

1

Exploring Space

Hi, I am Nila.
I am in space.
Will you join me?



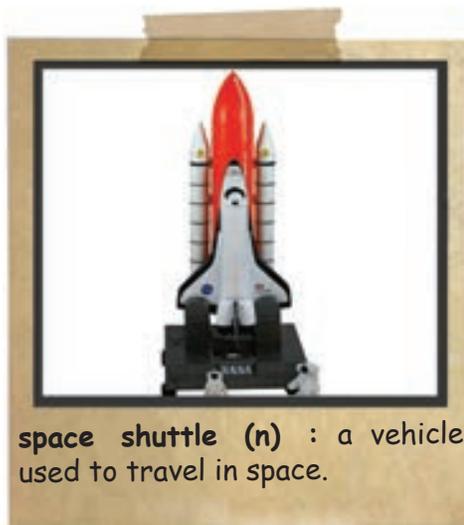
MY LITTLE Pictionary



Milky Way (n) : the galaxy that contains our solar system.



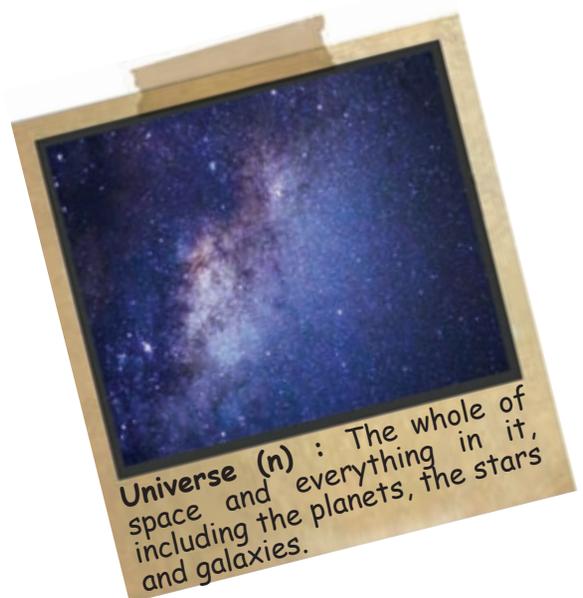
Earth (n) : the planet on which we live.



space shuttle (n) : a vehicle used to travel in space.



Solar System (n) : the sun and all the planets that move around it.

