

Shelter



God is our shelter / God is Protector

This unit of study has been designed for use with the Beacon Media resource:

Themes for Christian Studies - a Biblical foundation for learning.

Beacon Media songs - for integration with the theme.

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around the world	

Related Beacon Media Resources:

(Choose according to age of students)

Themes for Christian Studies 1 Protector - God is a Father who protects.

Themes for Christian Studies 2 Protector - God protects His people when they are in danger.

Themes for Christian Studies 3 Protector -God protects His people when they fight for Him.

Themes for Christian Studies 4- Protector -God rescues His people & protects them from sickness.

Themes for Christian Studies 5 Protector - God protects us from harm and evil.

Themes for Christian Studies 6 Protector -God protects His people in times of trouble.

Themes for Christian Studies 7 Protector - God is our shelter.

Music resources – refer to ‘Primary Music’

Out of Egypt *(from All Creation Sings)*

I don't have to worry *(from Sing a Joyful Song)*

A Great Big Dad *(from Couldn't Be Finer)*

Introductory notes for teachers

Christian life and character development

Through the completion of this unit students will:

- Understand that God is our protector and provider.
- Read Bible stories that tell of God's protection.
- Develop trust in the protection God provides for His children.
- Work cooperatively in building projects.

Literacy

- Read biographies of people who have experienced God's protection.
- Use terminology related to building and construction.
- Describe the way a particular structure was constructed.
- Research information on shelters.
- Record information and report on construction activities.

Art/craft

- Design and construct shelters.
- Decorate models.
- Observe a range of architecture.
- Draw pictures of shelters.
- Solve practical problems through construction.

Mathematics

- Measure building materials.
- Draw plans of structures.
- Look for pattern and shape in constructions.
- Identify shapes in structures eg. triangles, rectangles, cylinders.

Social context

- Learn about the history of buildings.
- Learn about buildings in different cultures.
- Observe design and construction in the neighbourhood.
- Identify sources of building materials.
- Use environmental materials for constructing shelters.
- Use recycled materials for construction.
- Appreciate roles of people who work in the building industry.
- Work with others on construction projects.

Science

- Test the properties of building materials.
- Explore the strengths of various shapes
- Explore structural possibilities of materials

Junior Primary: God is Protector/God is Peace

Teacher's notes

Houses

Related sections from Themes for Christian Studies:

Level 1 Protector - God is a Father who protects us.

Level 1 Peace - God is Peace: God keeps us safe.

Preparation -You will need:

- cardboard boxes and/or cardboard tubes
- paper, paint, scissors, glue
- pictures of houses
- samples of real building materials. E.g. bricks, tiles, wood, insulation, plaster.
- clay and matchboxes for making mud bricks

Vocabulary

build tall straight upright high base roof construct level square triangle

Discussion

What is your house like?

What is your house made from?

Where are the windows in your home?

Where are the doors?

What are the rooms in a house?

What furniture do we need?

What kinds of houses are there?

Why are houses important?

What is a shelter?

How could we make a shelter?

Activities

- Draw your house.
- Draw a bird's eye view of your house.
- Draw some of the rooms in your house.
- Walk around the neighbourhood and observe different kinds of houses.
- Write about your house.
- Observe a house under construction.
- Make houses from boxes. (A larger house could include furniture.)
- Learn joining techniques. E.g. using paste and paper instead of sticky tape; using fringing to join a cylinder to a flat surface.
- build a cubby
- build houses from Lego
- make some mud bricks from clay and matchboxes. Use the matchbox as a mould.

God is our shelter

For reading or listening:

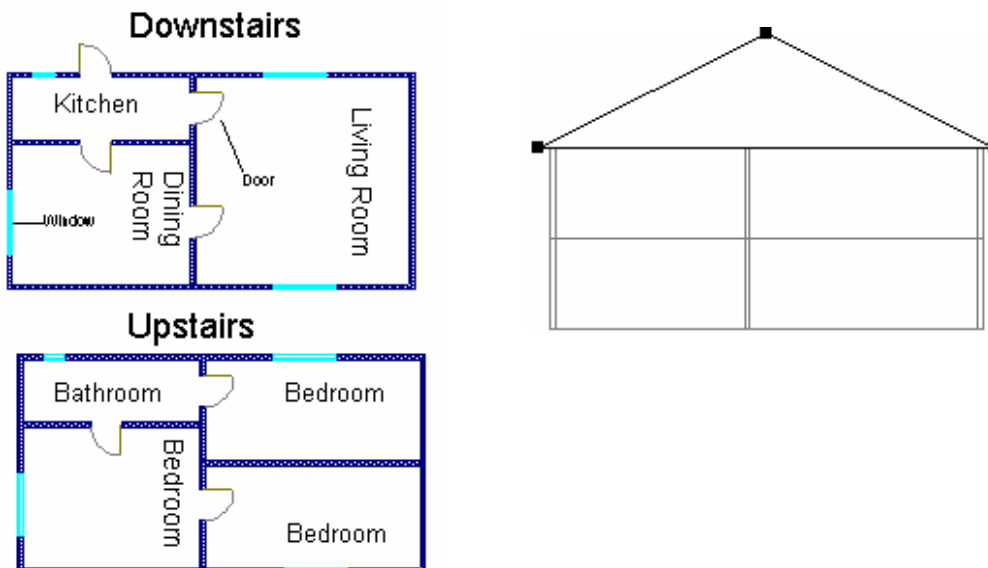
For in the day of trouble He will keep me safe in His dwelling; He will hide me in the shelter of His tabernacle and set me high upon a rock. Psalm 27:5

Where do you like to be when there is a big storm? The safest place to be is in your cosy house. Our house is a 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 that Mum and Dad are near by, even though thunder can't hurt you. It just feels safe.

God is our heavenly Father who keeps us safe. 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 Mum and Dad, and our cosy house can provide protection from real storms, God our Heavenly Father protects us from dangers 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.

Designing a house

Before a house is built, it must be designed. Architects draw pictures of the house. The drawings are called plans. This is what an architect's plans are like.



The builders use the plans as a guide while they are working on the house.

How many storeys are in this house? _____

How many rooms are in this house? _____

How many bedrooms are in this house? _____

How are the doors and windows shown? _____

How can you tell which way the doors open? _____

Draw a floor plan for your own house.

Now draw your house from the front view.

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 walls were built straight on top of the soil?

Experiment:

Make a sand tray. Place a stick into the sand. How far can you press it in?
Now place a block on top of the sand, and a stick on top of the block. Push down on the stick. Notice that the block doesn't sink into the sand like the stick did.

Walls

A builder uses a plumb line to check if a wall is straight

What might happen if the walls were not straight?

Experiment:

Make a plumb line out of a piece of string and a weight tied to the end. Notice how it hangs straight up and down.

Roofs

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

Why do houses have sloping roofs?

What types of materials are roofs made from?

What material is your roof made from?

Why do roof tiles overlap?

Experiment:

Make two roofs from cardboard: one sloping and one flat. Pour water on top and see what happens.

Windows

What are windows made from?

Why do we need windows?

What different shapes can windows be?

Workmen

Carpenters and joiners 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.

Draw a house

Pretend you are building a house. Draw the parts of the house in the right order.

1. Prepare a level foundation.
2. Pour the concrete for the floor.
3. Build the frame.
4. Build the walls.
5. Build the roof.

