B PROFESSOR Buildings Term 3

God is our Protector

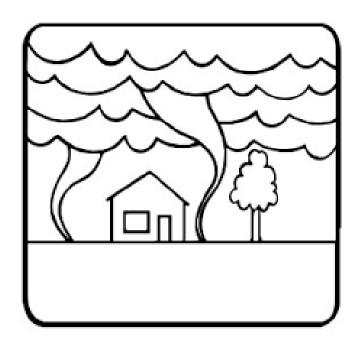
For the teacher to read:

In times of trouble He will shelter me; He will keep me safe ... and make me secure on a high rock. Psalm 27:5 (GNB)

Where do you like to be when there is a big storm? The safest place to be is in a very strongly built house. Houses provide shelter from the strong winds, the heavy rain, and sometimes even the lightning. When you hear the big clashes of thunder, it's good to know you're your family is nearby.

God is our heavenly Father who keeps us safe. He *protects* us. Sometimes in life we have times of trouble. These times are a bit like storms...not real storms, but times when we need safety. Just as our family and our house can provide protection from real storms, God our Heavenly Father is with us when we have troubles in life. The bible tells us that God will hide us in His shelter. It's not a shelter we can see, but the invisible shelter of His love and care.

- 1. What would you do if a storm was coming?
- 2. Draw a very strong house in a storm.
- 3. The Bible tells us that God is our shelter. What does this mean?



Designing a house

Before a house is built, it must be designed. This means that a drawing is made of the floor of the house. The drawings are called plans. It could look something like this:



On a piece of paper, draw a floor plan of your house.

Parts of a house

For the teacher to read:

Foundations

Houses have to have a foundation. This is a firm base for building on. It stops the house from sinking into the soft ground. Foundations can be made from concrete or strong wooden posts.

What would happen if there was no foundation?

Walls

A builder uses a plumb line, (a piece of string with a weight at the bottom), to check if a wall is straight.

What might happen if the walls were not straight?



Roof

The roof frame is usually constructed from wood. It usually has sloping pieces called rafters.

Why do many houses have sloping roofs? What types of materials are roofs made from? What material is your roof made from?

Windows

What are windows made from?
Why do we need windows?
What different shapes can windows be?

Draw a house

Pretend you are building a house. Make drawings to show:

- 1. The foundation
- 2. The walls
- 3. The roof
- 4. The windows





Workmen

Builders build most of the house but they need to get other people to help.

Carpenters fit doors and windows. They also lay floor boards and build the frame.

Bricklayers build the brick walls on the foundation, which is made of concrete.

Plumbers fit pipes, which carry water around the house. They also put in sinks and baths.

Electricians put in wires and cables for electricity. They also fit lights, plugs and switches.

Plasterers make the inside walls. They use plaster boards, which they join together.

Painters paint the house when it is finished. They paint the inside walls and ceilings. Some houses are painted on the outside too.

In your book, list five types of building workers and say what they do. Draw a picture for each.



Tools

What are these tools used for?

- hammer
- saw
- plane
- trowel

Building materials:

Concrete

Concrete is made in a concrete mixer, from sand, small stones, cement and water.



Bricks

Bricks are made from clay, which is baked at very high temperatures. They are stuck together with mortar, which is a paste made from sand, cement and water. Bricks are laid in a pattern for strength.

What is concrete made from? What are bricks made from?

Building materials

Wood

Some people use wood on the outside of their house. Long straight pieces of timber are needed. Wood is also used for making the frame of a house.

- 1. Where does wood come from?
- 2. Which tools do you need for working with wood?
- 3. Draw a wooden frame of a house.

Metal

- 1. Where is metal used on a house?
- 2. What kinds of metals are used?
- 3. What are nails and screws made from?

Plastic

- 1. Where is plastic used on a house?
- 2. Pipes can be made of metal or plastic. Plastic pipes will not rust but how could they be damaged?
- 3. Why do houses need pipes?
- 4. Why are electrical wires covered with plastic?

Plaster

Plaster is made from a mineral from the soil and mixed with water. It is then made into flat sheets called plaster-board. This is used for the inside walls. The plaster-board is then painted.

- 1. What is plaster-board used for?
- 2. What colour is the paint on the wall of the room you are in?

Leaves and other plants

In some countries walls and rooves are made from leaves and other plant materials.

Different kinds of houses

Make a book about different kinds of houses.

Draw a different kind of house on each separate page. Write a sentence on each page about the houses you have drawn.