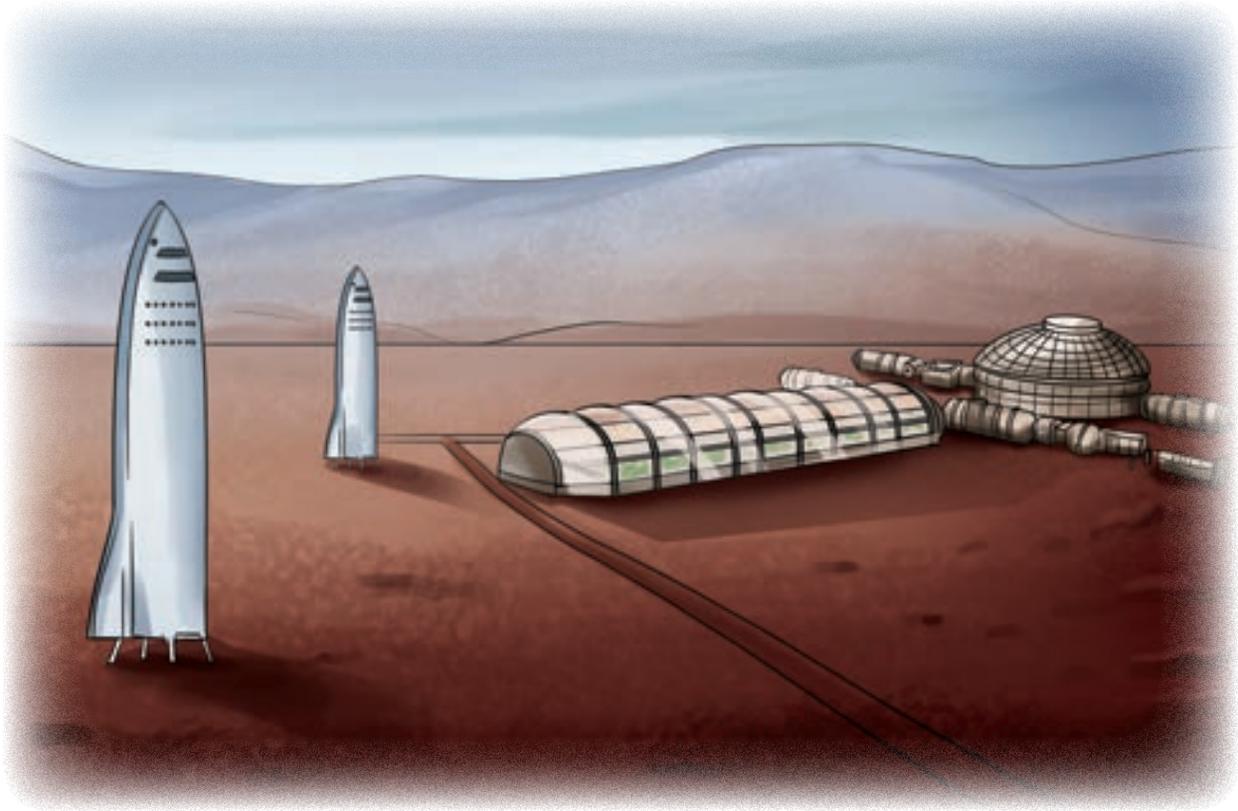


Universe (n) : The whole of space and everything in it, including the planets, the stars and galaxies.



LET US LEARN

Earth, the Desolated Home



It was the year 2068, humans had destroyed the Earth, and started colonising the red planet Mars. India established three colonies; Arivumathi's family lived in one such colony. On her birthday, her grandfather travelled more than 1500 km to meet her. When he reached, he saw her sleeping in her **capsule**.

He said, "Wake up, Arivu." Arivumathi was surprised, "Grandpa! When did you come? I was thinking that you won't be coming for my birthday." He sighed, "Don't you know about the dust storm of Mars? Sometimes, it even lasts for a month. But this time it did not. So I am on time. It still took me three **sols** to reach here. Now come on, let's not waste time. We will go to harvest the vegetation **hab** for vegetables."



In the hab, he said, "Hmm, these carrots are not tasty anymore, like the ones I ate in my childhood." She asked, "Why do you say so, Grandpa?" Grandfather explained to Arivu "The vegetables we grow here do not taste like the ones on the Earth. I really wish you had tasted the

carrots from the Earth." Arivu asked eagerly, "How did they grow the crops and vegetables on Earth?"

Hearing this, Grandfather was reminded of life on Earth. He said, "The Earth had fertile soil, so the fruits and vegetables grown were healthy and tasty." She asked, "But, I learnt that humans used chemical fertilizers, and polluted the soil. Here, we get unpolluted food and water. Is that correct?"

Grandfather laughed, "These fruits, vegetables and water are not the same as in the Earth. They are not real." Arivu exclaimed, "Even the water?" He said, "Of course! In Mars, we get water from burning **fuels**. On the Earth, we used to get water from rain, it was natural, and it was free!" She said, "Grandpa, enough of your stories about the Earth. I know that life there was easy but, here **survival** is very difficult." He replied, "Yes my dear, **adapting** to Mars is difficult. Today, we are fighting for things which we got easily."



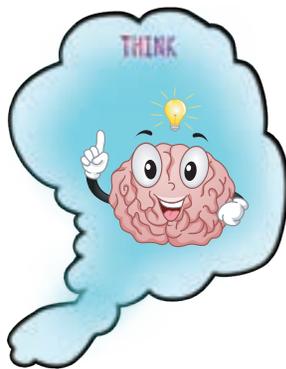
He continued, "In the Earth, you did not need a spacesuit or an oxygen cylinder. Also, the years are longer here." Arivu said, "Yes, grandpa. In



Mars, 668 sols (687 Earth days) make a year." He smiled, "Ha! Ha! Yes, you would be 18 years old on the Earth now."

Grandpa thought to himself, "We destroyed our home. The home that nature had offered us. Now, we are trying to make this our home."

Arivu looked at him and said, "Don't worry grandpa, the **scientists** are trying to **Terraform** the Mars." He said, "True, but nothing can be the Earth. The Earth is our home. Ah, let us leave this for now. Today we should celebrate."



What actions destroy the Earth?
How will you change it?

Glossary

capsule	a small cylinder shaped bed
sol	Martian solar Day, a Martian day
hab	habitat, human settlement
fuels	an energy source for engines, power plants or reactors
survival	to remain alive
adapting	modify, readjust
terraform	a process by which the surface and climate would be changed to make the environment suitable to humans
scientists	an expert in science



LET US UNDERSTAND

A. Choose the correct option.

astronomer Earth sol fuels Mars

1. A day in Mars is called _____.
2. _____ is called the red planet.
3. Our planet is called the _____.
4. We get water by burning _____.
5. The _____ are trying to terraform Mars.

B. Fill in the blanks.

1. The man destroyed _____.
2. In the Earth, we get water from _____.
3. In Mars _____ Earth days make a year.
4. You don't need _____ and _____ in the Earth.
5. Fruits, vegetables and water in the Mars are not _____.

