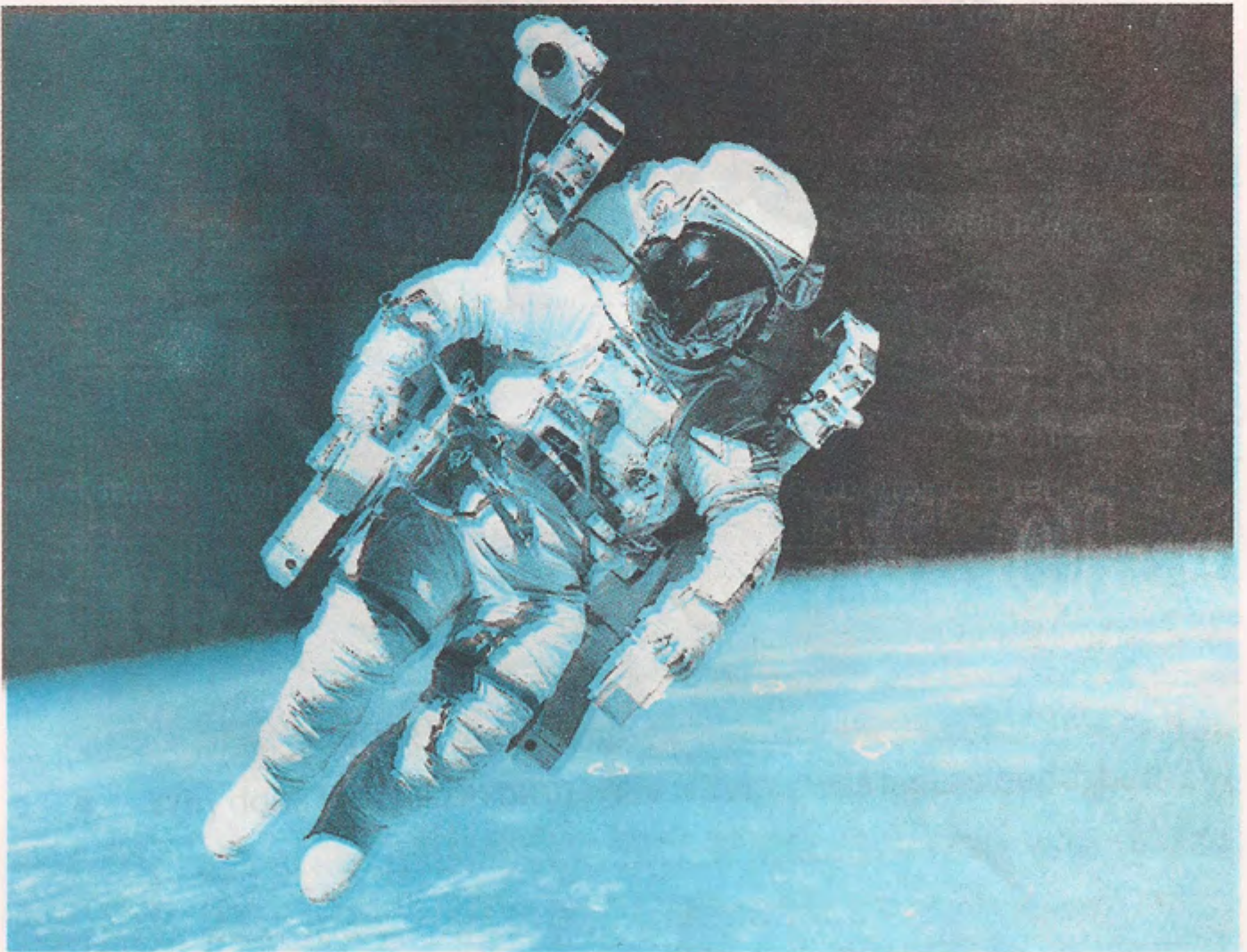


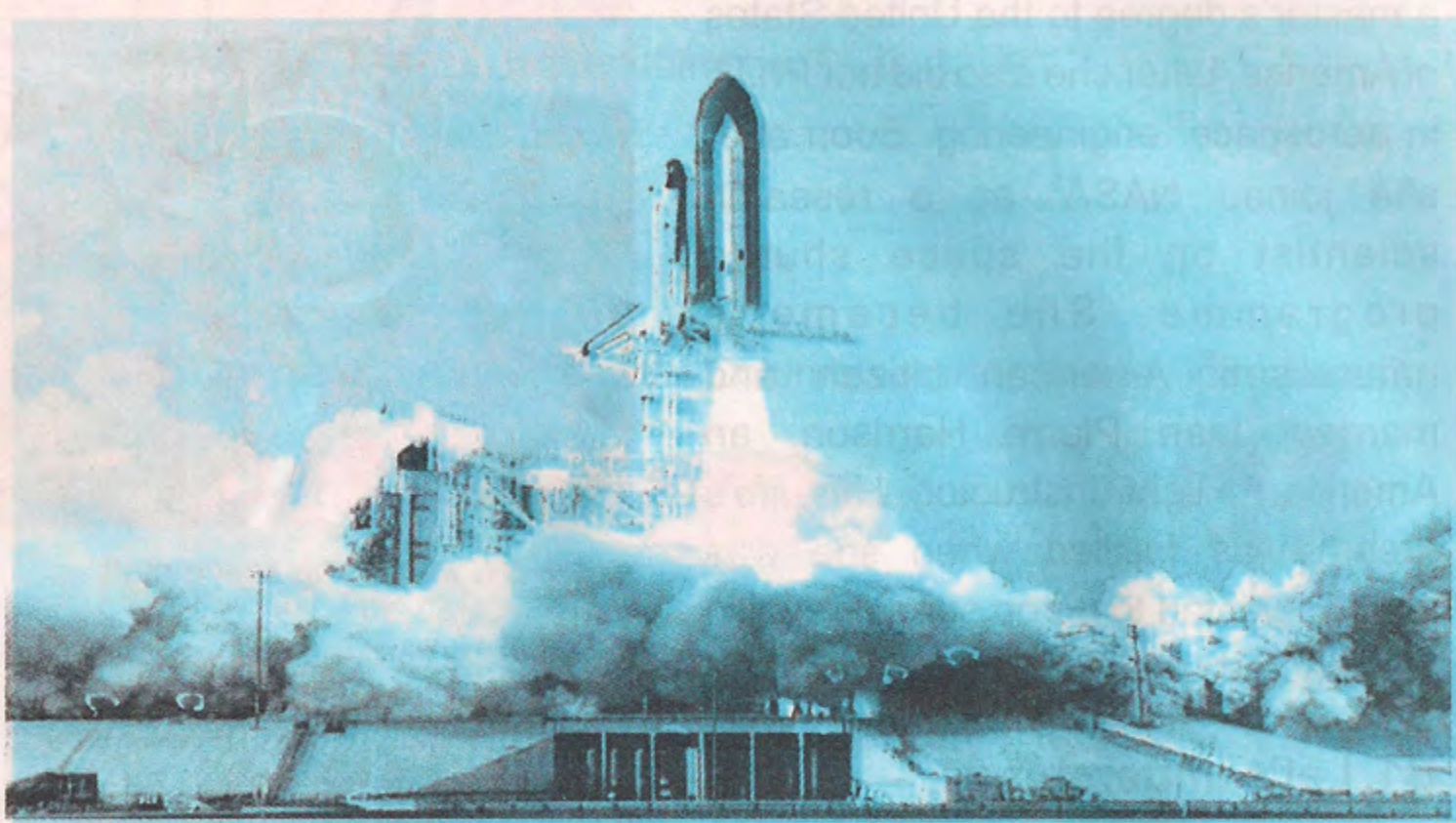
LESSON -15

A BRAVE INDIAN IN SPACE

UNIT - 1

A1. Pre-reading





ACTIVITY -1

Look at the pictures. Who is the man ?

