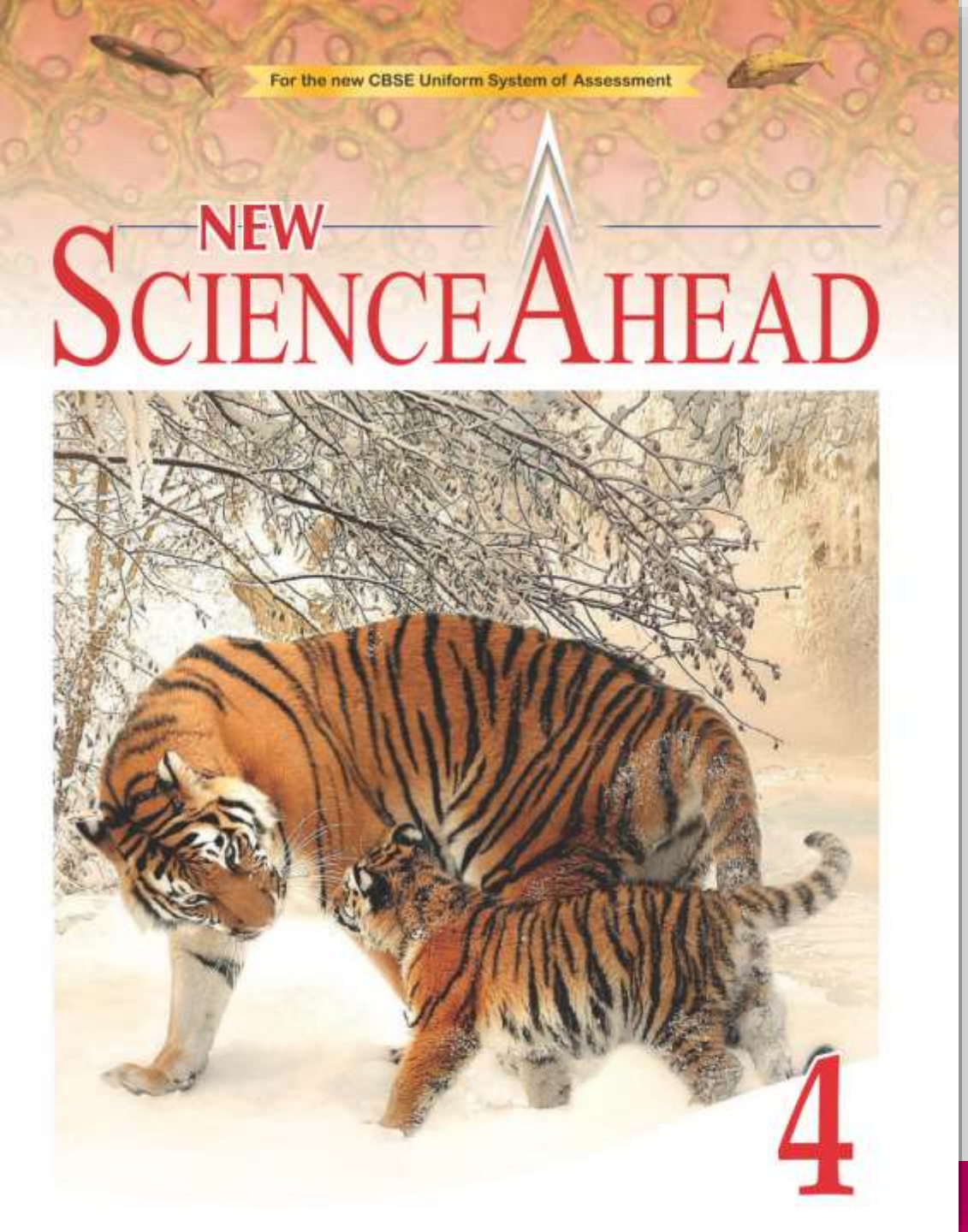
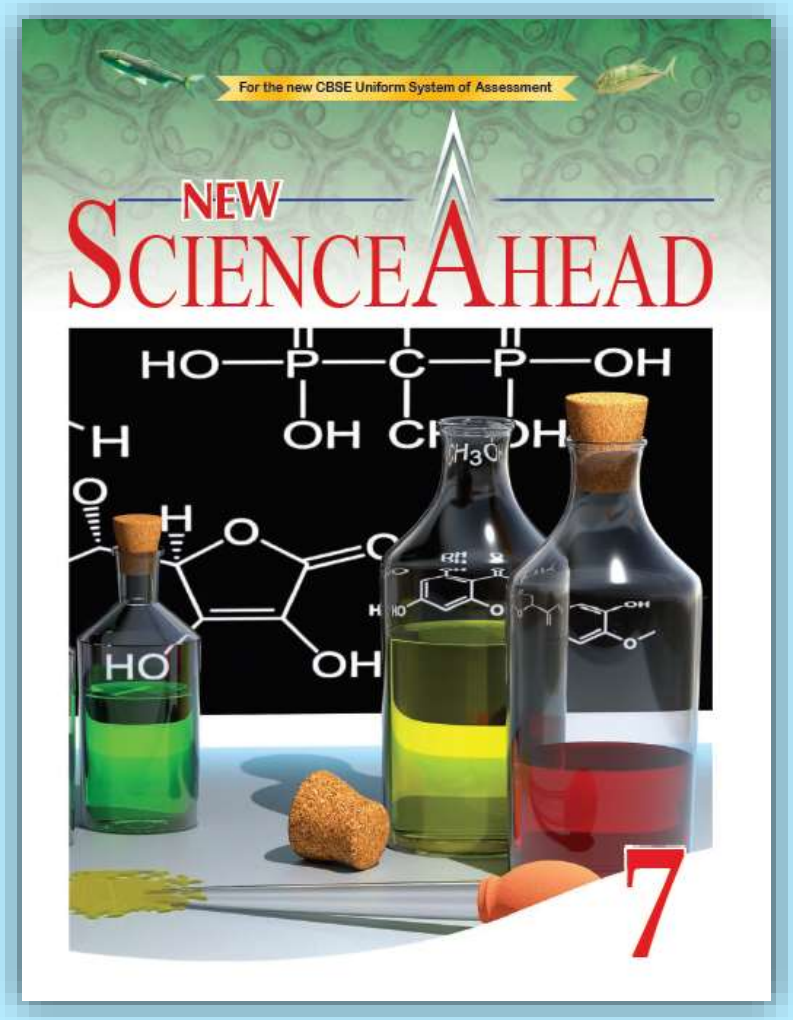