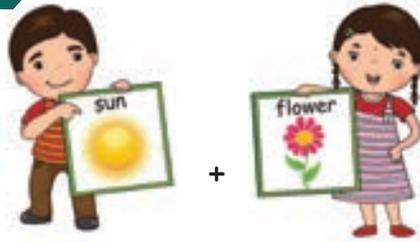
C. Answer the following questions.

1. What is the setting of the story?
2. Name the vegetables harvested in the vegetation hab.
3. What is a sol? How many sols make a year?
4. How is water produced in Mars?
5. In this story, what happened to the Earth?
6. What should we do to save the Earth?

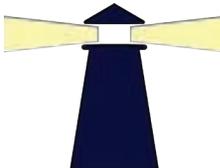


LET US BUILD

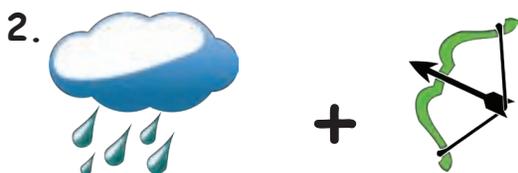
Hi friends, let us do some magic with words. When we combine these two words, we will get a new word with a different meaning.



These words are called **compound words**.

	+			+	
light		house	mail		box
					
lighthouse			mailbox		

A. Write compound words using the pictures.



B. Use the clues to complete the compound words.

1. news	+	<u>paper</u>	=	<u>newspaper</u>	
2. wheel	+	<u> </u>	=	<u> </u>	
4. basket	+	<u> </u>	=	<u> </u>	

C. Match the compound words.

1.		-		=	<u> </u>
2.		-		=	<u> </u>
3.		-		=	<u> </u>
4.		-		=	<u> </u>

D. Draw and write your own compound word.



E. Connect the compound words and create a new word.



LET US SING



Beyond the Universe

I dream of flying **beyond** the Earth,
amidst the planets and the countless stars.

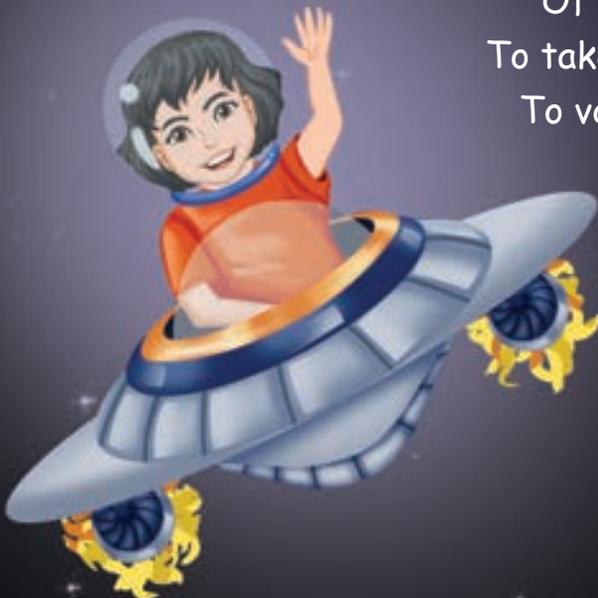
I would stop by the red planet Mars,
here we dream of a home away from home.

Fly on, to watch the Saturn,
with its ring and moons.

Then, I stopped by Jupiter, **marvelled**,
by its red storms that look like **marbles**.

Hurdling through a belt of asteroids,
I crossed Uranus, without a fuss.
To Neptune, the blue ice giant,
Further high, I fly, beyond the galaxy.

To meet the creator,
Of this **Magnificent** display.
To take me beyond the Milky Way,
To voyage across the galaxies.



Glossary

beyond	outside the limits or reach
amidst	surrounded by
marvelled	wondered
marbles	a little ball of glass or clay, used by children to play
hurdlng	racing over the barriers
further	to move ahead
magnificent	extremely beautiful

LET US UNDERSTAND

A. Match the planet with its feature.

1. Mars - blue ice giant
2. Saturn - red storm
3. Jupiter - red planet
4. Neptune - ring and moons

B. Answer the following questions.

1. Where is the poet going in the dream?
2. Which planet has rings around it?
3. Which planet has red storm?
4. Why does the poet fly out of the universe?
5. Name the planets the poet flies through.



LET US KNOW



- As Sruthi says, a collection / group of cows is called as a herd of cows.
- To indicate any group, we use **collective nouns**.

Here are some examples:



A team of players



A galaxy of stars



A pack of dogs



A swarm of flies



A band of musicians

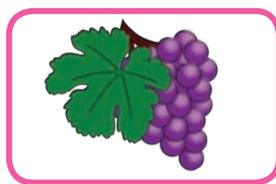


An army of ants

A. Write the collective nouns.



A _____ of birds.



