.

Chit 1 A card is inserted. A password is typed. Some options are selected. At the end of the process, money is given to you. **Ans.** _____

Chit 2 Water will be boiled. Sugar and tea leaves will be added. The hot brown liquid will be filtered. It will be placed in a fridge. It will be served with mint leaves and a dash of lemon. **Ans.** _____

Chit 3 Umbrellas have been kept aside. Raincoats have been put into cupboards. The plastic cover has been removed from the hut of Kaluram. **Ans.** _____

Chit 4 The leg of the opponent is being pulled. The shoulders and hands are being held tightly by all. The player is caught finally. **Ans.** _____

The teacher will provide more descriptions on chits OR the teacher can ask students to prepare chits.

F. 8 A car was stuck in a ditch, the details of the rescue operation are not given in proper order. Write the number in the boxes to arrange the steps.

- The strong rope is being carried with by the helper. ☐
- The car is being moved away from the ditch slowly. ☐
- A crane is standing near the spot. ☐
- A strong rope is being tied to the crane by other helpers. ☐
- A helper is going into the ditch slowly with safety precautions. ☐
- The car is being pulled by the crane. ☐
- Other end of the rope is being tied to the car. ☐
- The emergency staff is being appreciated by all present here. ☐

F.9 Read the news article. There are 12 errors in it. Identify these errors and rewrite the paragraph correcting them.

The Policemen was called to the Federal National Bank yesterday. The bank was robbing at 12.15 pm. A big amount looted. No customer were hurted but one robber was shot by police. Later, several customer were interviewed about the robbery. Many clues are left at the bank but no robber has caught yet. Clues are been investigated. Some fingerprints were also founded at the bank. Some images of robbers are captured over CCTV cameras. The officers from the police department is investigating the case well.

Writing

W. 1 You studied how amazing the tiny ants are. There is another insect which is found near us – the bees. Study the behaviour of the bees and write 10-12 sentences on what you find out.

Queen bee- working bees-soldier bees-beehive engineers-honey collectors-working as a team-nurturing baby bees-design of beehive-protection of beehive

W. 2 You are watching a rescue operation in which a fire fighter is saving a person from a house on fire. Write your commentary of that rescue operation. (Clues : break the window glass, enter the room, use ceasefire, bring the person, tied the person using safety belt, rescued)

W.3 What similarities and differences do you find between ants and human beings? Make a list of them.

No	Similarities	Differences
1	Teamwork	Selfishness
2		
3		
4		
5		

W.4 Prepare a list of 10 questions to interview a scientist who has been researching in the field of Myrmecology (Scientific study of Ants).

1. What is your name?
2. What is your qualification?
3. Where did you study?
4. How you got interested in myrmecology?
5.
6.
7.
8.
9.
10.

Activity

A.1 Work in groups. Collect pictures & photographs of different types of ants; mention their peculiarities and display them on your notice board.

A.2 Divide the students in groups of five. Each group would collect fun facts about any of the species of birds, animals or insects other than ants. Then the group leader of each group would share fun facts with the class.

Project

The life cycle of ants has four distinct stages: egg, larvae, pupae and adult. It is known as complete metamorphosis. Divide the students into groups and ask them to prepare posters explaining the life cycle of different species of ants.

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