Orient BlackSwan

New ScienceAhead

For the NCERT syllabus

PRODUCT PRESENTATION



THE PACKAGE

Students' Books
Introductory to 8

Teachers' Resource Packs
Classes 1–8

Smart Books for Teachers
Classes 1–8

Students' Apps
Classes 3–8

Web Support
Classes 1–8

COVERS

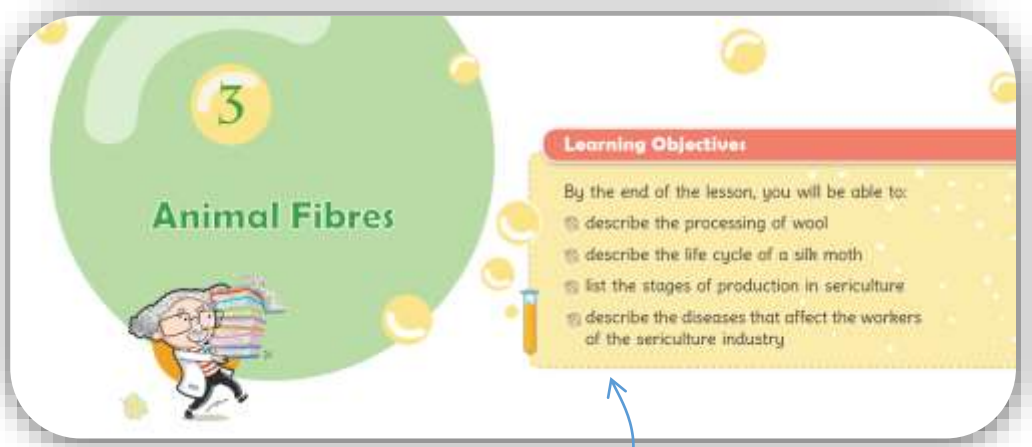

For the new CBSE Uniform System of Assessment
NEW
SCIENCE AHEAD
8

CORE FEATURES

- Follows the NCERT syllabus CBSE/NCERT
- In accordance with Bloom's *Revised Taxonomy of Educational Objectives*
- Learning objectives CBSE/NCERT
- Activities for assessment CBSE/NCERT
- Case studies CBSE/NCERT
- Be Inspired!
- Our Heritage CBSE/NCERT
- National Science Olympiad sample papers


Yearly Examination

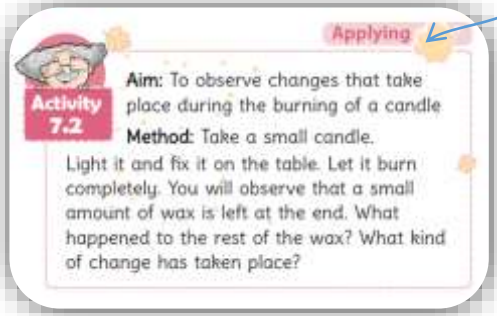
Sample question papers
Two tests and two examinations

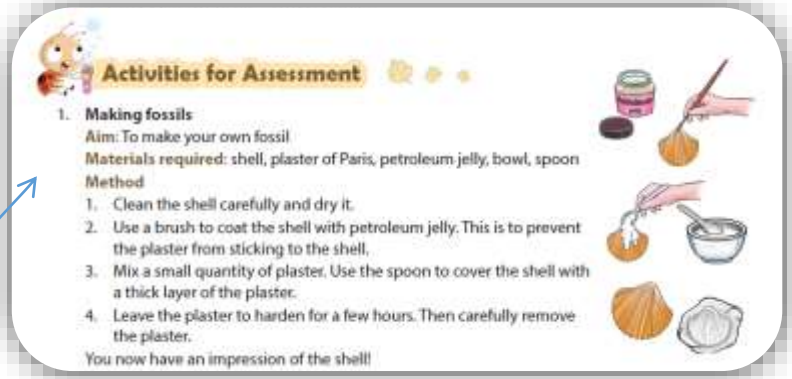

3
Animal Fibres
Learning Objectives
By the end of the lesson, you will be able to:
- describe the processing of wool
- describe the life cycle of a silk moth
- list the stages of production in sericulture
- describe the diseases that affect the workers of the sericulture industry

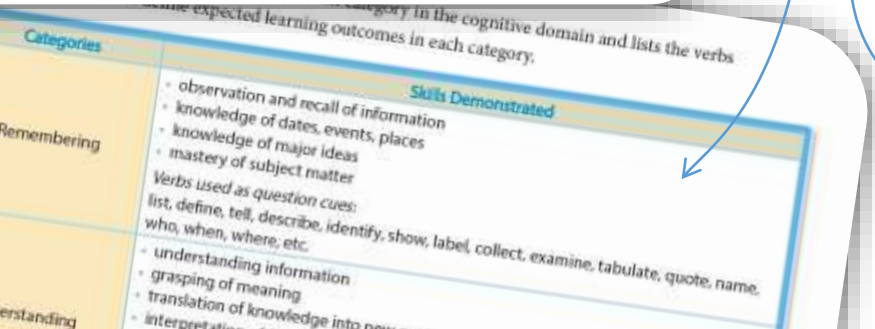
In accordance with Bloom's *Revised Taxonomy of Educational Objectives*
With a handy table of question cues and learning outcomes

Learning objectives
Guide the learning process and encourage students to take responsibility for their learning


nt Activities
periment
Creating
t to show that heat travels from a hotter body to a colder body till both bodies are at ture. You may use water at two different temperatures to do this experiment.
Applying
tion near your town or city if there is one. Ask the officials how they measure ich kind of thermometer is used? Write a report about your visit.