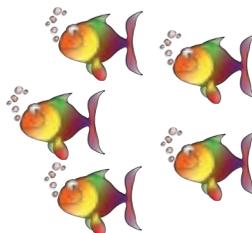
A _____ of grapes.

B. Match the picture with the collective noun.

1. A **flock** of goats



2. A **bouquet** of flowers



3. An **army** of soldiers



4. A **shoal** of fish



5. A **choir** of singers



Hi Somu, I find happiness in sharing my ideas. Now, let me show you another kind of naming word.

- There are some naming words that can be only felt and experienced.
- We can not see or touch them.
- For example, we can not see **happiness**. But we can feel and experience it.
- These naming words are called **abstract nouns**.



Here are some examples:



happiness



anger



sadness



jealous

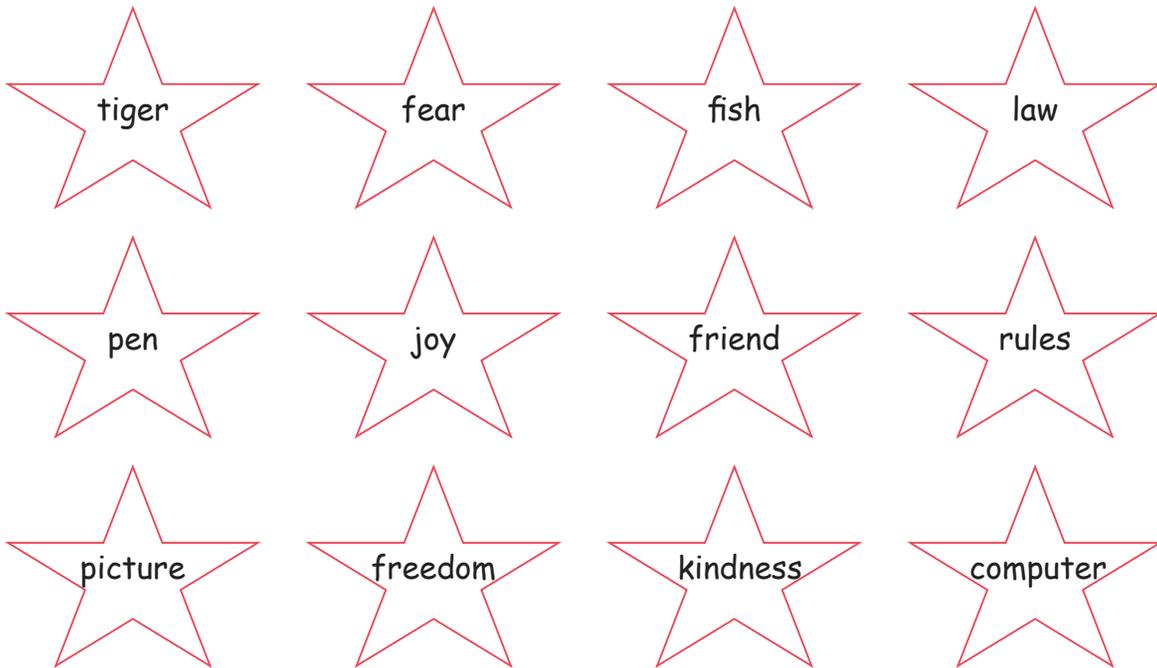
More examples:

honesty wisdom beauty hope luck mercy dream pride life

A. Pick the abstract noun.

1. He takes pride in his job.
2. The dove is a symbol of peace.
3. My grandmother is full of wisdom.
4. Iniya is very tall for her age.
5. Prem felt anger.

B. Colour the abstract noun.



LET US LISTEN



Tick the correct one after listening to the announcement.

