# UNIT-2

### **Scientists and Inventions**

### **ACTIVITY - 1**

#### PART 1: FAMOUS INDIAN SCIENTISTS

Necessity is said to be the Mother of Invention. Scientists are curious to know and explore different things and processes around them. We enjoy all the comforts of knowledge as well as life today. This would have not been possible without the efforts and success of numerous scientific inventions.

Some of the famous scientists of India are Aryabhatta, Chanakya, C.V.Raman, APJ Abdul Kalam, C.R.Rao, Vikram Sarabhai, Homi Bhabha and many more.

- \* Let us read more about some of the famous Indian Scientists.
- Vikram Sarabhai was born in Ahmedabad on 12th August 1919 in a Jain family. The establishment of the Indian Space Research Organization (ISRO) was one of his greatest achievements. He also supported Dr. Homi Bhabha in setting up the first rocket launching station in India.
- Dr. Homi Jehangir Bhabha, widely regarded as the father of India's nuclear science programme. He was an Indian nuclear physicist, founding director, and professor of physics at the Tata Institute of Fundamental Research.
- Aryabhatta was an Indian mathematician and astronomer. He gave the concept of Zero and the place value system in Math.
- Sir Chandrasekhara Venkata Rāman was an Indian physicist. He was awarded the Nobel Prize for Physics in 1930 for his discovery in Physics known as the Raman Effect.

#### **ACTIVITY-2**

Observe the following pictures and find the names of the scientists and their contribution/s to the World of Science. Write in the space provided below.







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There are many other Indian Scientists. Find more information about them	
and share it with your friends.	
ACTIVITY - 3	
Answer the following questions.	
List the names of any three scientists.	
What do scientists do ?	
Find the meaning of the words: numerous and discovery.	
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Read More"Who invented the computer?" It is not a question with a simple	le
answer as many inventors contributed to the history of the computer. It is	a
complex piece of machinery made up of many parts, each of which can be	e
considered a separate invention in it self.	



#### **ACTIVITY - 3**

Observe the following pictures and discuss in groups and find the answers to the questions related to the picture.



- Are the children curious? What makes you say so?
- Why is the boy holding a coat?
- What is a snow man?

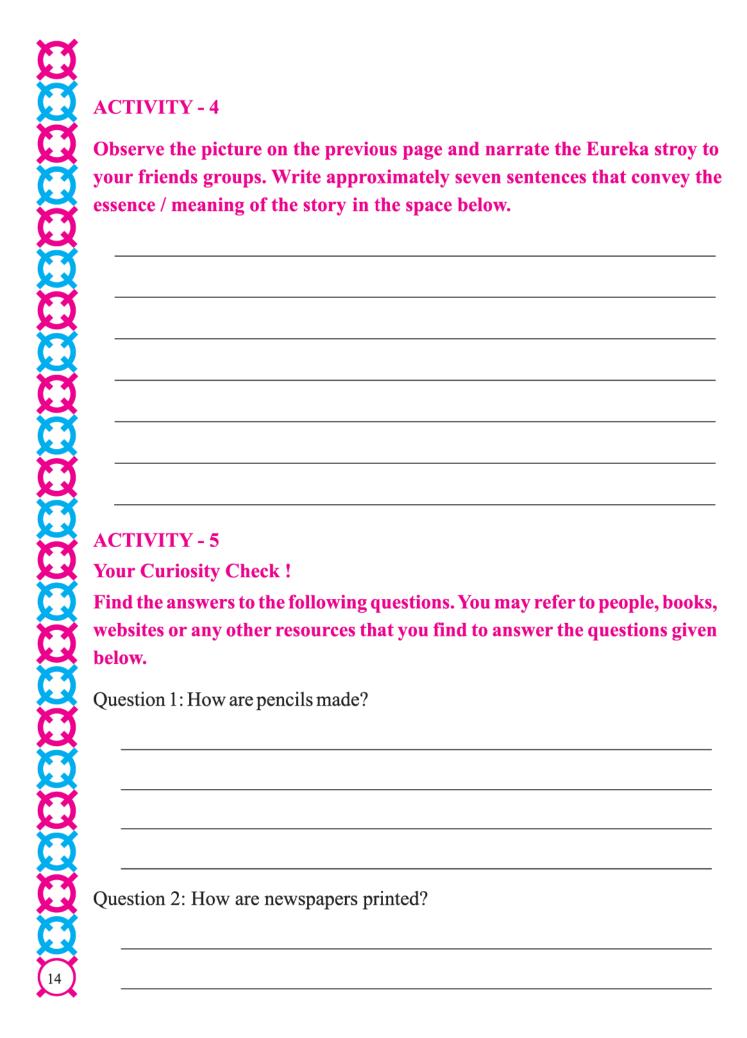
Let us learn more about scientists and discoveries ....

#### PART 2: FAMOUS DISCOVERIES AND INVENTIONS

Archimedes was a Greek scientist. He lived in Syracuse nearly 2000 years ago. The King of the land wanted to wear a Golden Crown. He gave some gold to a goldsmith to make a suitable crown. After a few days, the goldsmith came with the crown to the King. The crown was weighed. The weight of the crown was equal to the gold given to the goldsmith by the King. The King looked at the color of the crown. He suspected that the goldsmith had stolen some gold. But the king was not sure. The King wanted to find out the truth. He asked his court scientist Archimedes to find out. The King said, "Find out how much gold has been stolen?" How to find out the truth? Archimedes thought about the problem day and night. One day he was about to have his bath, but he was busy thinking. He did not notice the bathtub. The water in the bathtub was already full to the brim. He slid into the bathtub. Immediately a large quantity of water flowed over the brim of the bath tub. He noticed this. Suddenly, there was a flash in his mind. He jumped out of the bathtub, shouting, "Eureka! Eureka!" Eureka in Greek means "I have found it."