Applying
Activity 7.2
Aim: To observe changes that take place during the burning of a candle
Method: Take a small candle. Light it and fix it on the table. Let it burn completely. You will observe that a small amount of wax is left at the end. What happened to the rest of the wax? What kind of change has taken place?


Activities for Assessment
1. Making fossils
Aim: To make your own fossil
Materials required: shell, plaster of Paris, petroleum jelly, bowl, spoon
Method
1. Clean the shell carefully and dry it.
2. Use a brush to coat the shell with petroleum jelly. This is to prevent the plaster from sticking to the shell.
3. Mix a small quantity of plaster. Use the spoon to cover the shell with a thick layer of the plaster.
4. Leave the plaster to harden for a few hours. Then carefully remove the plaster.
You now have an impression of the shell!


expected learning outcomes in each category.
Categories
Skills Demonstrated
Remembering
- observation and recall of information
- knowledge of dates, events, places
- knowledge of major ideas
- mastery of subject matter

Verbs used as question cues:
list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.
- understanding information
- grasping of meaning
- translation of knowledge into

Scientific experiments
For experiential learning

Activities for assessment
Experiments, field trips, model-making and more

Case Study

In 1822, Alexis St. Martin, a Canadian fur trapper, was accidentally shot in the abdomen. When the wound healed, there was a small hole left in his abdomen that extended into his stomach. Dr William Beaumont, a surgeon, carried out many experiments on the process of digestion using this hole in St. Martin's stomach. This work has increased our understanding of the process of digestion and the functions of digestive juices.

Case studies

In-depth coverage of important topics in classes 6–8

National Science Olympiad sample papers

For competitive advantage

National Science Olympiad

The actual National Science Olympiad test paper has 50 questions.

There are 3 sections, 10 questions in section I (Logical reasoning), 35 in section II (Science) and 5 in section III (Achievers section).

Syllabus for Science
Motion and Measurement of Distances; Light, Shadows and Reflections; Electricity and Circuits; Fun with Magnets; Our Environment; Sorting and Separation of Materials; Changes Around Us; Living Organisms and their Surroundings; Food and its Components; Fibre to Fabric.

1. Who wrote the book "The Origin of Species"?
   (A) Louis Pasteur (B) Charles Darwin (C) Stephen Hawking (D) Sir Alexander Fleming
2. The tail of a comet always points towards the Sun.
   (A) false (B) true (C) cannot say (D) when nearing the Sun
3. Which of the following is necessary for burning (combustion)?

Be Inspired!

Most of us have seen many children at railway stations, bus stops and traffic signals selling small items. They do not go to school, and thus have not been taught to read or write. A police constable, Dharamvir Singh, has been teaching the children who come to the Nizamuddin railway station in New Delhi to read and write. He also teaches them some basic mathematics. This has resulted in the children spending more time on their education and in bettering their lives.

Internet Links

http://www.aaamath.com/mea.html
http://www.schoolingkids.com/india-ap-inter/physics-kinematics/study-notes/rest-motion-kinds-translatory-rotatory-oscillatory-periodic-random.php
http://www.physics4kids.com/files/motion_intro.html