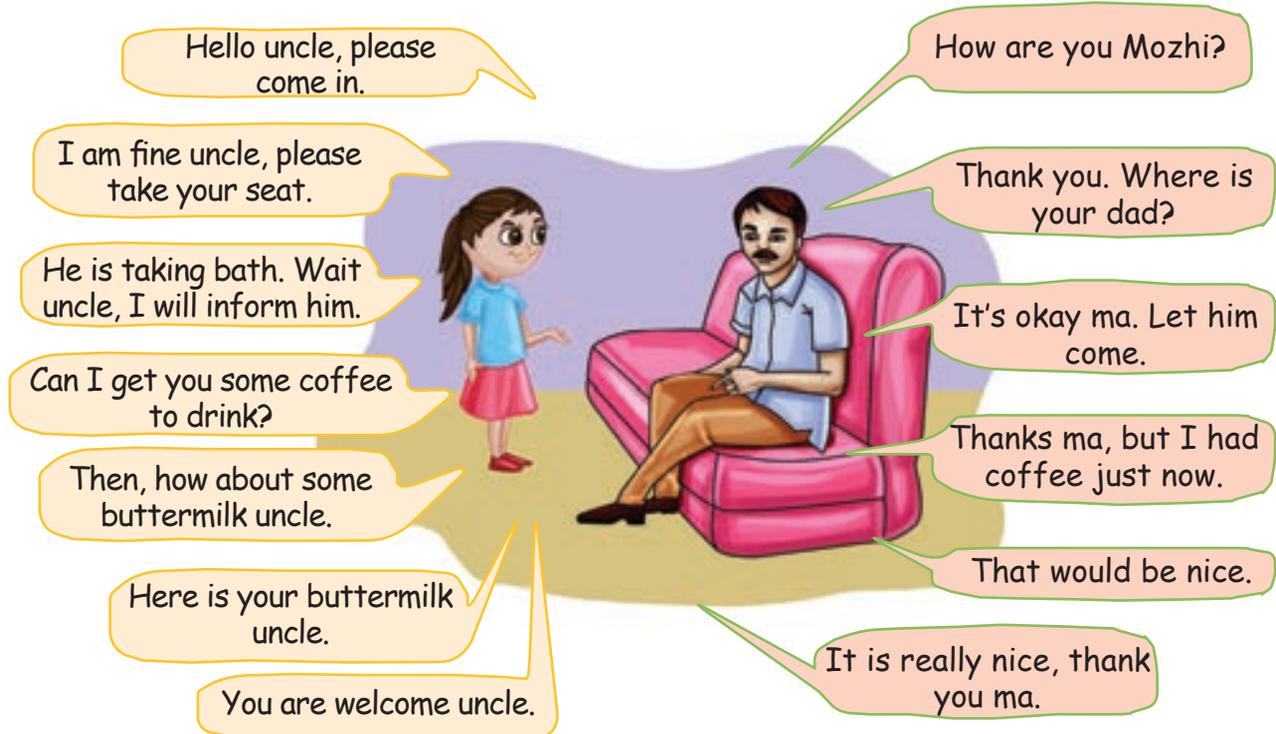
1. The Kovai Superfast Express is arriving on platform no. _____.
a. 2 b. 6 c. 4
2. The train no. of the Silambu Express is _____.
a. 12675 b. 16182 c. 12641
3. The Thirukkural Superfast Express is late by _____.
a. 2 hours b. 3 hours c. 1 hour.

Note to the teacher:
Scan the QR code to listen to the audio. Let the children listen to the audio and answer the questions. The listening passage is given at the end.



LET US SPEAK

See how they speak at this situation and practise as if you were in that situation.



Structures that are useful for this situation.



Note to the teacher: Make the children practise these phrases thoroughly and give them different scenarios to practise.



LET US READ



Lost in Space



Now, they were trapped inside, and they walked into the deck.



The shuttle went through a belt of asteroids.

Amuthan, an Asteroid is coming towards us. Turn the shuttle.

How will I turn the shuttle? Let me try pulling this lever.

The shuttle crash-landed on a new planet.

Are you alright, Amuthan?

I am fine. Quick! We must wear a spacesuit!

They ran for the suits. Nilavan saw green lights coming towards the shuttle.

Look at those lights. It is coming towards us.

Yes, they are all around us and that shuttle is very big! Let us wear our suits.



Aliens from the big shuttle shattered the windows and took them out.

How is this possible? Do you speak our language?

Please, don't be afraid. There is a problem with your shuttle. We can fix it for you.