Tools

What are these tools used for?

hammer _____

saw _____

plane _____

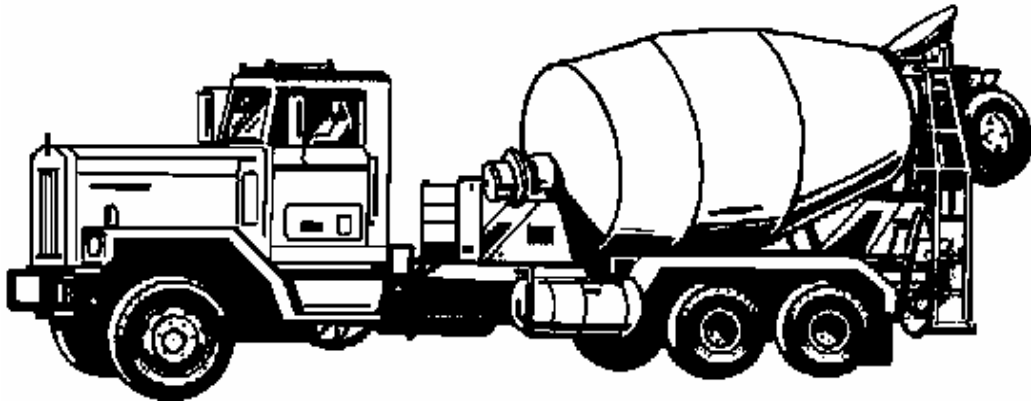
trowel _____

Make a chart showing different tools, and match them up with the workmen who use them.

Building materials

Concrete

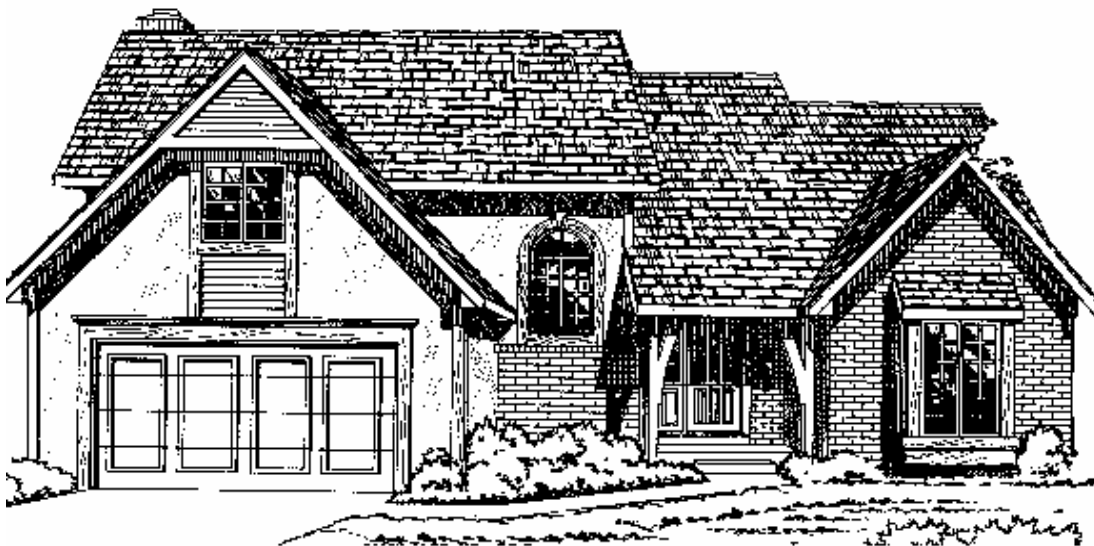
Concrete is made in a concrete mixer, from sand, small stones, cement and water.



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.

1. Draw some different brick patterns.
2. Draw a brick house, showing the pattern.
3. Make a brick pattern using lego.
4. Make a collection of different types of bricks. Some are rough and some are smooth. Make some crayon rubbings of bricks.



Some houses are made of mud bricks. The mud bricks are coated with a kind of glue to stop the rain from wearing the mud bricks away. Mud brick houses are different from other brick houses because the mud brick can be seen on the inside as well as the outside.

Wood

Some people use wood on the outside of their house instead of brick. The wooden boards are called weather-boards. These are long straight pieces of timber. Can you draw a weather-board house?

1. Where does wood come from?

2. Which tools do you need for working with wood?

3. Make some crayon rubbings of different types of wood.

4. Make a collection of different types of wood.

Metal

Where is metal used on a house?

What kinds of metals are used?

Maths activity:

Using a beam balance, weigh some nails. How many nails, all of the same size, weigh the same object on the opposite side of the balance. Try again using bigger or smaller nails. Try comparing with different objects.

Plastic

1. Where is plastic used on a house?

2. Why are most pipes made from plastic?

3. Why do houses need pipes?

4. Why does electrical wiring need to be covered with plastic?

5. _____

Maths Activity:

Collect pieces of plastic pipe and measure the length and width.

Insulation

1. What does it look like?

2. Where is it used?

3. Why is it used?

Quick Quiz

For which part of the house do we use these materials?

bricks _____

wood _____

glass _____

plaster _____

insulation _____

plastic _____

metal _____

concrete _____

Some construction challenges

Try to make a shelter out of these materials:

1. clay
2. newspaper and sticky tape
3. a blanket and a chair
4. cardboard cartons
5. a pack of cards
6. straws, plasticine and tissue paper

Try to make the tallest building you can.

Try to make the widest building you can.

Middle Primary: God is Protector/God is Powerful

Teacher's notes

Castles

Related sections from Themes for Christian Studies:

Level 3 God is Protector -: God protects His people when they fight for Him.

Level 3 God is Powerful level - God is great, strong and mighty.

Preparation

You will need:

- boxes for construction
- paper, paint, scissors, glue,
- pictures and posters of castles, knights and armour from the middle ages

Vocabulary

Middle ages peasant knight castle battlements moat draw-bridge soldier banquet
attack dungeon enemy spiral staircase protection

Discussion

When did people build castles?

Why did they build them?

What were they built from?

In which continent were most castles built?

Application

- Build a castle from cardboard
- Make a study of life in a castle during the Middle Ages
- Draw castles at different stages in history
- Draw the inside of the castle
- Hold a medieval banquet

- Decorate the room to resemble the great hall of a castle. Make mock tapestries, flags and coats of arms.

God is our protector

*The name of the Lord is a strong tower. The righteous run into it and are safe.
Proverbs 18:10*

Try to imagine how **big** God is. God is great, strong and mighty. We can feel safe in His care. Here are some words from the bible that make us feel safe. Look up the verses and match the words with the verses. In some verses there are two words.

Words:

tower rock fortress shield stronghold refuge strength greatness power

Verses:

Psalm 18:2 Psalm 46:1 Psalm 59:9 Psalm 66:3 Proverbs 18:10 Proverbs 30:5

Which words remind you of a castle?

God is our defender

There are many verses in Psalms, which tell us that God fights for us. Find out the answers to these questions from the bible verses.

1. Who is the enemy that we fight against? (Ephesians 6:12)

2. What is the weapon mentioned in Psalm 11:2?

3. What kind of weapon would the devil use?

4. Who would he shoot at?

5. How does God fight for His people in Psalm 64:7?

6. What do you think this really means?

7. Can we expect to win if we try to fight our enemies on our own? (Psalm 44:4-8)

8. How does trusting in God make us feel? (Psalm 56:11 and Psalm 27:1-3)

God fought for the Israelites when they were obeying Him. When they followed other gods they lost the battle.

God fought for the Israelites

Joshua was a great leader of the Israelite people. He led the Israelites in many battles against their enemies. The Israelites were God's special people who knew the true God. Today, Christians are God's special people too. We need God's protection to fight against our enemy, the devil.