OUR HERITAGE

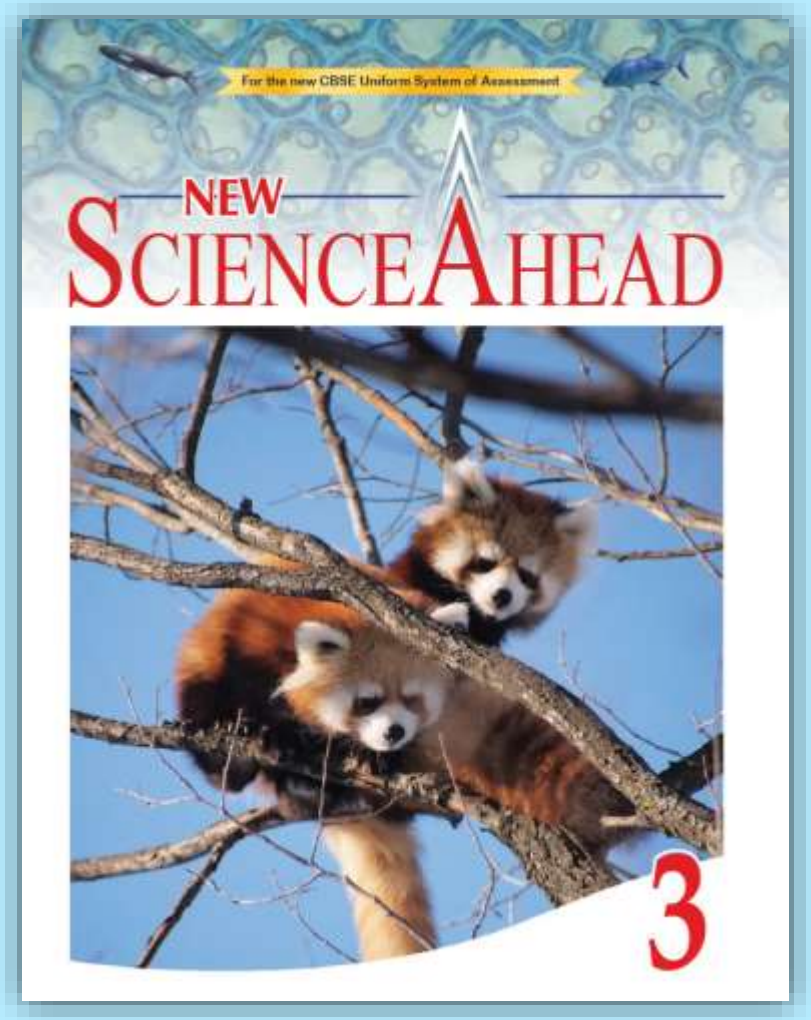
Our ancestors used certain traditional units to measure distances. The smallest unit was the *angula*, which is around two centimetres. Twelve *angulas* made up a *vitasta*, which is equal to a hand span. Four *vitastas* made up a *hasta*, which is equal to a cubit. A *yojana* is equal to around 15 kilometres in SI units.

Be Inspired!

Inspiring students through the lives of scientists and those whose values have made a difference

