

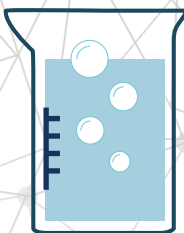
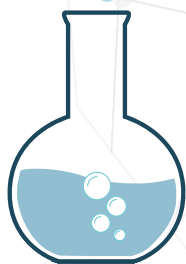
# Insight into **SCIENCE**

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# Preface

**Insight into SCIENCE** is a series of science books for classes kindergarten to V, specially designed to lead young minds to explore the world of science and to bring to an end the teacher's perennial search for the ideally graded science books that develop a scientific aptitude in young learners. The books are designed for schools teaching a specialised science course at the primary level.

Science is a subject that appeals greatly to young minds and becomes most interesting for both the learner and the teacher if taught using an interactive and innovative method. The books in the series equip the teacher with innovative techniques and explain the concepts of science in a most interesting, learner-friendly manner, using very lucid language. The books focus on students' understanding the concepts and discourage rote learning. For this, scientific principles have been correlated with children's everyday experiences.

Some key features of the **Insight into SCIENCE** series:

- ☀ The approach adopted is innovative and emphasises learning actively by investigating, observing and experimenting.
- ☀ The text is supported by rich, self-explanatory illustrations to aid learning.
- ☀ *Naughty Nitoo* comic stories arouse students' interest in the topic to be taught.
- ☀ *What you already know*, at the beginning of each chapter, activates students' background knowledge and relates it to the topic, which arouses students' interest in the topic and helps them to understand it easily.
- ☀ *What you will know* has topic-based questions that usually arise in young children's minds. It encourages students to explore the subject to find the answers to their questions, while also setting learning objectives.
- ☀ *Fun and learn* has interesting experiments and activities to consolidate learning.
- ☀ *Know a fact* provides extra information related to the topic, which motivates students to further explore the subject in particular and the world of science in general.
- ☀ *Words to remember* provides explanations of all the important words that may be new for students.
- ☀ *Points to recall* sums up the chapter perfectly, facilitating revision.
- ☀ *Exercises* are comprehensive and include a wide variety of questions for testing all types of students: not so intelligent, average and extraordinarily intelligent.
- ☀ *Tell your teacher* inculcates moral values in students and develops their communication skills.
- ☀ *Find out* asks students questions about daily life situations involving the application of the scientific principle taught in the chapter. It encourages students to explore the scientific world on their own.
- ☀ *Project*, provided in each chapter, gives students an interesting task in the application of the theory or principle taught and aims at making them scientifically creative.
- ☀ *Experiment* or *Activity time*, at the end of the chapter, aims at making students scientifically innovative with the help of an activity using easily available resources.

We sincerely hope that with all these valuable qualities, the books in the series will not only impart scientific knowledge but also develop a scientific aptitude in children and lead them to apply scientific principles for a better and brighter future of humanity.

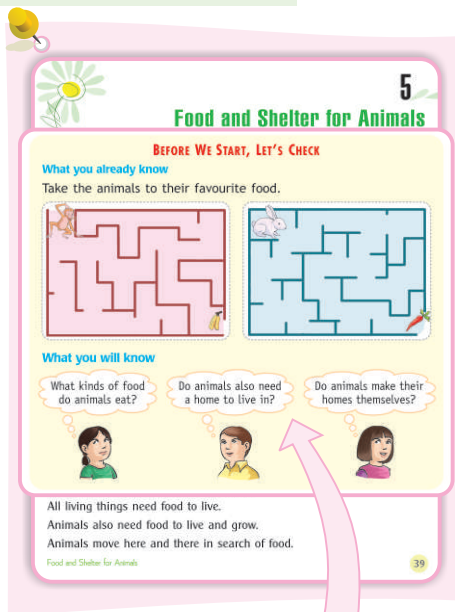
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# Highlights



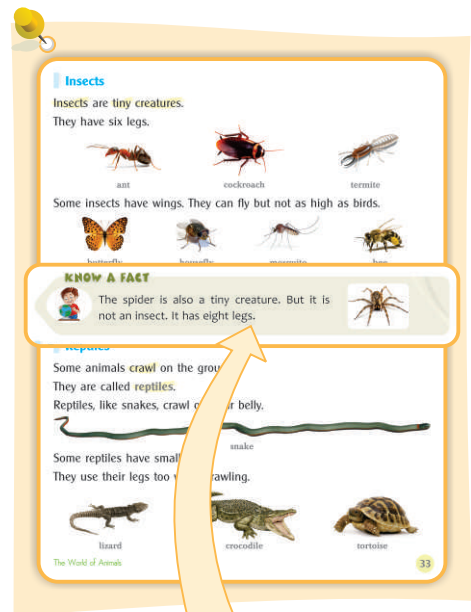
## Naughty Nitoo

comic stories describe everyday activities of a typically curious and naughty child to arouse students' curiosity and make them eager to learn.