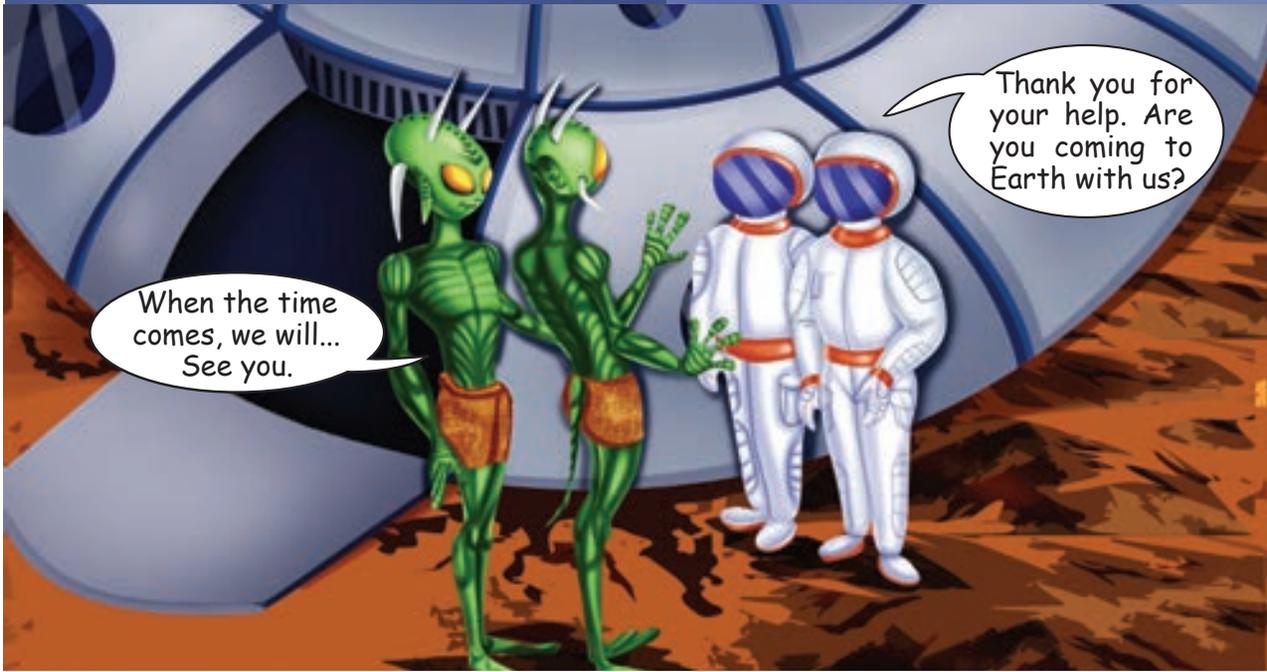
We can read your mind and use that to speak your language.

The aliens gave them a special room so that they can remove their suits and rest.



Please, rest here and eat these capsules. They are the same as your food.

Hey, wake up. Your ship is ready. Put on your suits. It is time to go home.



When the time comes, we will... See you.

Thank you for your help. Are you coming to Earth with us?



LET US UNDERSTAND

A. Write true or false.

1. Amuthan locked the door behind him.
2. Nilavan unknowingly started the space shuttle.
3. The blue lights seen through the window were aliens.
4. They went out through the broken windows.
5. The aliens gave a new shuttle to them.

B. Name the character or speaker.

1. "Are you alright?"

2. "Wake up. Your ship is ready."

3. "Let me try pulling this lever."

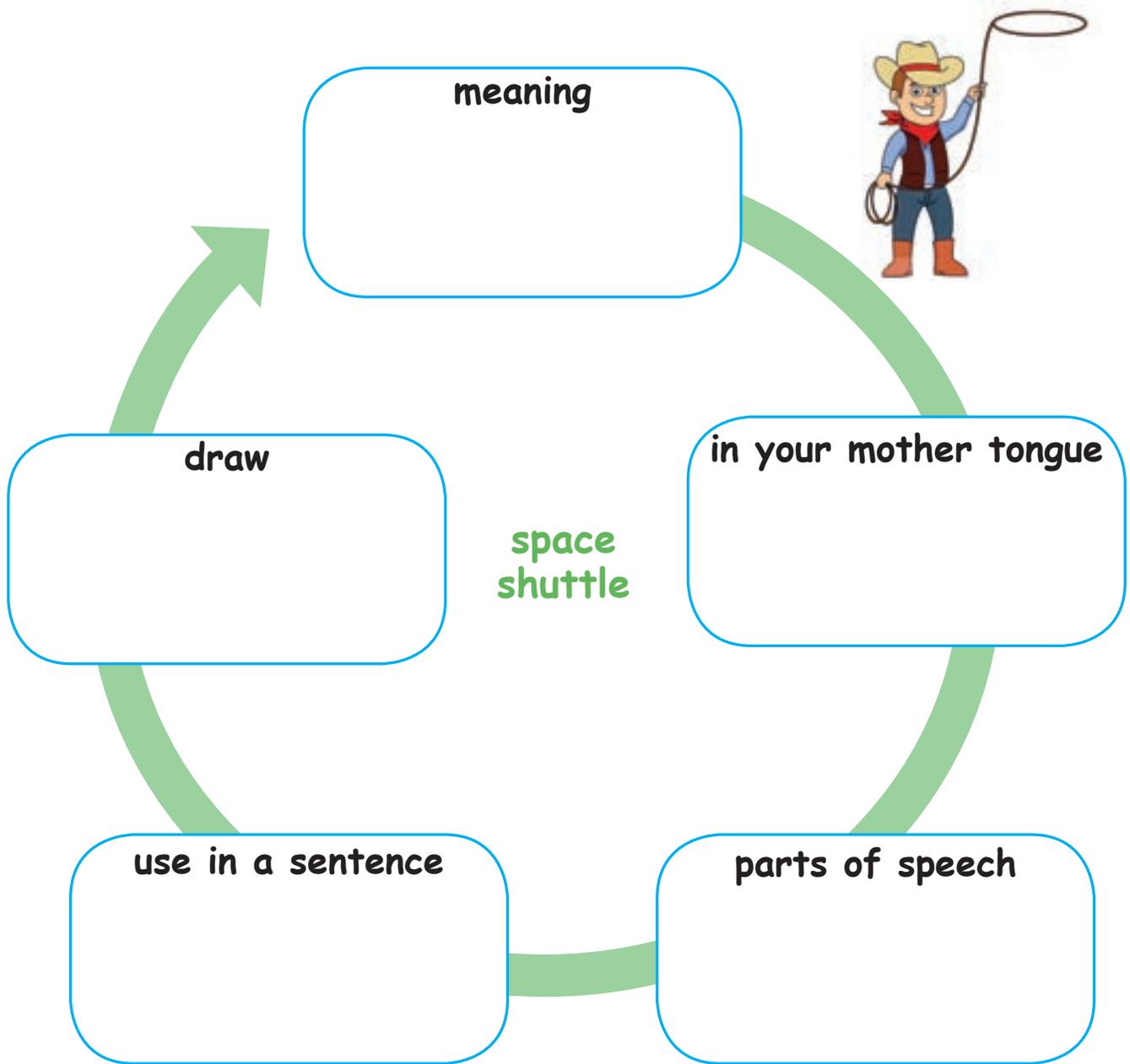
4. "I am fine. We must wear the space suit."