Joshua 10-13

God said that He would only fight for the Israelites if they_____

Joshua 24: 14-18

What choice did Joshua give the people?

What happened after Joshua died?

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What happened when they went to battle?

Not all the Israelites served false gods. Gideon was one who worshipped the true god.

Judges 6:12-14

An _____ appeared to Gideon and said that the Lord was _____ him. God was going to use him to save Israel from the _____.

Judges 6:34

The _____ of the Lord came upon Gideon. He blew a _____ and called his army.

Gideon was not a brave warrior. He was an ordinary man. He found it hard to believe that **he** could lead an army. He wanted a sign from God.

Judges 6:36-38 Gideon's sign

The _____ made the fleece _____ but the earth stayed _____.

The next day, the _____ made the earth _____ but the _____ stayed _____.

Judges 7:2 **Gideon's army**

God told Gideon that there were too _____ people in his army. God wanted the Israelites to see that it was **He** who would win the battle for them.

Judges 7:5-6

How did God choose the men to fight?

How many in the army now?

Judges 7:22

Why were the Midianites defeated?

The armour of God

Read Ephesians 6:11-12

Who do we fight against? (verse 12) _____

We can stand firm against the schemes of the devil by putting on _____

Read Ephesians 14, 15 and 17

What is the armour of God used for...

the loins _____

the chest _____

the feet _____

the head _____

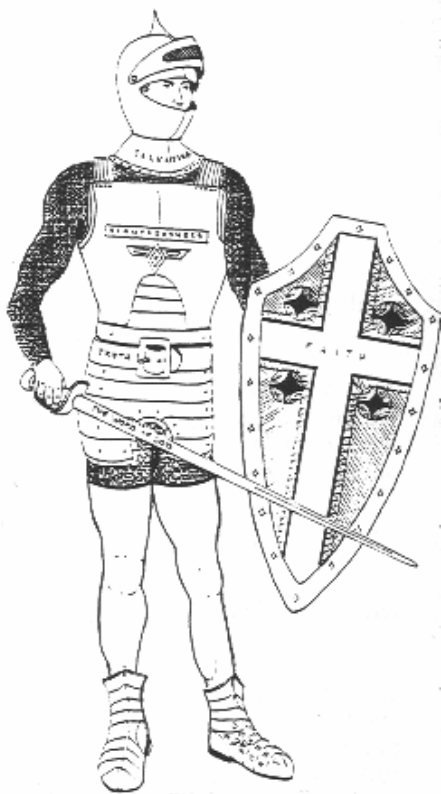
Draw a picture of a man ready for battle. Make him big enough to show the four pieces of armour you have just listed. Write the names of the four pieces of armour on your drawing:

The helmet of salvation

The breastplate of righteousness

Armour for the loins

Shoes for spreading the gospel of peace



Also make a cut-out soldier, dressed in his armour. You will find the pattern in Themes for Christian Studies 3. God is Protector.

Read Ephesians 6:16

The shield, which protects us against flaming missiles, is the shield of _____.

The flaming missiles are fired at us by _____. One of them might be

temptation to do something we know is wrong. Here are some others. The letters are jumbled, but the first letter is in shown.

tdobu spdeair etha veny

Read Ephesians 6:18

A good soldier always stays a ___ t. The Holy Spirit helps us to p___ . We must pray with perseverance. This means we should never g ___ up.

We put on the armour of God by being:

truthful, prayerful and righteous

And by having:

F _____, P _____, and God's W _____

What does it mean to put on the helmet of salvation?

What is the sword of the Spirit?

Life in a castle

The Middle Ages

People who study history give this name to a certain period of time.

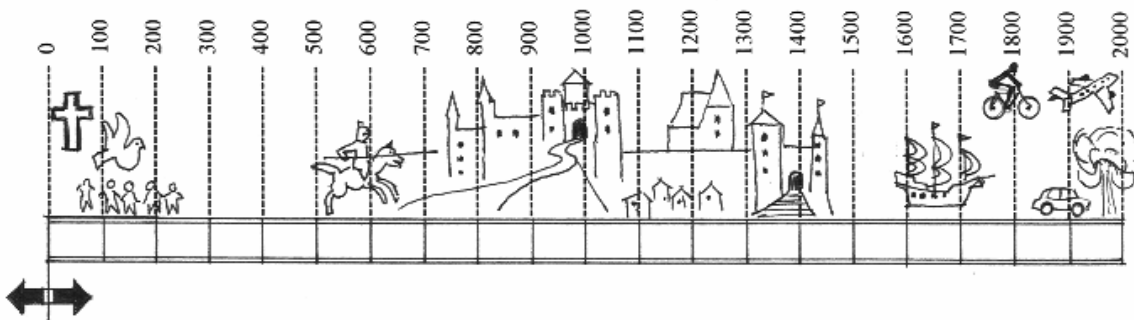
When?

From about 500 years after the death of Christ, until the fifteenth century.

Where?

Europe

People also call this time, the **medieval** period. This was the time of knights and castles.



1. Colour Europe on the map of the world. Don't forget to include Britain.
 2. Name 3 countries in Europe.
-

3. How many years in a century?

4. Which century are we living in at present?

5. How long ago did the Middle Ages end?

6. Study the time line. What is meant by B.C. and A.D.?.

Before the Middle Ages, most of Western Europe, including Britain, belonged to the Romans. However, when the Roman Empire fell, groups of people started ruling themselves, with their own chief or king. At the beginning of the Middle Ages there were many wars and much confusion. However, by the end of the Middle Ages there was law and order.

7. What does the 'fall of the Roman Empire' mean?

8. What happened after the fall of the Roman Empire?

9. Why do you think there was a lot of fighting at the beginning of the Middle Ages?

Who lived in castles?

Few people lived in castles. The people who lived in a castle were the lord or king, his family, his servants and the people who defended it. The men who defended the castle were called the garrison.

The garrison included knights who always fought on horseback, archers and ordinary foot soldiers. Fighting men needed armour, horses and weapons. Therefore the craftsmen who looked after these things also lived within the castle walls. Everyone of course needed feeding, so there were many cooks and kitchen workers.

If the lord or king was very powerful he probably owned other castles too, in different parts of the kingdom, so he spent much time travelling from one castle to another with his family and servants.

10. Who lived in castles?

11. Who were the garrison?

12. What did the craftsmen do?

13. Why might a king and his family travel a lot?

Where did other people live?

Unless you were rich enough to own a castle, you would live on the land surrounding the castle and work very hard for the lord. The land around the castle was called the **manor**. It had meadows, woods, fields, rivers, a mill, an oven, a wine press, a church and a village. People worked as farmers, bakers, smiths, carpenters, leather-workers and builders of roads and bridges,

14. Where did most people live?

15. How did ordinary people serve the lord and king?

16. In what way could the lord or king serve the ordinary people?

17. How does this remind you of God who is our protector?

The first castles


In England, in the 11th century, soldiers came from France. The French soldiers were called the Normans, and the English at that time were called the Saxons. The Saxons often attacked the Normans, so the Normans built the first castles in England, to defend themselves against the Saxons.