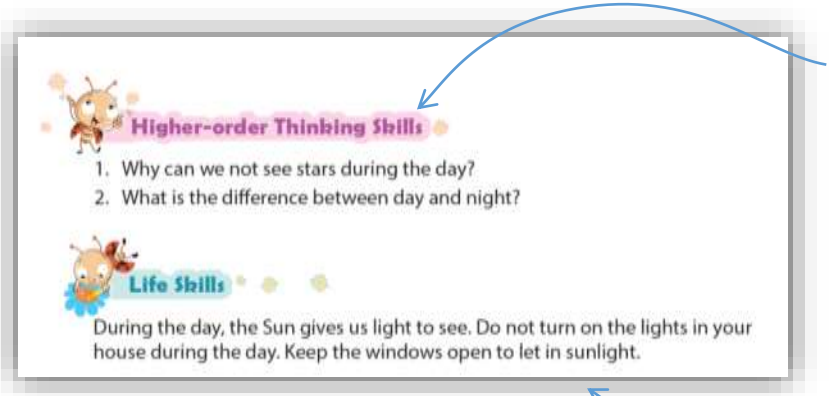
Our Heritage

India's scientific heritage



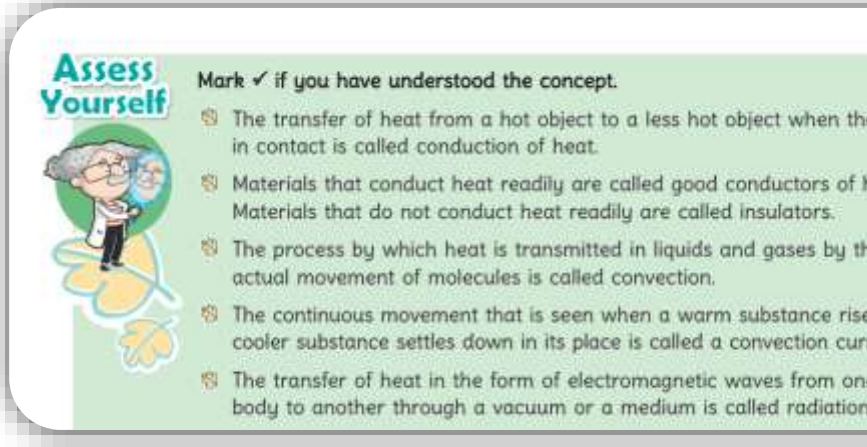
ADDITIONAL STRENGTHS

- Fresh, attractive layout with a focus on readability
- Well-labelled illustrations
- Science tidbits
- Lesson summary
- Higher-order Thinking Skills CBSE/NCERT
- Life skills CBSE/NCERT
- Internet links
- Glossary