What is the name of the astronaut who has gone into space like the man in the picture ?

B1. Let's read

Now read unit-1 below to know about an Indian who went into space.



THE TEXT

Kalpana Chawla, who was one of the seven astronauts to travel in the space shuttle Columbia in January, 2003, was born in Karnal in Haryana. She had ambitions¹ right from her childhood. After passing out from a local high school, she attended an engineering college away from her home town. Her father was not willing at first, but she persuaded² her father to allow her to study aeronautical³ engineering.

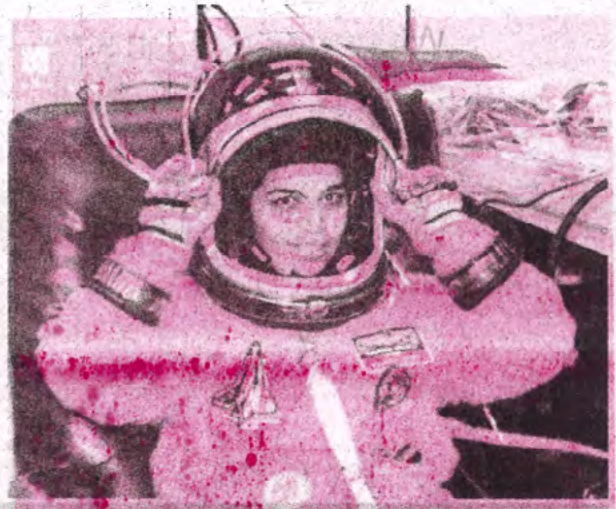
After a B.Sc. degree in aeronautical engineering, she went for

1. desire for success

2. made someone agree to do something.

3. related to building and flying of aeroplanes

a master's degree to the United States of America. Later she also did her Ph.D. in aerospace⁴ engineering. Soon after she joined NASA⁵ as a research scientist on the space shuttle programme. She became a naturalised⁶ American citizen and married Jean Pierre Harrison, an American Flight Instructor. Her life's dream was fulfilled when she was finally selected to go on space travel in the space shuttle, Columbia.



4. related to building space craft.

5. National Aeronautics and space administration of the United States of America.

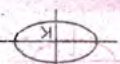
6. becoming a citizen of a country without being born there.

B1. Let's understand.

ACTIVITY - 2

Answer the following questions.

1. Where was Kalpana Chawla born ?
.....
2. Where did she study after passing from a local high school ?
.....
3. Which course did she take in engineering ?
.....
4. At first Kalpana's father was willing/ not willing to allow her to study engineering
(strike out the wrong one)
.....
5. Which course did she take after aeronautical engineering ?
.....
6. Say 'True' or 'False'
 - i) Kalpana did her Ph.D. in aeronautical engineering.
 - ii) Kalpana did her Ph.D. in aerospace engineering.
 - iii) She completed Master's Degree in India.
 - iv) She became an American citizen.



7. Where did she join after doing her Ph.D. ?
.....
8. Who did she marry ?
.....
9. What was Kalpana's ambition ?
.....
10. When did the space shuttle, Columbia start its journey into space ?
.....

UNIT - II



A2. Pre-reading

Kalpana became an astronaut. Her dreams came true. Did she get encouragement from others? Let's read the next unit of the text to know more about her.

B2. Let's read.

When asked what it was like being a woman in her field, Kalpana replied, "I really, never ever thought, while pursuing⁷ my studies or doing anything else that I was a woman, or a person from a small city, or a different country. I had my dreams like anyone else and I followed them. And people who were around me, always encouraged⁸ me and said, "If that's what you want to do, carry on."

Kalpana was the first Indian-American woman astronaut to participate⁹ in a American space mission. On 16 January, 2003 her family from India cheered along with the staff at the Kennedy Space Centre as they watched the Columbia go up into space.