Thus, it was found that different metals of the same weight have different volumes. Objects, put in water, will displace water. The displaced water will be equal to their volume.





estion 3: Wh	do we have antac	cid tablets or Eno or Soda?	?

Today there are many cartoons projected on television screens, websites as well as books. Some cartooned pictures give us a lot of information. Let's do an activity with cartoons.

#### **ACTIVITY - 6**

Study the pictures given in the tables below and construct a situation based on them. Use the hints to get authentic clues and build situations. You may use web resources or discuss the task with your teacher.

Cartoons	The cartoon reflects
Gravity	Hint : Isaac Newton





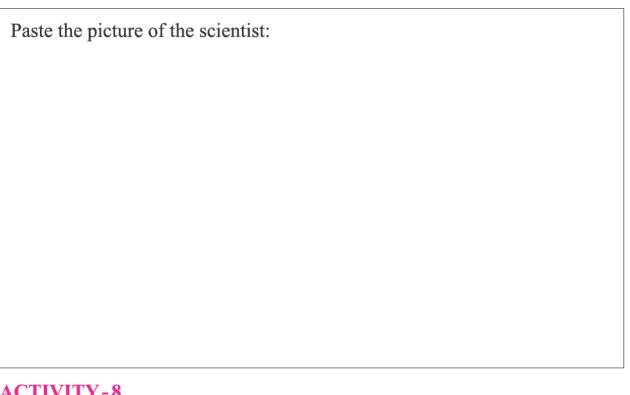
Hint: Air to Breathe

## **ACTIVITY - 7**

### **My Hero Scientist!**

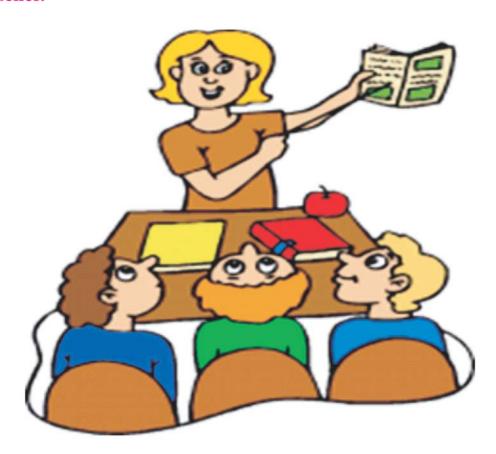
Write the details of your favourite scientist. Discuss the details of the same with your teacher and friends in class.

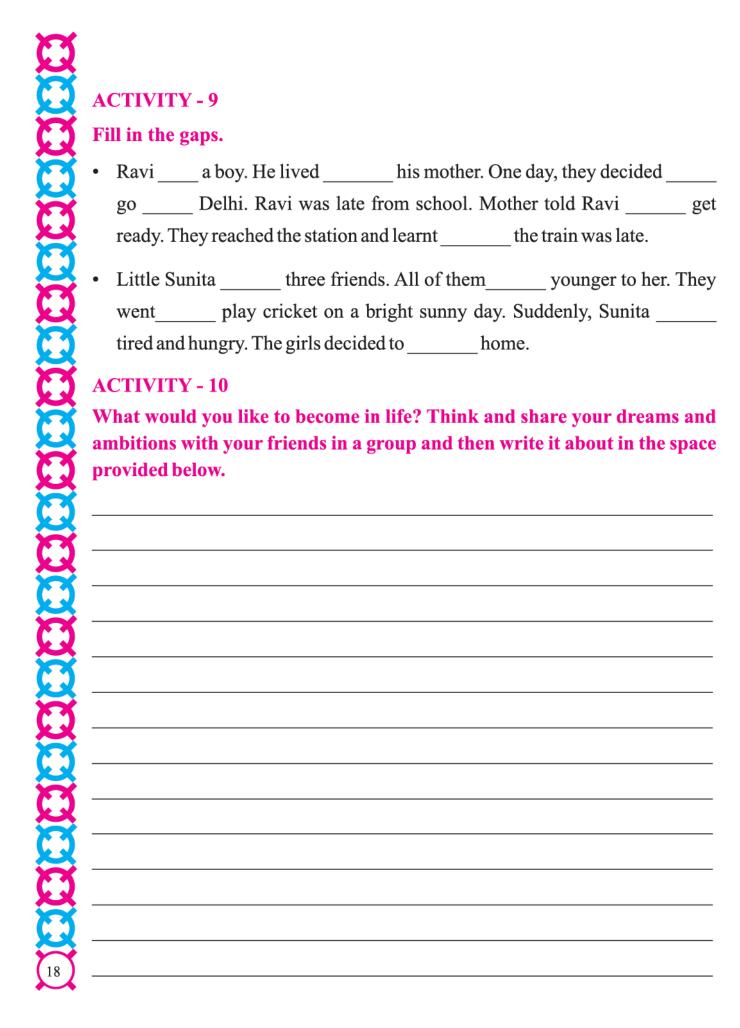
with your teacher and friends in class.			
Name of the Scientist:			
Life span :			
Place / origin:			
*Inventions/ contributions :			



### **ACTIVITY-8**

Describe the following picture in pairs. Share your views with your friends and teacher.





### Helpline

- Build an English resource corner for your students. Encourage the students to read comics, make charts, flash cards and power point presentations.
- Provide guidelines to the students based on ways in which they could relate themselves to the earth. Enable them to write slogans, stories and paragraphs on diverse themes.
- Use a number of clippings from Youtube or other websites and make students discuss their views and generate ideas.
- Instruct students to collect at least two poems dealing with the theme of science. Allow students to practice poetry recitation in your presence and within groups.