Higher-order Thinking Skills

Along with problem-solving, crucial for developing scientific thought

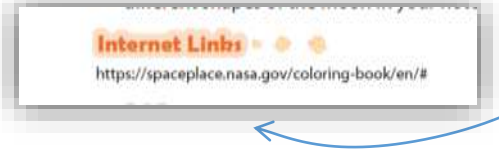


Life skills

Skills to cope with real-life issues

Lesson summary

Quick recap to help concept retention

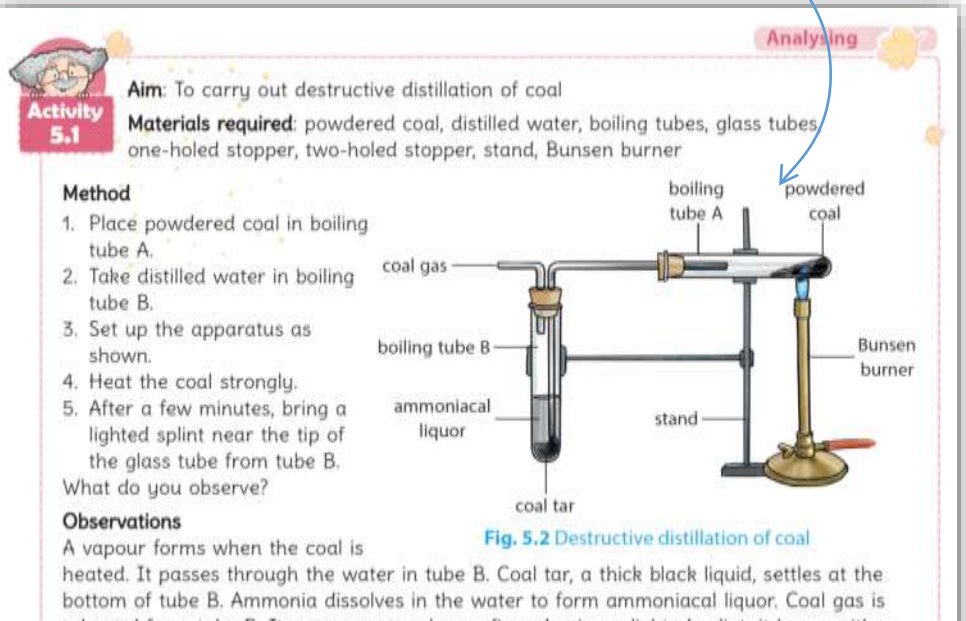


Internet links

For extended learning

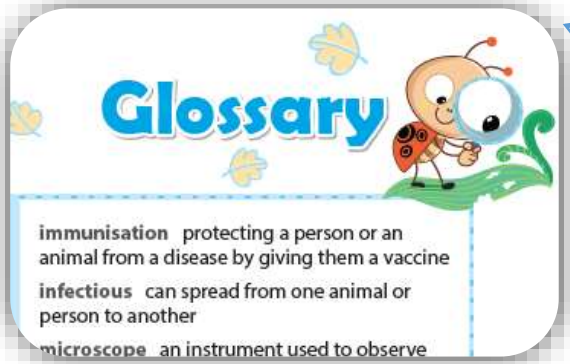
Well-labelled illustrations

For visual learning



Science tidbits

To excite interest and raise awareness



Glossary

Difficult words and terms explained in lesson footnotes and at the end of the book

TEACHER SUPPORT: THE TEACHERS' RESOURCE PACK

FOR CLASSROOM TEACHING

- Lesson Plans
  - Concept maps / Graphic organisers
  - Learning outcomes
  - Essential questions
  - Activities