7. continuing

8. gave courage to

9. take part

C2. Let's Understand

ACTIVITY -3

Say 'True' or 'False'

1. (i) Kalpana Chawla did not think of becoming an astronaut while she was a student.

(ii) She thought that she couldn't do anything great as she was a woman and she came from a small town.

(iii) Her friends and relatives did not encourage her.

2. How did people around Kalpana encourage her ?

.....

3. Choose the correct alternative.

Kalpana Chawla became famous because

i) she was a woman and she did her Ph.D. in the USA.

ii) she was the first Indian-American woman astronaut to participate in the space mission.

iii) she took American citizenship.

5. Why was the 6th of January 2003 important in Kalpana's life ?



UNIT - III

Kalpana's mission in the space shuttle¹⁰, Columbia, took 15 days, 16 hours and 34 minutes. During this time she went around the earth 252 times, travelling 10.45 million kilometers! The crew had six other astronauts. The crew¹¹ performed experiments¹² on food growth in space, and tests for making stronger metals and faster computer chips¹³.

The mission had been completed and then the space shuttle was coming down towards the earth for landing on Saturday the 1st of February, 2003. It suddenly¹⁴ lost contact with NASA as it was coming in for landing. It was then flying at a height of 2,00,000 feet and travelling at more than 20,000 km per hour. All of a sudden¹⁵ the space shuttle broke apart¹⁶ in flames in the earth's atmosphere¹⁷..

10. aircraft for travelling in space

11. a group of people working together in a ship or an aeroplane.

12. scientific test

13. small, thin pieces which make the computer work

14. within no time

15. suddenly

16. broke into pieces

17. air round the earth

C3. Let's Understand

ACTIVITY - 4

Answer the following questions.

1. How much time did Kalpana spend in the space shuttle ?

.....
.....

2. How many times did she go around the earth during the mission ?

.....
.....

3. Who else were there in the space shuttle ?

.....
.....

4. The crew performed two experiments during the mission. They were

i) _____

ii) _____ (Fill in the blanks)

5. What problem arose when Columbia was coming down towards the earth ?

.....
.....

6. What happened to the space shuttle then ?

.....
.....

7. What was the speed of the space shuttle when it was landing ?

.....
.....



B3. Let's read.

Kalpana is no more. She has inspired Indians. Read Unit-IV to know how she is still a source of inspiration and encouragement for us.

On the Saturday night when the news about the Columbia disaster¹⁸ broke, there was shock and disbelief. The town of Karnal spent a sleepless night as thousands of people stayed glued¹⁹ to their television sets in the hope that Kalpana and the crew had somehow survived²⁰. A journalist wrote:

“She was a heroine. It is really tough²¹ to become an astronaut. You need to know a lot about everything, from biology²² to astrophysics²³ to aeronautical engineering. You need a high level of physical and mental stamina²⁴. Her achievement²⁵ is awe-inspiring²⁶.”

For millions of young Indians the story of Kalpana Chawla, a girl from a small town who touched the skies, has become an inspiration²⁷. In a message that she sent from space shuttle, Columbia, to students of her college in Chandigarh, Kalpana said, “The path from dreams to success does exist. May you have the vision to find it, the courage to get onto it ... wishing you a great journey.”

There will surely be many who start off on the journey to fulfil their dreams.

- 18. very bad accident.
- 19. totally attentive to
- 20. remained alive.
- 21. very difficult.
- 22. science of living things.
- 23. science of physical and chemical structure of the stars and planets.
- 24. strength.
- 25. work done successfully.
- 26. inspiring something that makes you respect and praise someone.
- 27. a person who by example makes you do great things.

C3. Let's Understand

ACTIVITY-5

Answer the following questions.