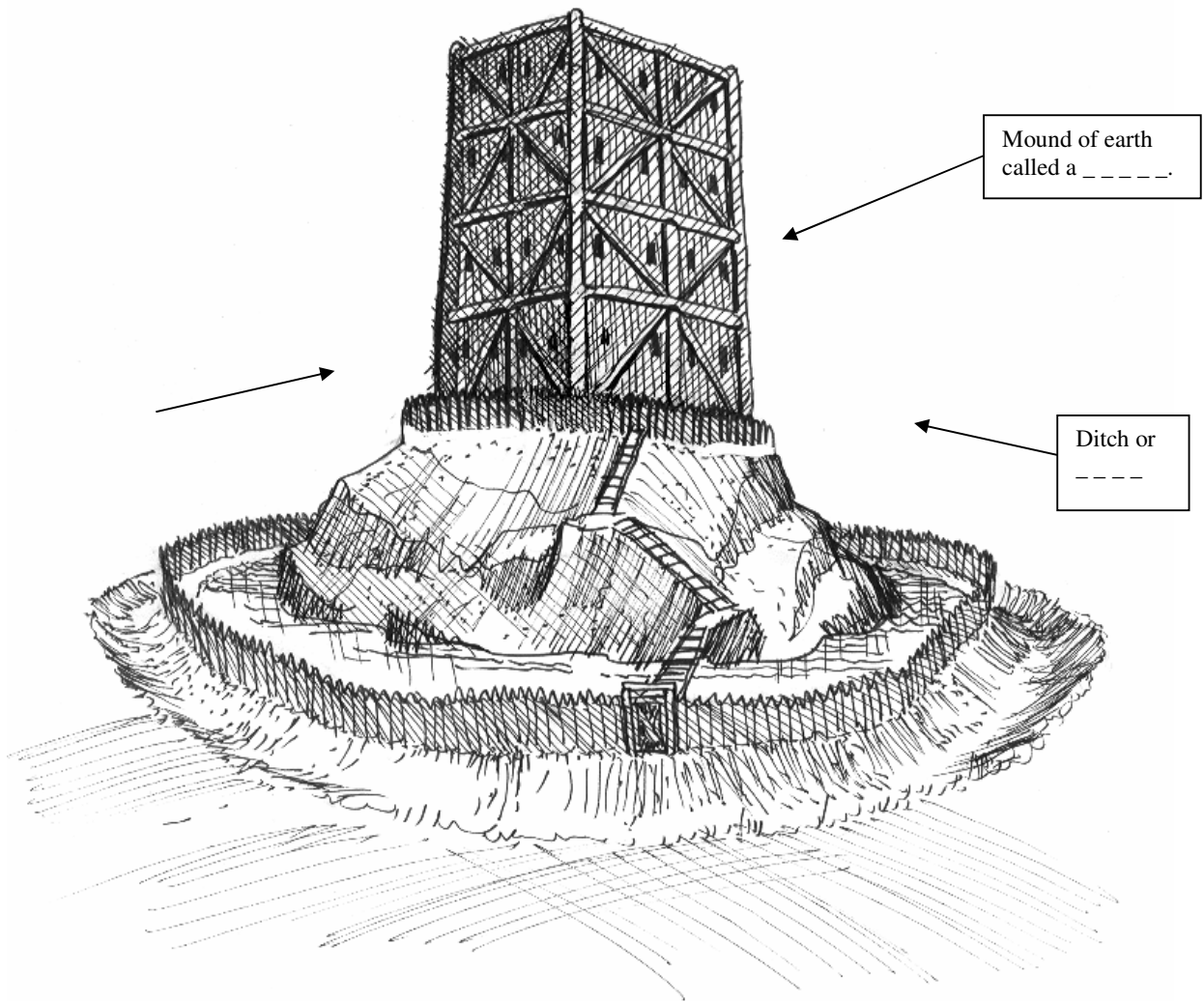
Earliest castles were made of wood. First a great mound of earth was made. This was called a **motte**. The castle was built on top of it. This tower-shaped building was called the **keep**. A ditch was dug around the base of the motte and filled with water. This made a **moat**, which was difficult for enemies to cross. A strong wooden fence called a **palisade** surrounded the moat. Another ditch was built outside the palisade.

Draw an enlargement of this picture, and from your reading, put the correct names on your drawing.

Castle made of

This tower-shaped
Building is called
a -----





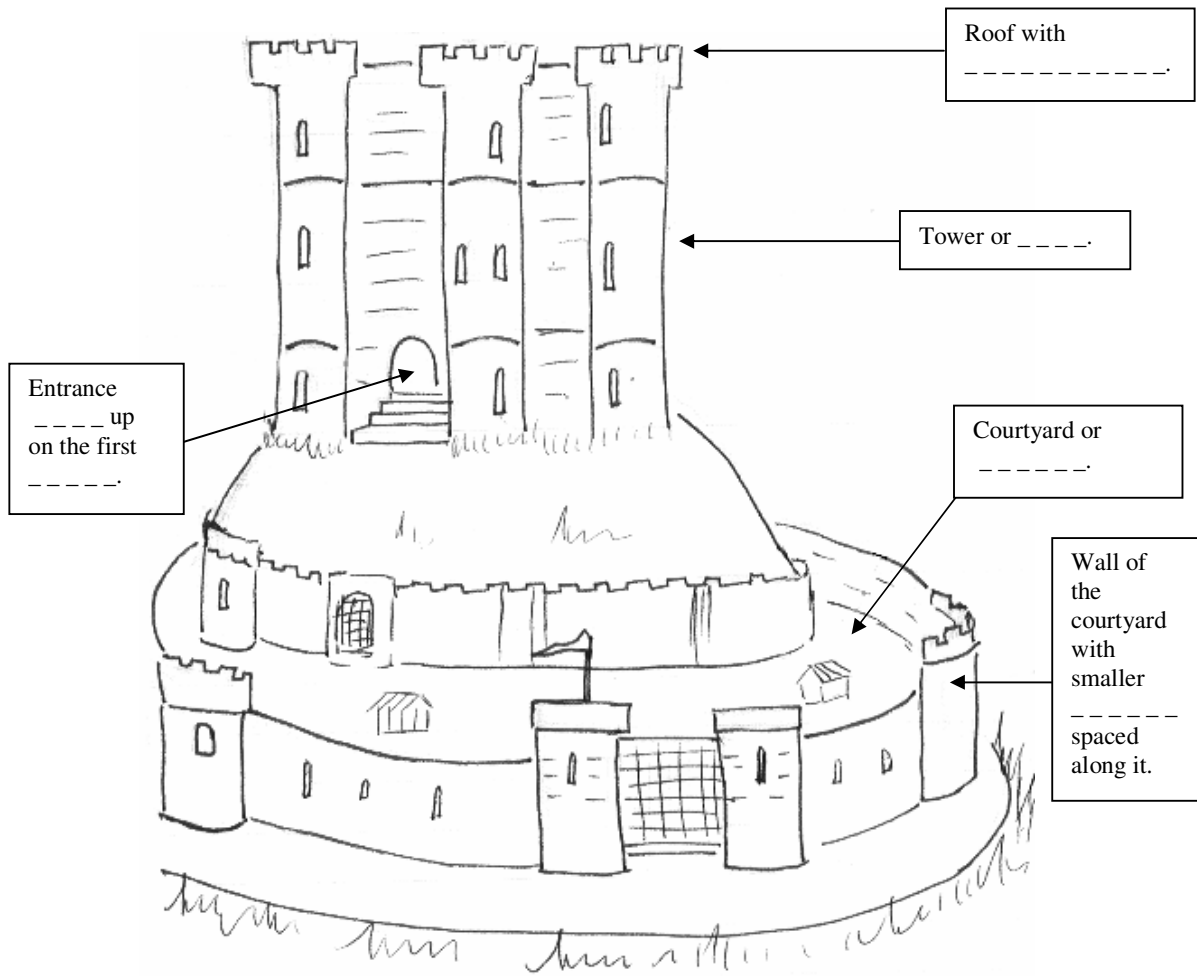
Stone Castles

Why did people start to build stone castles? One way that enemies could take a castle was to set fire to the gates.