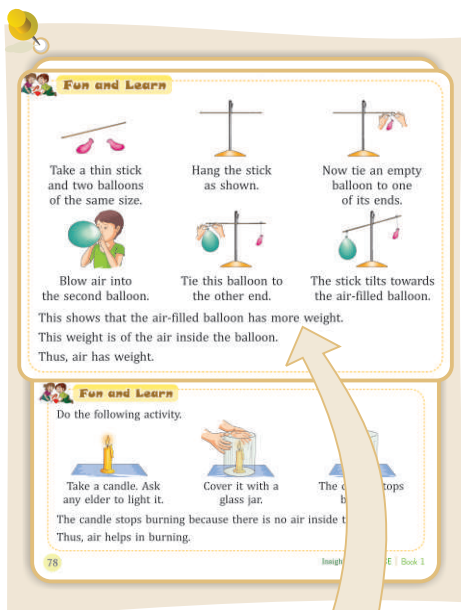
## Before We Start, Let's Check

activates students prior knowledge related to the topic to be taught and makes every student active in class.



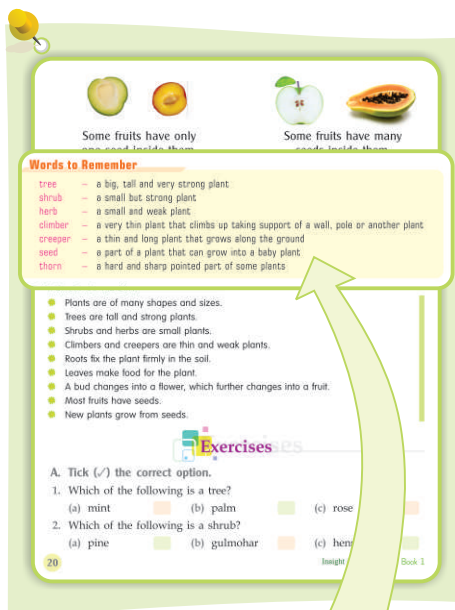
## Know a Fact

provides extra and usually amazing information about the topic, which develops students' interest in science.



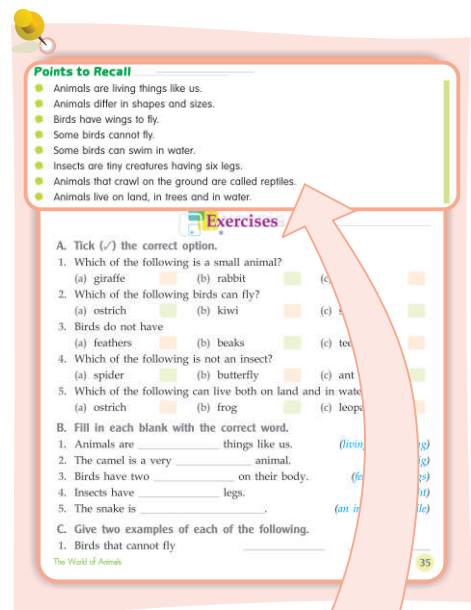
## Fun and Learn

has novel activities and experiments within the text that help to consolidate learning.



## Words to Remember

provides explanations of all the important words used in the chapter and does away with students' need for a dictionary.



## Points to Recall

sums up the chapter perfectly, facilitating revision and the consolidation of learning.



**Skin**  
The skin covers our whole body. We feel and touch with our skin.

**BRAINSTORM**  
Which of the following feels **soft** and which feels **hard**?  
table teddy bear

**GROWING UP**  
You were very small a few years back. You will not fit into the clothes you used to wear then. Do you know why? Because you grew up. But your clothes don't grow. All living things grow with age.

baby boy boy man old man  
baby girl girl woman old woman

**Words to Remember**  
sense - feeling the surroundings, through seeing, hearing, tasting and touching  
organ - a part of the body doing some specific work

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### Brainstorm

has questions to answer which students have to use their thinking skills and think out of the box.