1. What happened in the town of Karnal on Saturday night ?
(Fill in the blanks)
 - i) People _____
 - ii) People _____ their television.
2. An astronaut should know a lot about everything from _____
to _____ to aeronautical engineering.
(Fill in the blanks with the right words)
3. To be an astronaut one should have a high level of _____ and _____.
(Fill in the blanks)
4. Kalpana Chawala has inspired millions of young Indians. How ?
5. Who did Kalpana send a message from the space shuttle ?
6. In her message she said
 - i) the path from _____ to _____ exists.
 - ii) one should have _____ and _____.
 - iii) she wished them a _____.(Fill in the blanks with the right words)

D. Let's look at the words.

ACTIVITY - 6

Match the words on 'A' with the meanings in 'B'.

- | A | B |
|----------------|---------------------------|
| 1. ambition | a) a very bad accident |
| 2. atmosphere | b) power of imagination |
| 3. achievement | c) air round the earth |
| 4. vision | d) desire for success |
| 5. disaster | e) work done successfully |

Activity – 7

Fill in the blanks with the correct form of the words given in brackets.

1. Kalpana's friends and relatives _____ (courage) her to realize her ambitions.
2. Einstein's _____ (achieve) is great in the field of science.
3. Your _____ (participate) in the school activities will sharpen your brain power.
4. We get _____ (inspire) from the life of Utkalmani Gopabandhu Das.
5. Your _____ (appoint) order has already been sent to your home address.
6. Mother Teresa was working in a _____ (mission) spirit.
7. Maharani Laxmibai was famous for her _____ (brave).

Activity – 8

Practise speaking the following words. Repeat after your teacher. Put stress at the beginning the letters in boxes.

Repeat after your teacher

Put stress at the beginning of the letter in boxes.

1. Inspi**ration**
2. Se**lection**
3. Partici**ipation**
4. Com**pletion**
5. Exami**nation**

E. Let's talk

ACTIVITY - 9

One day Milan went to Nandankanan with his uncle. He saw a lot of animals and birds there. The next day he went to school and talked to his friends about his visit to Nandankanan. His friends asked some questions and he answered them.

The students practise speaking through role play in groups.

Mohan : Good morning, Milan. Why didn't you come to school yesterday ?

Milan : Good Morning, Mohan. I had been to Nandankanan with my uncle.

Mohan : How did you go there ?

Milan : We went there by auto-rickshaw.

Mohan : How did you get into the zoo?

Milan : We bought tickets at the gate and then went in .

Mitali : Where did you go first ?

Milan : We went to see the birds first.

Mitali : Birds ! O, that's fine. Which birds ?

Milan : Peacocks, parrots, kingfishers, ducks and a lot of other birds.

Mohan : And what else did you see there ?

Milan : The monkeys and then the chimpanzees.

Mitali : That's great. Did you see the white tigers also ?

Milan : Yes, about four or five. We saw the lions too.

Mitali : Oh, the bell is ringing now. We'll talk about it later. Let's go back to our classroom.



F. Let's learn the language.

ACTIVITY - 10:

Fill in the blanks with the correct form of the words given in brackets.

Example:

The train was entering the platform when I got (get) there.

1. He _____ (watch) TV when I entered the room.
2. The farmer _____ (plough) the land although it was dark.
3. Her father was in Sambalpur when she _____ (pursue) her studies in Rourkela.
4. Tisa _____ (dance) while Shreeya _____ (sing).
5. The patient _____ (sleep) when the doctor came.

G. Let's write



Activity - 11

The teacher tells the following words and sentences. The students write them in their notebooks without looking at the book.

believe

receive

deceive

relieve

butter

supply

kettle

recommend

Sentences.

1. The table is broken.
2. The book is on the table.
3. Trust your friends.
4. Do your work sincerely.
5. Be respectful to your superiors.

ACTIVITY – 12

When did the disaster take place?

Answer the following questions each in about 3 to 4 sentences.

1. What did Kalpana study in India ?

.....
.....
.....
.....

2. What do you know about her education in the United States ?

.....
.....
.....
.....

3. What did Kalpana Chawla do to make us proud ?

.....
.....
.....
.....

4. What was Kalpana Chawla's dream ?

.....
.....
.....
.....