The earliest stone castles were large towers with the entrance high up on the first floor. It was impossible for anyone to arrive unnoticed, because soldiers stood guard on the roof or **battlements** and could see anyone approaching for miles around.

The tower, or **keep** of the castle, was usually in a large **courtyard** called a **bailey**, and the wall of this courtyard had smaller towers spaced along it, each with more look-out places. The keep had walls up to twenty feet thick.. Windows had no glass, but could be covered by wooden shutters. The castle was very draughty, so tapestries were hung over cracks in the walls to keep out the cold.

Draw an enlargement of this picture and write the correct names on it. Some will be the same as your last picture. Some will be different.



The Courtyard or Bailey

Look at your picture of the stone castle. Find the courtyard. Try to guess what the courtyard was for. Can you see any buildings in the courtyard? What might they be? What could you do if you didn't want to stay inside the keep all the time?

You may have guessed that the buildings for the servants who lived and worked there. The bailey was surrounded by a stone wall. If the castle was attacked, everyone left the bailey and went into the keep for safety.

What did the servants do when the castle was under attack?

The Keep

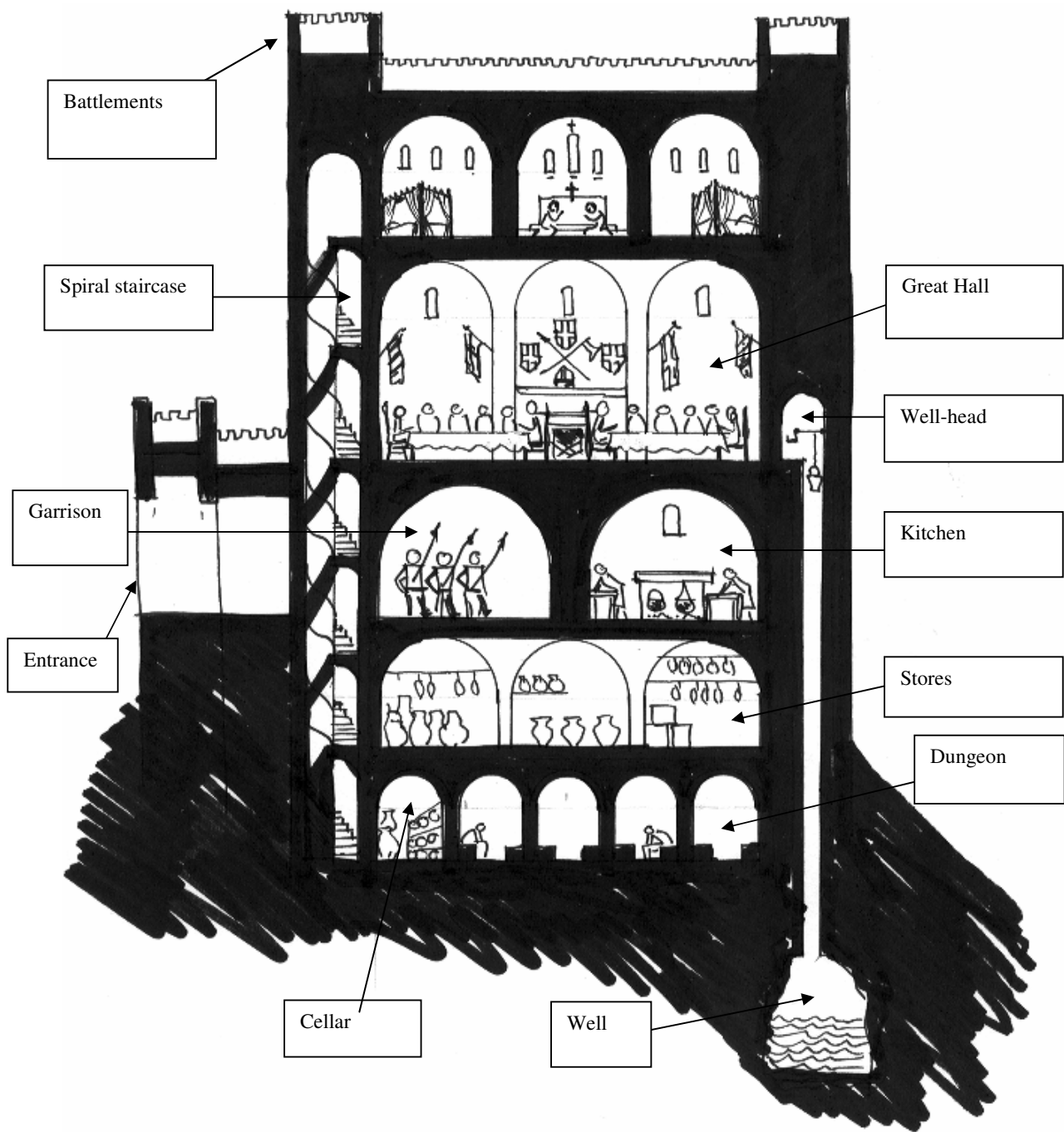
The **entrance** was either on the first floor or second floor. It was reached by a ladder, which could be pulled up in time of danger.

The **great hall** was the most important room in the castle. It was used for eating, sleeping and entertainment. It had little furniture. There were just long trestle tables, some benches and a few chests for clothes. The floor was made of planks covered with rushes for warmth. People slept on the floor. Often there were large pictures on the walls. The pictures were made out of wool and were called tapestries. There was a small room built into the wall where the gold and jewels were kept.

The **bedrooms** were on the floor above the great hall. These were the private bedrooms of the baron, or king, and his family. There was a sitting room on the same floor, with a large curtain separating it from the bedroom. There was also a sleeping chamber for knights and special guests.

The **kitchen** was below the great hall, or in a separate building in the courtyard.

The **dungeon** was where prisoners were sometimes kept.



Look at the picture of the keep and answer these questions:

1. Which room of the keep is below ground level?

2. Who might you find sitting in the dungeon?

3. What might you find in the cellar?

4. What room would you find at ground level?

5. What might you find in the store room?

6. On which floor is the entrance?

7. If you walked up the steps through the entrance, which room would you step into?

8. What is the garrison entrance?

9. Which room is next door to this room?

10. In some keeps there was no kitchen. Where would the food be cooked?

11. What was the most important room in the keep?

12. What did people do in the Great Hall?

13. What was the chapel? Where is it in the picture?

Make a large drawing of the Great Hall. **Read** the information about it, and **think** about these things:

1. What is on the floor?

2. What would you find on the walls?

3. Were there any special decorations, like flags or coats of arms?

4. What furniture might you find?

5. Did everyone in the castle have a bedroom?

6. Who might sleep on the floor in the Great Hall?

Other parts of the keep

Here are some parts of the keep that were not rooms. Try to guess the words to fill the gaps, by looking at the picture of the keep.

The **windows** were small and _____. They were like this so that it would be difficult for an enemy to shoot _____ into the keep. The windows had no _____ but could be covered with wooden _____.

The **walls** of the keep were very _____.

The **spiral staircase** joined the different _____. It had narrow _____ steps. It nearly always turned to the right. This made it difficult for an enemy who was trying to _____ the stairs to swing his sword in his

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right hand.

The well-head was in a corner of the Great Hall. It had a chain and _____
for drawing water.

The **battlements** helped protect soldiers who were trying to _____ the
castle against attack..

Where were castles built?