**SAFETY ON THE BUS**  
Wait for the bus in a queue. Never get on or off a moving bus. Never put your arm or head out of a moving bus.

**SAFETY WHILE PLAYING**  
Play games that are safe and fun. Never stand near the sides. Never push others or fight with others.

**TELL YOUR TEACHER**  
Tell your teacher what wrong or right thing the child in each picture is doing.

**SAFETY AT HOME**  
Do not play with matches. Stay away from sharp things like knives, razor blades and scissors. Never poke your fingers into electric sockets.

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### Tell Your Teacher

inculcates moral values in young children and develops their communication skills.

**FIND OUT**  
Some people go to the moon in a rocket. Look at this picture. He is the first man to walk on the moon. Find out his name and write it here.  
N I A S R G

In a clear night sky, we see tiny bright spots. They are stars. The stars are very big. They are bigger than the moon. But they look so tiny because they are very far from us.

**BRAINSTORM**  
We know that an aeroplane is huge. But why does it look small when it is in the sky?

The stars keep twinkling in the sky. The stars are infinite in number. We cannot count them.

**Words to Remember**  
sun - a hot ball of fire  
moon - a round object in the sky, which does not give out light of its own  
stars - shining specks of light in the night sky

Up in the Sky 103

### Find Out

asks students questions about some additional daily life situations, which encourages students to explore the world of science on their own.

**Activity Time**  
Make a pinwheel with the help of your teacher.

Take a square piece of paper, a pencil fitted with an eraser, a ruler, a pin and a pair of scissors.

Draw two diagonal lines on the piece of paper.

Mark the central point and two points on each diagonal line as shown.

Cut along the diagonal lines from each corner up to the marked points.

Using the pin, make a hole in the centre and four holes at the corners as shown.

Push the pin through all the holes.

Hold the pencil firmly and push the pin into the side of the eraser on the pencil.

83 Air Around Us

### Activity Time

has an interesting experiment to help students to learn practically. It can be conducted using easily available resources.

**Revision Exercise 1**  
(Based on chapters 1 to 7)

**A. Tick (✓) the correct answer.**

- Which of the following is not a sense organ?  
(a) nose (b) hand (c) skin
- Which of the following is a natural thing?  
(a) box (b) rock (c) cloth
- Which of the following birds cannot swim?  
(a) over (b) duck (c) swan
- We eat food in the...  
(a) kitchen (b) dining room (c) bathroom

**B. Fill in the blanks.**

- A frog is called a... to live in.
- We use our... with our tongue.
- The... of a frog is called a... .
- The... have in the afternoon is called... .
- ... are small and weak plants.

**C. Answer the questions in one word.**

- What do we eat both plants and flesh of animals?
- What are things made by man?
- What is good for our health?
- What is our food called?
- What do we keep in a stable?
- What plant grows along the ground?
- What do we use for wheat, rice and maize?
- What do we use for both legs and hands are used?

**E. Answer the questions in one sentence.**

- What do we use for a plant?
- What do we use for pulses together called?
- What do we use for a spider have?
- How do we make its nest?

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### Revision Exercises

test students' knowledge of the topics taught. Every aspect of the subjects taught is covered.

**Activity Bank** Section D  
(Based on chapters 11 to 13)

**Wordsearch**  
In the wordsearch, twelve words related to water are hidden. Find and encircle them. Go either across (→) or down (↓).

**Experiment**  
To understand how a filter purifies water, do the following experiment.

Take a glass of water. Put some marbles in it. Now take an empty container. Put the water from the glass into the container. You will see that the marbles remain in the sieve. The water in the container is clear.

**Group Discussion**  
Make groups of six students each. Each group should discuss different activities related to weather conditions. One member of the group will note the activities discussed. Finally, submit your notes to the teacher.

**Project**  
Take a drawing sheet. Draw a table on it as shown below.

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Now, first write the date today in the first column on the first row, and look at the moon. Draw the shape of the moon below the date, day, fourteen days. In the end, write your name at the bottom of the sheet for your teacher.

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### Activity Bank

has a myriad of activities aimed at developing students' scientific creativity and inventiveness.

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