


**Practical
Science**

Life and Living

for 8-10 year olds

- Practical hands-on science activities
- Contains comprehensive teachers' notes and lesson ideas



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This book contains a package of photocopiable worksheets designed to be used to cover the Science learning area of **"Life and Living"** with 8-10 year old students.

At this level the students gain understandings into the relationships between animals and plants and their needs within their habitat. Specific tasks include an in-depth study of a tree habitat in the school grounds, research into the animal kingdom, observing and researching an invertebrate specimen, gathering data and analysing the effect of light on plants, and planning and undertaking a research project on honey bees.

Each lesson has the potential to:

- extend into more than one lesson by having separate parts to the lesson sheet. Some sections of a lesson may need planning on other paper before final copies are transferred to the lesson sheet. Some lessons may be too long for one lesson and could be completed at another time.
- expand into other curriculum areas using a similar theme. There are ideas for cross-curricular integration with other learning areas. Sometimes a whole day's work could be planned around one lesson sheet.

Science Materials and Equipment

The equipment needed has been kept to a minimum to facilitate ease of planning. It is readily available in schools or is easily acquired.

All lesson sheets are outcome linked to the various curriculum documents (see page 6). Answers are provided where necessary (see page 27).

Other books in the Practical Science series:

- *Earth and Beyond*
- *Energy and Change*
- *Natural and Processed Materials*
- *Working Scientifically*

Lesson Sheets Layout



The diagram shows a student lesson sheet titled 'Lesson 1 Homes for Animals'. It contains three main sections: A, B, and C. Section A asks students to list three reasons why animals need shelter. Section B asks students to select three different sorts of animals (e.g., a bird, a mammal, a fish, insect, etc.) and draw and label each animal in its shelter, describing the main features of this animal's shelter. Section C asks students to name four animals that live in a community and list an advantage that these animals have living in a community. The sheet is numbered 1 and 2.

STUDENT LESSON SHEET

① Lesson title

② Student learning activities



The diagram shows a teachers' notes page titled 'Lesson 1 Teachers' Notes Homes for Animals'. It contains four main sections: 1. Learning Outcomes, 2. Materials, 3. Lesson Ideas, and 4. Integration Ideas. Section 1 lists outcomes related to understanding relationships between living things and comparing/contrasting similarities and differences within and between groups of familiar living things. Section 2 lists materials including bird cages, mouse cages, and pictures of wild animals. Section 3 lists lesson ideas including brainstorming needs of living things, discussing why animals need a secure shelter, and looking up information about animal enclosures. Section 4 lists integration ideas including the arts and English (spelling). The page is numbered 1 and 2.

TEACHERS' NOTES INCLUDE:

(FOR EACH LESSON)

① Outcome links;

② Required materials;

③ Lesson plan ideas including extension ideas and teaching tips;

④ Cross-curricular/integration ideas.

Homes for Animals

Learning Outcomes:

- Describes the types of relationships between living things.
- Compares and contrasts similarities and differences within and between groups of familiar living things.

Materials:

- *bird cage and/or mouse cage and/or aquarium*
- *photos or posters of wild animals in their natural habitat*
- *library book loan on a variety of animals*

Lesson Ideas:

- Brainstorm the needs of all living things. List on board.
- Discuss why animals need a secure shelter. Children can write their ideas on a separate piece of paper before committing them to the worksheet.
- Look up information about animal enclosures on the Internet with children taking notes on what the animals have been provided with to make them comfortable.
 - ▶ www.sandiegozoo.org
 - ▶ www.zoo.nsw.gov.au
 - ▶ www.zoo.org.au
 - ▶ www.nationalgeographic.com/tigers/maina.html
- Children should discuss which animals they are going to choose to research. Encourage a wide choice/variety of animals (e.g. choosing a mammal, bird, insect, fish, etc.).
- Students write about the needs of the animal and the reasons for that type of shelter.
- Brainstorm the types of animals that live in communities (not just insects). List the advantages for animals in living in a community.

Integration Ideas:

The Arts: Children paint or draw a picture of a “community” of animals.

English (Spelling): Collate a list of words relating to animals and their homes for word study activities.

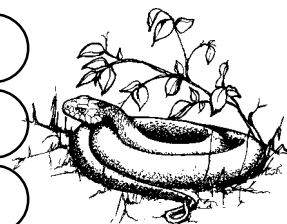
A

List three reasons why animals need shelter.

①

②

③

**B**

Select three different sorts of animals. (E.g. a bird, a mammal, a fish, insect, etc.) Draw and label each animal in its shelter. Describe the main features of this animal's shelter.

①

②

③

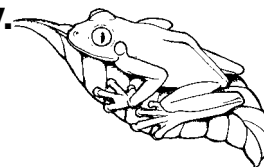
C

Some animals live together to form a community.

① Name four animals that live as a community.

• _____ • _____

• _____ • _____



② List an advantage that these animals have living in a community.