Castles were usually built on a spot that was difficult for enemies to reach. For example, on top of a steep cliff, a hill, or a point of land reaching into a body of water. In places that needed extra protection, a wide deep ditch, called a moat, was dug outside the castle walls. The moat was filled with water. The people of the castle crossed the moat on a **draw-bridge**, which could be raised or lowered quickly. For further protection, an iron grate, called a **portcullis**, was hung over the castle gateway and could be dropped to prevent outsiders entering.

What shape was the keep?

The first keeps were rectangular, but later, stone keeps were built. Round keeps were safer because there were no corners to be knocked off.

1. Why were castles built on a high spot?

2. Why did a castle need a moat?

3. Why was a drawbridge used to cross the moat, and not an ordinary bridge?

4. Why did they use a portcullis?

5. Why were round castles safer?

Draw the gateway of the castle with the portcullis.

How was a castle captured?

The safest way for the enemy to capture a castle was to put it to siege. That meant, to starve out its defenders. If a castle was prepared, however, with stores of food and drink, it was necessary for the attackers to get through the walls. To do this, they used **catapults**, which hurled stones and red hot irons. When a point in the castle wall was weakened, the attackers moved in closer under cover of their archers. They filled in the moat with rocks and earth, and laid tree trunks on top as a bridge. Then several men battered a strong wooden beam against the weakened spot. The beam was called a **battering ram** and was sometimes fitted with a metal tip.

Storming towers were built of wood and covered with wet animal hide. This was so they would not burn. The enemy rolled them up against the castle wall to get into the castle.

As a last resort, attackers might try to tunnel under a castle's wall. Meanwhile, the defenders were busy pouring down boiling water and burning pitch from the walls, raining down arrows and rocks, and trying to overturn the storming towers.

1. To put the castle under siege means to _____ out its defenders.
2. The enemy used catapults to hurl _____.
3. The attackers moved in closer once they had weakened the _____.
4. The attackers were protected by the _____.
5. Storming towers were made of _____.
6. They were rolled up against _____.
7. The defenders fought back with _____.

God's opinion of war

God promises that He will fight for His people in battle, and protect them when they are attacked by the enemy, but He does not expect Christians to **start** battles. Most wars are fought because of selfishness and greed. In the Middle Ages, wars were fought because kings wanted more land and more power.

We must remember that fighting against people is not part of God's plan, but fighting against the devil certainly is. As Christians, the battles we fight are against Satan. We can fight Satan by putting on the armour of God. We can speak the truth, be bold in

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standing up for Jesus, do what is right and good, and show love to everyone. Jesus says that we must even love our enemies! We must also remember to be humble and not proud, and to be satisfied with the things we have.

Christians should show the fruits of the spirit. The first three are love, joy and peace. People who start wars, like the wars of the Middle Ages, are disobeying God. Here are some of the *bad* fruits they show. Fill in the gaps:

Instead of being satisfied with what they have, they are _____.

Instead of showing love, they show _____.

Instead of making peace, they make _____.

Instead of being humble, they are _____.

A Feast at the castle

Write a story about the feast. Here are some questions to help you.

Why are we having the feast?

In which room is the feast?

How is the room decorated?

What are the tables like?

Where are the king and his family sitting?

What food are you eating?

Who brings the food?

Why are there no dishes to be washed?

What entertainment is there?

Words you might need:

*celebrate great hall tapestries shields delicious beef bear apples
honey*

servants bread poor music recorder lute singers

A knight and his horse
Fill the spaces with your own ideas.

Once upon a time there lived a knight called Sir He lived in about 1000 years ago.

Sir lived in the castle of King The knight's job was to the castle. Sir lived in the keep. At night he slept in the He slept on

When an enemy attacked the castle he would

If an enemy tried to come up the spiral staircase the knight would

In battle he wore
His horse wore

In times of peace the knight and his horse would practise for battle. They would have jousting competitions. The knight and his horse would.....

Lots of people watched. The people would

Knights were very brave. Christians must be brave too. We do not fight against people but we fight against who tries to make us do the wrong thing. A Christian must always be brave and what God wants us to do.

Upper Primary: God is Protector

Teacher's notes

Buildings around the world

Related sections from Themes for Christian Studies: Level 7, Protector - God is our shelter.

Preparation

You will need:

- toothpicks or straws and plasticine for building pyramids and bridges
- sand, for sand modelling
- cardboard, wood and recycled materials for construction
- pictures of famous buildings around the world
- books on buildings of the world

Vocabulary

domes arches vaults pyramids frames aqueducts suspension keystone refuge

Discussion

Why are building important?

Who designs them?

Which buildings are the tallest?

How are skyscrapers built?

Do you know the names of the seven wonders of the world?

Do you know any other famous buildings around the world?

Why do people build bridges?

What shapes do we see in buildings?

Which are the oldest buildings in the world?

Activities

Make a list of famous buildings of the world, and the country.

Mark their position on a world map.

Make a time-line showing the development of different types of shelter.

Make charts and drawings of different types of buildings around the world.

Research the history of shelter.

Compare different structures and decide what factors have influenced the type of building. Decide whether these factors are environmental, religious or cultural.

God is our Protector

God is our refuge and our strength, an ever-present help in trouble. Therefore we will not fear, though the earth give way and the mountains fall into the sea. (Psalm 46:1-2)
You have been a refuge...a shelter from the storm and a shade from the heat. (Isaiah 25:4)

A refuge is a place we can go when we are in trouble. Castles were a refuge in times of attacks. Forts and fortresses are another kind of refuge. A refuge is also a place we can go to shelter from the environment. Igloos are a refuge from the driving snow. So are houses.

When Christians are in trouble, they have a refuge. That is God our Heavenly Father. He is stronger and mightier than any fortress in the world. He can protect us from danger and from evil.

The bible tells us about many different people who found refuge in God. One was Daniel. He was in trouble.

Daniel lived in Jerusalem. One day, the king of Babylon, King Nebuchadnezzar, attacked Daniel's city and Daniel was taken prisoner, along with other men from Jerusalem. King Nebuchadnezzar wanted to train up the captives to serve him. He instructed them to eat rich food, which the king thought would make them strong. However, Daniel refused to eat the rich food and chose to eat only vegetables and to drink only water. Because Daniel continued to be so fit and healthy, the king allowed him to continue eating vegetables.

Years went by. Now Darius, king of the Medes, had captured Babylon. He needed someone to be chief ruler there. Seeing that Daniel was such a wise man, he chose Daniel. The other rulers were jealous. They plotted to get rid of Daniel. The rulers made a plan. They knew that Daniel prayed every day to God. They went to king Darius and tried to persuade him to make a new law.

What was the new law? (Daniel 6:7)

What would happen if anyone did not obey the law? _____

Did king Darius accept the idea? _____ (Daniel 6:9)

Why do you think he did? _____

What did Daniel do when he heard about the new law? (Daniel 6:10) _____

The rulers immediately rushed to the king and told him Daniel was still praying to his God. The king was devastated. Daniel was his favourite. He tried to find a way to save Daniel, but it was no use. Daniel had to be brought to the lion's den. What did the king say to Daniel as he was being thrown in the den? (Daniel 6:16)

A stone was rolled across the opening of the den. King Darius had to seal it with his own ring. Then everyone would know if the stone was removed. King Darius went back to his palace. He couldn't eat or sleep. At first light he hurried to the lion's den. What did the king find? (Daniel 6:19-21)

King Darius ordered that Daniel be taken out of the lion's den immediately, and that his accusers be thrown to the lions instead.