5. "Eat these capsules."

C. Answer the following questions.

1. Where were the boys taken to?
2. Where did the space shuttle land?
3. What did Nilavan see through the window?
4. Who shattered the windows?
5. How did the aliens know the boys' language?

D. Try your own.



E. Speak and win.

Join in either of the following groups and say some valid points to win.



Group A

I like to live in the Earth because.....

Group B

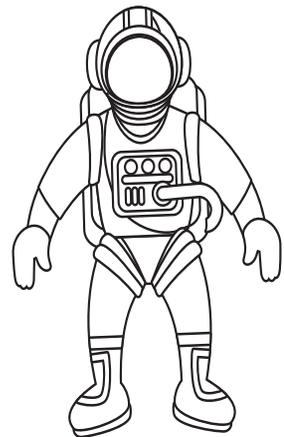
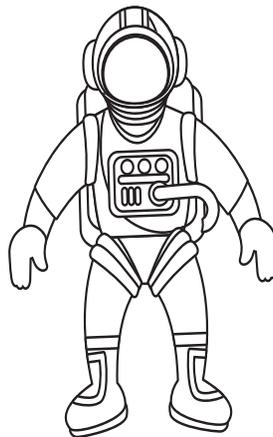
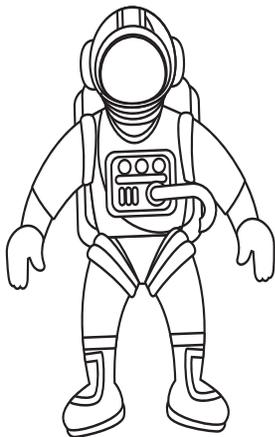
I like to live in the Mars because.....



LET US READ ALOUD

Read the passage three times and colour a spacesuit for each time.

A spacesuit is like a spaceship built for one. A spacesuit lets us work and live in space. It protects us from the heat and the cold. It gives us air to breathe. The suit is made of many parts and has water to drink. It even has a built-in toilet, if you need to use.



Complete the sentences.



An astronaut wears a _____.

A spacesuit is like a _____.

A spacesuit allows us to _____.

A spacesuit protect us from _____
and _____.

Circle the things that the spacesuit provides us.

air

food

water



LET US WRITE

Letter writing

No. 15, Big street,
Namachivayapuram.
26th June, 2019.

Dear Kumaran,

How are you? I am fine here. There is a festival in my village next week. I am very happy to invite you to the festival. Please plan to be here on Monday the 30th. I am eager to meet you. Convey my regards to your parents.

Your loving friend,

R. Nethra.

Write a letter to invite your friend to your house for the summer vacation.

Dear _____,

Note to the teacher: Make the children write an informal letter to you about the good things in their life using I have, I like, I want (for their portfolio).