5. How was Kalpana's dream fulfilled ?

.....
.....
.....
.....



6. When did the disaster take place ?

.....
.....
.....
.....

7. Why do we remember Kalpana Chawla ?

.....
.....
.....
.....

ACTIVITY - 13

Replying to a letter

Paikapara

Khurda

9 October 2011

Dear 'X',

Hope , you are spending your holidays happily. You must have got the gift packet which I had sent. Have you opened it ? Did you like my gift ? Please write to me soon.

with love,

Yours truly,

'Y'



Nandasahi
Bhawanipatna
Kalahandi
20, Oct. 2011

Dear _____,

Thank you for your _____.

Thanks for the _____ also.

I've already _____ it.

You've sent a _____ on Kalpana Chawla.

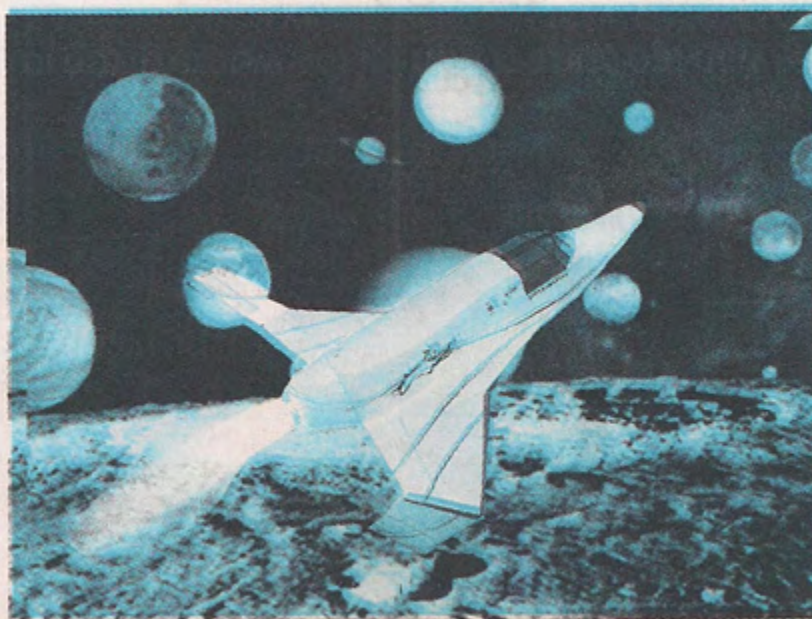
I have _____ it. Really she was a brave _____. I salute her
with admiration.