- Answer key to the students' book exercises

FOR PRACTICE AND ASSESSMENT

- Practical-based questions (PBQs) (CBSE requisite)
- Value-based questions (CBSE requisite)
- Question papers with answer key
- Question bank with answer key
- Worksheets with answer key

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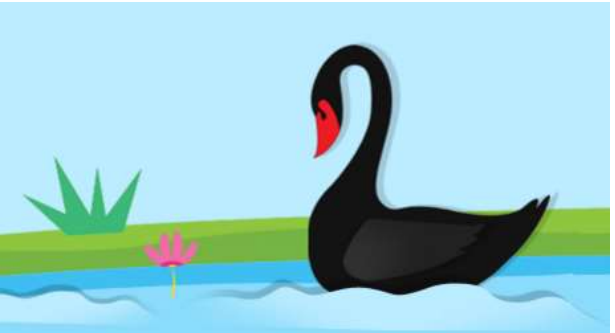
DIGITAL

EBOOK

DIGITAL SUPPORT

Smart Books for Teachers

- Animations
- Videos of science experiments
- Interactive tasks
- Presentations
- Picture galleries



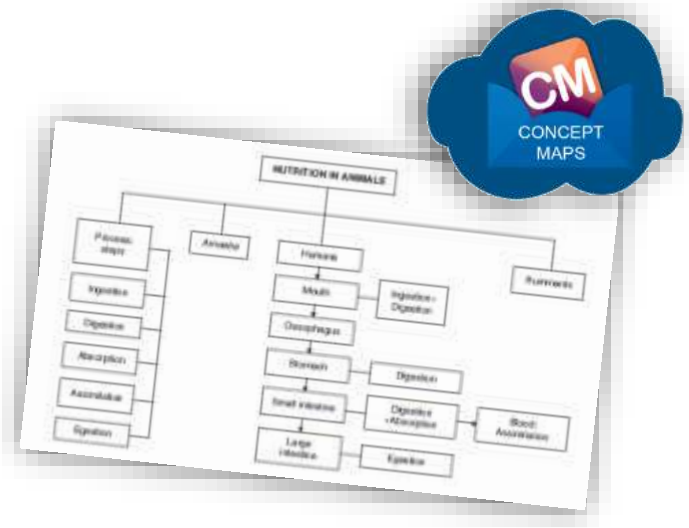
Orient BlackSwan
DIGITAL

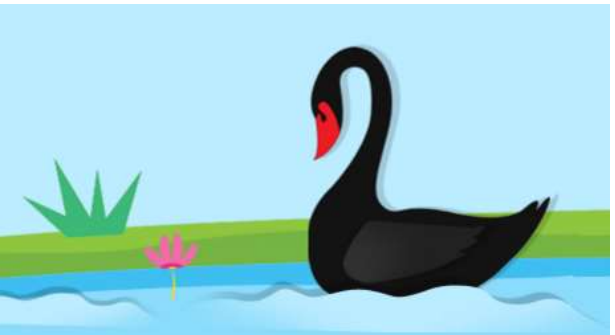
EBOOK

DIGITAL SUPPORT

Smart Books for Teachers

- Concept maps
- Worksheets with answer key
- Teachers' resource corner with lesson plans
- Question-paper generator