What new law did the king make this time? (Daniel 6:26)

God protected Daniel because he chose to make God his refuge. Find out about three friends of Daniel, who also made God their refuge in a time of trouble. Their names were Shadrach, Meshach and Abednego. (Daniel chapter 3)

History of shelter

The First Homes

Most people, who do not believe the bible, imagine that the first people were a kind of half man, half ape, living in caves and having little intelligence. However, Christians know that there were never such beings as ape-men, and that people were

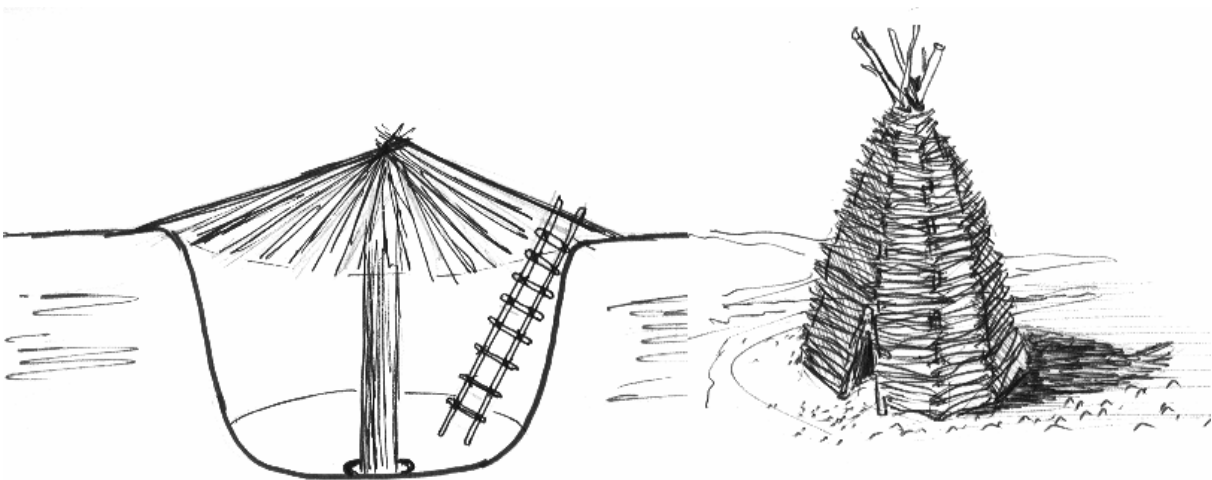
created with the same intelligence that people have today. We could therefore assume that Adam and Eve, and their children, were quite capable of building structures out of the materials they found around them. Noah, who lived on earth not too long after its creation, was capable of building a huge and wonderful boat, capable of staying afloat for 40 days. The people of Babel, who we read about in Genesis 11, were capable of building an enormous tower.

While it is true that some people did live in caves, (because we see their paintings on the walls), it is wrong to assume that the first people on earth lived in caves for thousands or even millions of years. This is an idea put forward by people who believe in evolution. Not everyone could live in caves, because you just don't find caves everywhere. Right from the creation, God gave humans the intelligence to build and create.

Archaeologists are people who look for things from the past. Some have found remains of early types of dwellings. They have found evidence that people in early times built pit dwellings. To make pit dwellings, holes were dug in the ground and covered with logs, placed horizontally over the hole. Then earth was heaped on top.

Remains of other types of dwellings have also been found. It seems that in early times, people used materials like wooden posts, reeds leaves, mud and animal skins. Many people say that the people who lived in early times were 'primitive'. This comes from the word 'primate' which means 'descending from our ape-ancestors'. Christians know that they did not exist, so we do not call the first dwellings 'primitive'.

Look at these drawings and describe the type of homes that early people may have lived in.



Desert homes

Desert homes must perform two functions. They shield the interior from intense daily heat, and must also store that heat for use during the cool nights. The best material for this is heavy clay or mud, moulded and baked into bricks. Mud bricks slowly absorb the sun's rays during the day, preventing the heat from penetrating the interior of the home. Then, during the cold night, the warm bricks radiate their stored heat and keep the interior warm. There is evidence that mud bricks were used in hot desert areas all around the world.

Another type of desert home is the tent. Tents were used by nomadic people. These are people who move around from place to place. A tent can be taken with you wherever you go. The desert tents, like those of the Arabs, usually have broad canopies over the doorways, to lessen the effects of the sun and wind. Tents were originally made from animal hides which were sewn together. Tents were used by many people around the world, including the American Indians.

1. Why are mud bricks such an effective form of shelter in desert regions?

2. Why were tents a suitable form of shelter for nomadic people?

3. Draw a tent belonging to an Arab from a nomadic tribe. Label your drawing to show the main parts of the tent and the materials used.

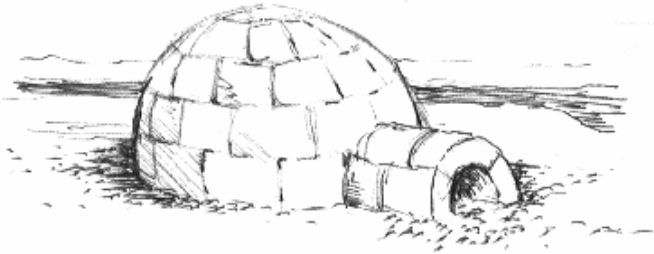
4. Compare a camping tent of today with traditional tents. What do they have in common?

Eskimo homes

Perhaps the most fascinating shelter ever developed by man is the Eskimo igloo. The arctic climate is harsher than any climate in the world. The only building material available to traditional Eskimos was the snow itself. The Eskimos, using a semi-circular snow knife, cut long flat blocks of snow and arranged them in an ascending spiral, that became smaller and smaller at the top, forming a dome. The igloo was built from the inside. Cutting blocks from around his feet, the Eskimo would lower the floor level as the dome rose above him. When the igloo was finished, more than half was below the surface. A small tunnel was connected to the igloo. This is where

the sled-dogs sheltered. A small hole was left at the top of the igloo to provide ventilation, and to allow smoke to escape.

The inside of the igloo was cosy, keeping out the outside cold and wind. Seal oil-lamps provided light and warmth. Blocks of ice were cut for furniture, and covered with animal skins. The temperature of the inside of the igloo could be 40 to 80 degrees higher than the temperature outside. The dome shape was excellent for the arctic conditions as the howling winds only swirled around the smooth shape and did no damage.



1. Draw a picture of an igloo. Include the details you have read about in the passage.
2. How did the Eskimo get the floor level to be lower than the ground outside?

