



Materials in our house

Chemical Sciences



Written for the Australian Curriculum: Science

Sienna Osborne | Randall Hall | Richard John

AUSTRALIAN CURRICULUM: SCIENCE

Strand:	Science Understanding, Science as a Human Endeavour
Sub-strand:	Chemical Sciences
Descriptor:	Different materials can be combined for a particular purpose People use science in their daily lives

SCIENCE WORDS

Materials, steel, wood, concrete, aluminium, glass, plastic, strong, light-weight, hard, durable, rust, brittle, transparent, pliable, shelter

INFORMATION FOR PARENTS OR CAREGIVER

Helping your child learn to read is a rewarding and enjoyable experience for both you and your child. Here are some ways you can help your child with their reading.

BEFORE READING

- Introduce the book; read the title and look at the pictures. Ask your child if they know of any materials around the house.
- Refer to the science words above. Discuss each word and its meaning. These words will appear in the book.

DURING READING

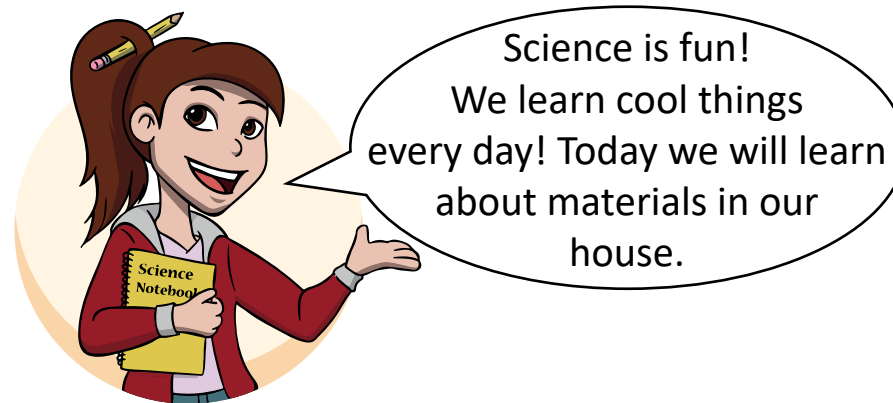
- At this level, your child should attempt to read their home reader on their own. There may be words they are unsure of. Encourage them to break these words down into their individual sounds, blending them from left to right.
- Stop your child on the pages where Suzie the Scientist appears. Discuss the science vocabulary and interesting information presented.

SCIENCE CONCEPTS IN THIS BOOK

Students learn to differentiate objects from the materials from which they are made. Objects and structures we encounter every day are made from a wide range of materials including metal, plastic, rubber, glass, ceramic, wood, paper and concrete.

The material used in a particular object or structure is determined by the properties of that material. For example, rubber would not be used for the foundation of your house or for the windows. The reason is that rubber has properties that include low compressive strength and low optical transparency. Concrete has high compressive strength so it is an excellent material for the foundation of your house. Glass has high optical transparency and is an excellent material for windows.

Your child will learn later that it is actually the arrangement of tiny particles (such as atoms and molecules) that dictate the properties of materials; so particle arrangement dictates the properties of materials, and the properties of materials dictate their uses.



Materials in our house



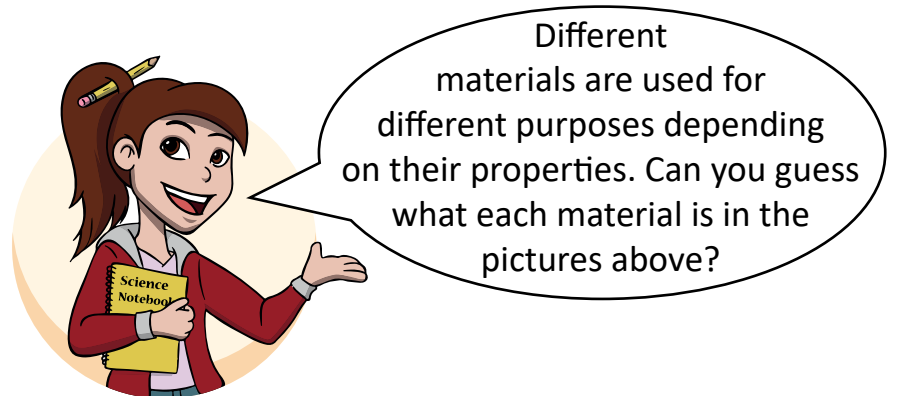
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We can find lots of different materials in our house.

Steel, wood and concrete are some materials we find in our house.

Aluminium, glass and plastic are other materials we find in our house.



Different materials are used for different purposes depending on their properties. Can you guess what each material is in the pictures above?

Wood

Wood comes from trees. It is strong and light-weight.

Wood is used to build the frame of our house.

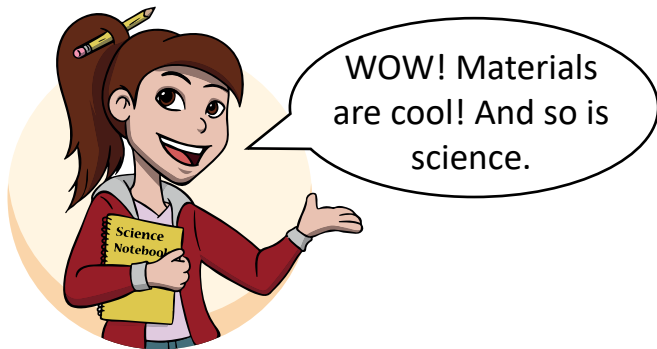


Wood can also be cut into many shapes and sizes to make tables, chairs and doors.

There's lots of wood in our house.

Lots of different materials are used in our house.

These are combined to give us shelter and a safe place to live.



AFTER READING

Ask your child what the book was about and encourage them to re-tell it in the order in which it appeared.

Discuss the following with your child to assist in understanding the content of the book:

- Can you name some materials around your house?
- Which materials are strong and hard? Which materials are light-weight?
- Do you think you could make a window from concrete? Why or why not?
- What is your favourite material in this book?

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Chemical Sciences

In this book Suzie the Scientist helps us learn about materials used to build our houses. We learn that different materials are used for different purposes depending on the properties of the material. Suzie also shows us how the same material can be used for lots of different objects around our house.

Australian Curriculum: All books in the 'Suzie the Scientist' series are written for the *Australian Curriculum: Science* and align directly to what children learn in the classroom. This book addresses the learning outcome "Different materials can be combined for a particular purpose" from the Chemical Sciences sub-strand.



WOW!
Materials are cool! And so is science.

PARENTS, READ ALONG WITH SUZIE!

*Throughout this book Suzie the Scientist tells us interesting scientific facts. Use these pages to encourage further interest and discussion about **materials** with your child.*

Suggested Reading Level:



PM 21-24, Fountas & Pinnell L-O



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