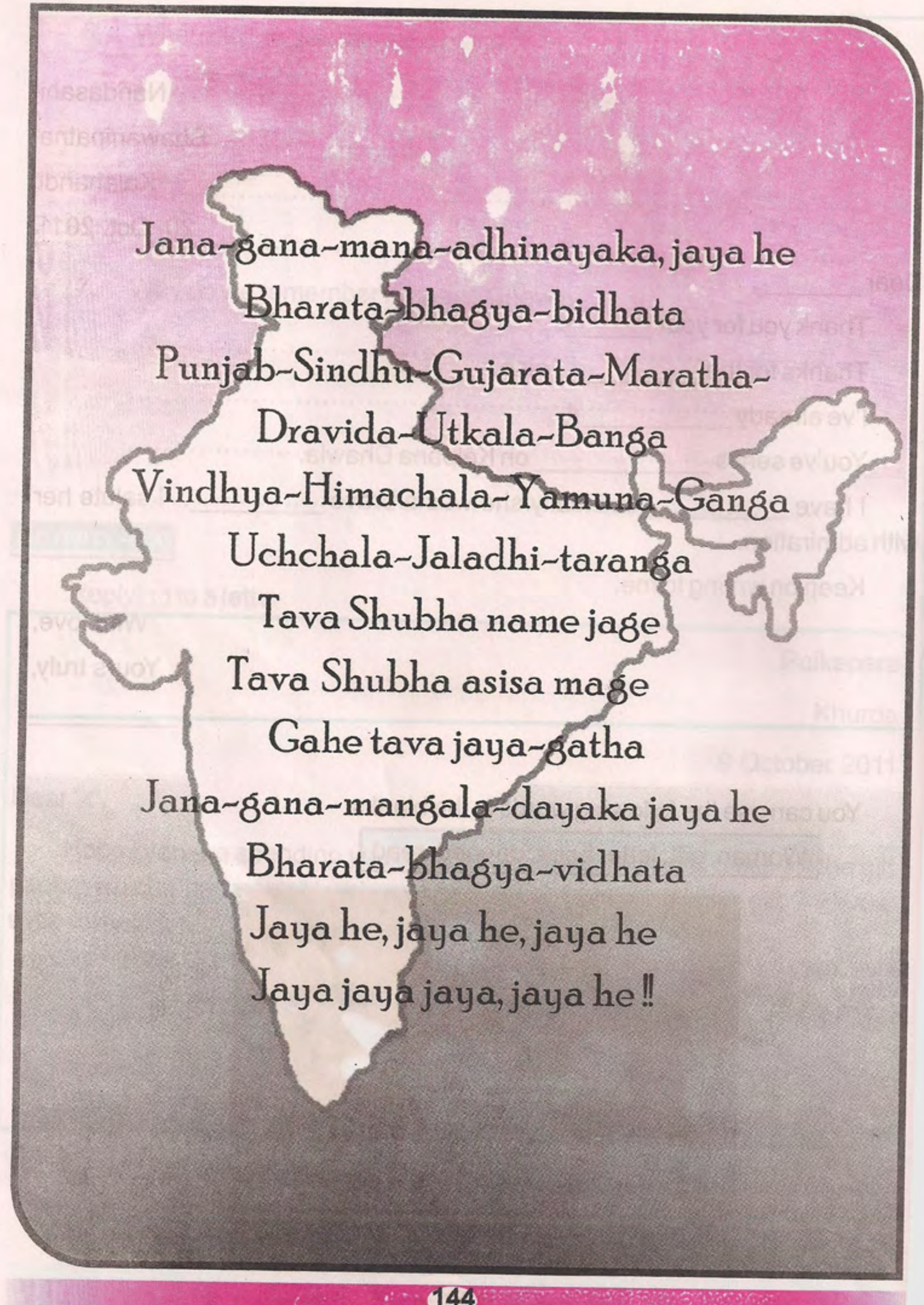
Keep on writing to me.

With love,
Yours truly,

You can use the following words in the blanks.

Woman, gift, letter book, opened, read





Jana-gana-mana-adhinayaka, jaya he

Bharata-bhagya-bidhata

Punjab-Sindhu-Gujarata-Maratha-

Dravida-Utkala-Banga

Vindhya-Himachala-Yamuna-Ganga

Uchchala-Jaladhi-taranga

Tava Shubha name jage

Tava Shubha asisa mage

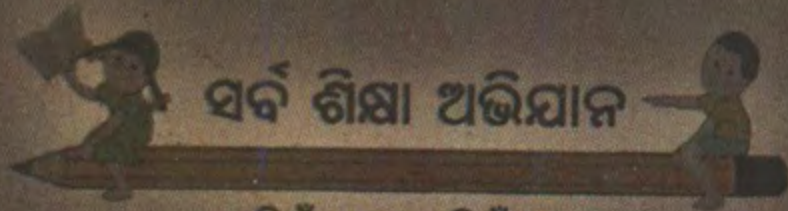
Gahe tava jaya-gatha

Jana-gana-mangala-dayaka jaya he

Bharata-bhagya-vidhata

Jaya he, jaya he, jaya he

Jaya jaya jaya, jaya he !!



ସର୍ବ ଶିକ୍ଷା ଅଭିଯାନ

ସବିଏଁ ପଢ଼ନ୍ତୁ ସବିଏଁ ବଢ଼ନ୍ତୁ