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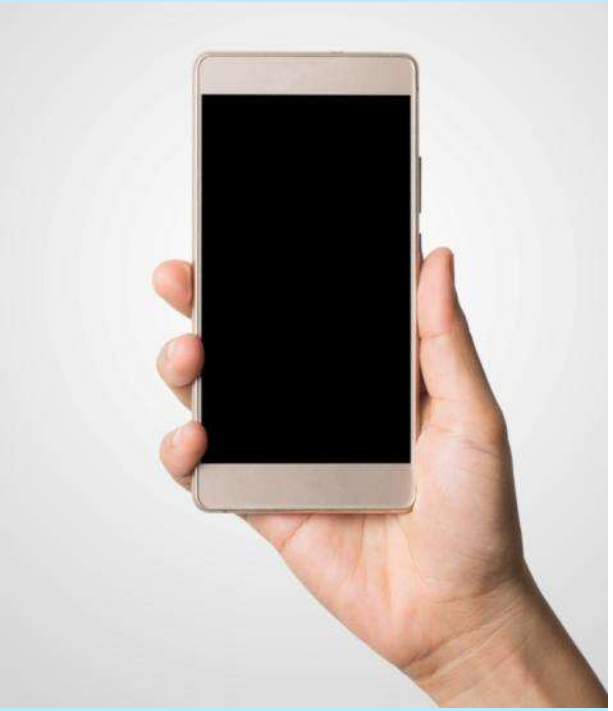
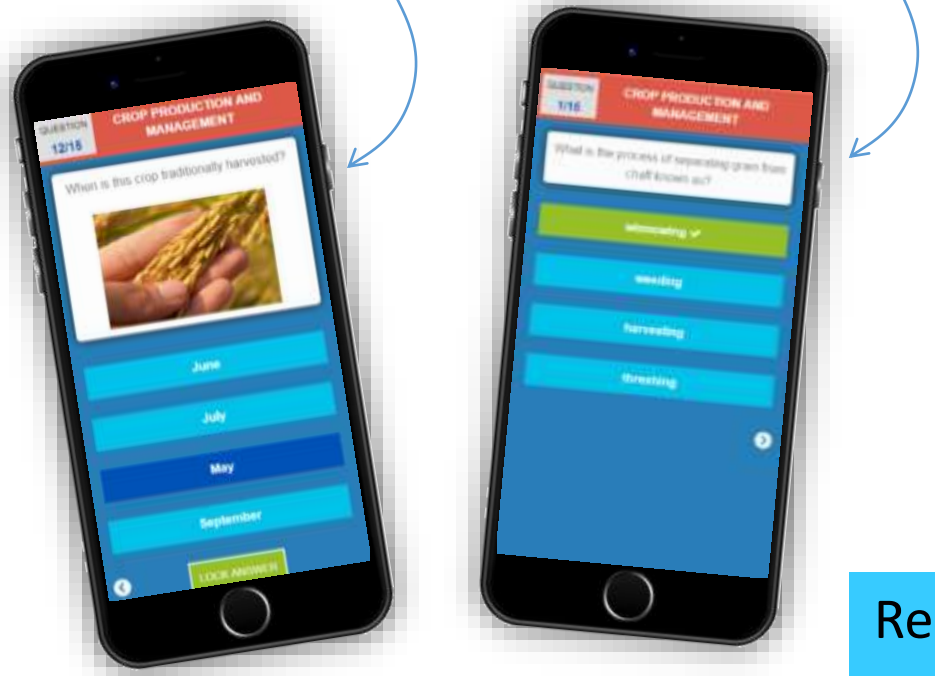


STUDENTS' APP

Practice mode

Test mode



Responsive design—works across devices

Shuffled questions and answers

Andriod and iOS compatible!

Orient BlackSwan

New ScienceAhead

For the NCERT syllabus

THANK YOU