I Can Do

A. Answer the following.

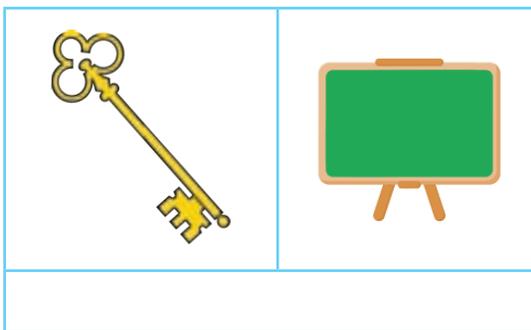


Name of the object

In your mother tongue

Use in a sentence

B. Write the compound words from the pictures.



C. Use the clues and complete the compound words.

cow + _____ = _____



rain + _____ = _____



D. Recite the poem 'Beyond the Universe'.

E. Fill in the blanks with the collective noun.

swarm shoal flock



a _____ of fish.



a _____ of birds.



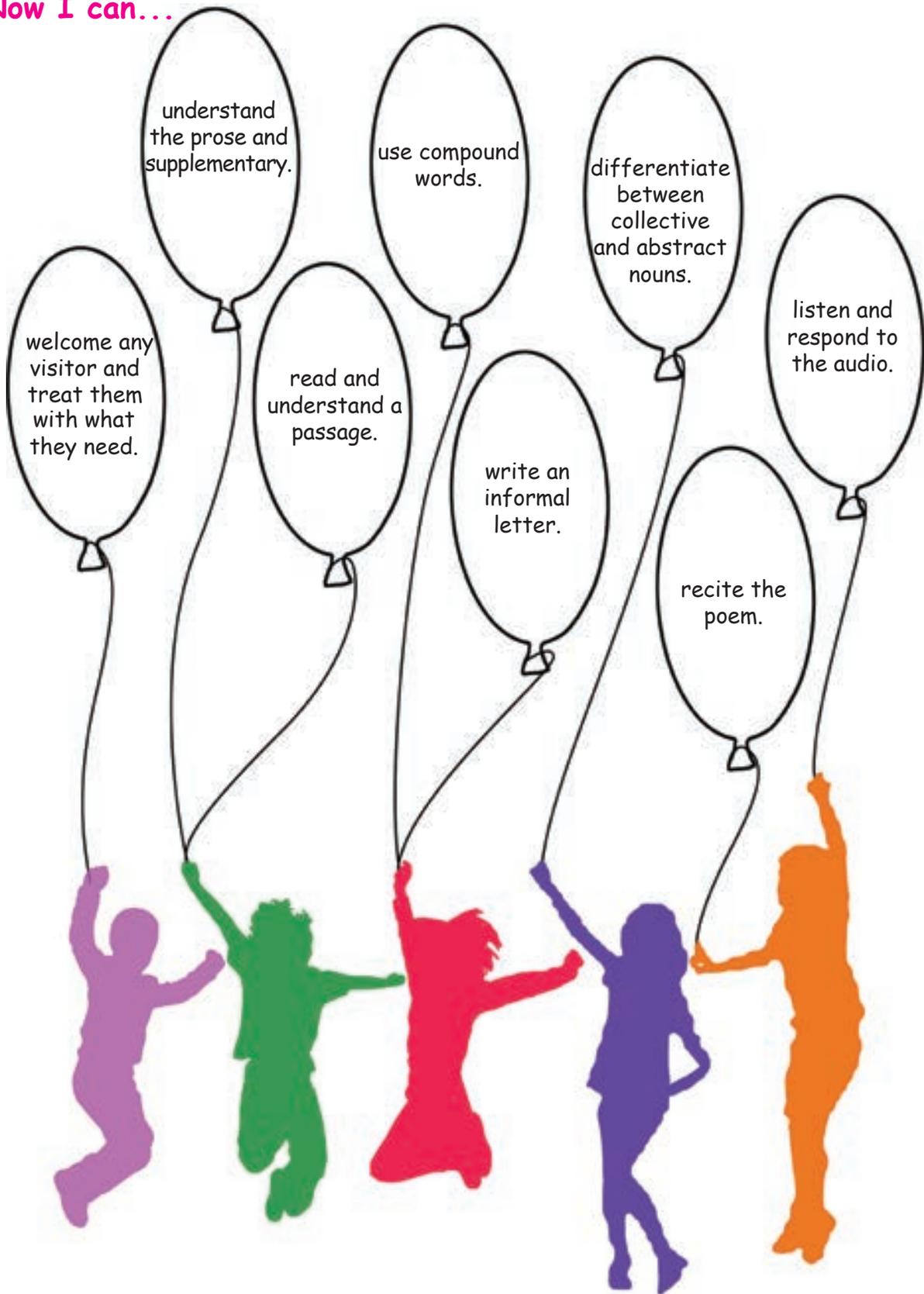
a _____ of bees.

F. Circle the abstract noun.

fear box beauty tree taste
pencil happiness anger honesty book

Learning Outcome

Now I can...



Note to the teacher: Ask children to colour the balloon when they achieve the learning outcome.