3. What was the small tunnel for?

4. Why was there a small hole at the top?

5. What was the igloo like inside?

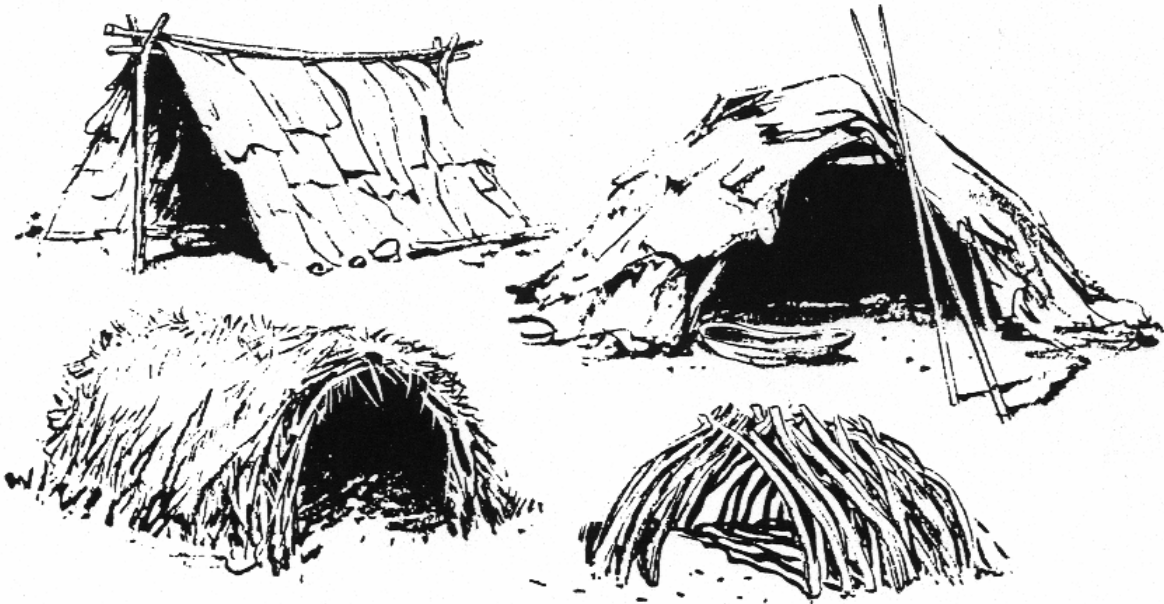
6. Why was the dome shape a good shape to use?

7. These days we wouldn't find many Eskimos living in igloos. What kind of home do you think they might live in today?

Early homes of Australian Aboriginal people

The Australian Aboriginal people moved around from place to place. They understood the land, and never mistreated it. They would never take all the food plants from one place, but left some so there were enough seeds to produce more plants. Their homes were easily built from the materials around them. When they moved on, they simply built new homes. Australian Aboriginal people now live in permanent homes made of modern building materials.

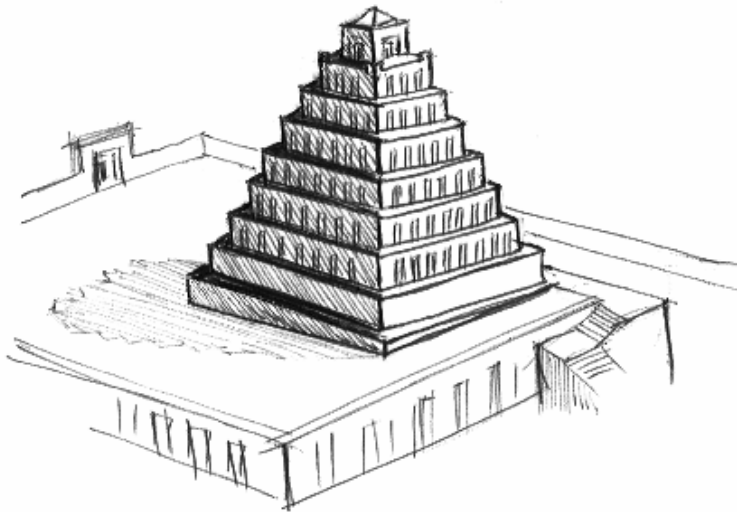
Have a look at these drawings and write a description of some of the types of early Aboriginal homes.



Famous buildings around the world

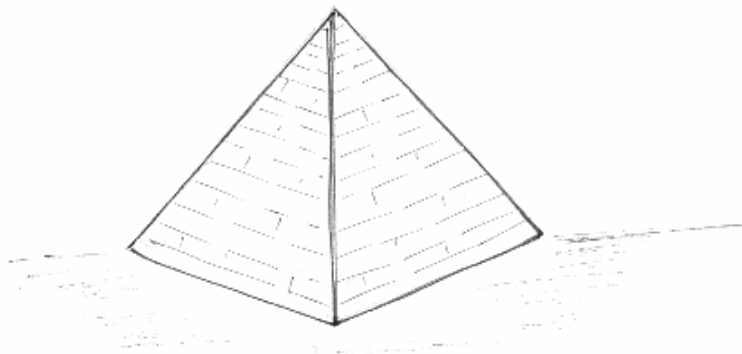
The Tower of Babel

You can read about this tower in Genesis 11. It was built by the descendants of Noah, who thought they were so great that they could reach heaven. God saw their proud hearts and put a stop to the building by confusing their languages. Because they suddenly spoke different languages they couldn't communicate with one another to finish the building project. It is believed that the tower was a 90 metre high stepped pyramid called a ziggurat.



The Pyramid of Giza

Like the people who built the tower of Babel, the Egyptians also wanted to build tall structures to get closer to heaven. The Egyptians worshiped false gods. They buried the pharaohs in the pyramids, along with their treasures, and food for their next life. Without steel or concrete, the only way of building high in ancient times was to pile stone blocks on top of one another. Slaves were used to haul the huge stone blocks. God's people, the Israelites were slaves to the Egyptian pharaoh at the time, but God chose Moses to set them free. The Great Pyramid of Giza was completed about 2550 BC and was 146 metres high.



The Colosseum

About 2,000 years ago, the city of Rome was at the heart of a vast empire. The Romans built huge arenas called amphitheatres. Men called gladiators fought each other or wild animals, while people watched. The Colosseum, in Rome, was the biggest amphitheatre they built. It had room for about 50,000 people. The Romans sometimes flooded the Colosseum and watched ships fighting each other in sea battles.

The Colosseum had three layers of arches and the arena was oval shaped. There were about 80 entrances, and tickets had the right entrance number stamped on them. Slaves and women sat on wooden benches at the back. The other seats were marble.

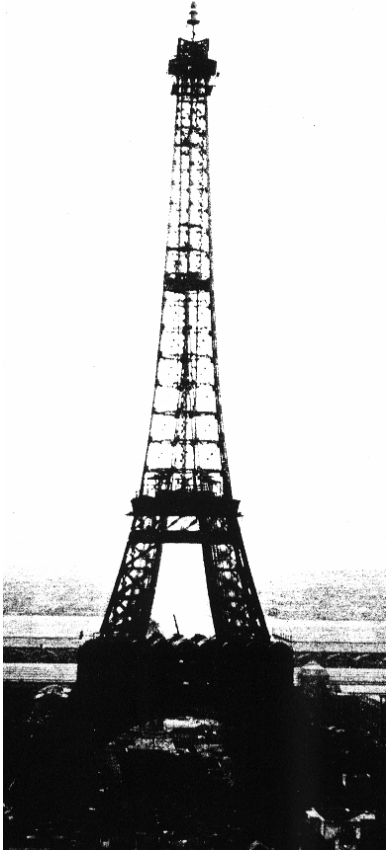
The leaning tower of Pisa

The 55 metre high leaning tower of Pisa in Italy was built between 1174 and 1350. Unfortunately it was built on soft ground without proper foundations. As a result, the soil has settled unevenly, making the tower lean about 5 metres towards the ground.



The Eiffel Tower

Alexandre Gustave Eiffel, a French engineer, was one of the first to realise the great possibilities that iron had in building. Using iron was the first step to building skyscrapers. Eiffel made the highest iron building ever, for the Paris exhibition in 1889. It was 300 metres tall.



Quick Quiz

1. Which famous building did not have proper foundations?

2. Why was the Eiffel tower built?

3. What did the building of the Eiffel tower prove?

4. Why was the Tower of Babel built?

5. Why did the Egyptians bury the pharaohs with treasures and food? Do you think they needed it?

6. What was the Colosseum used for and who built it?

Something to do

Find pictures of three of the famous buildings mentioned above and draw them. Find out the names of the most famous buildings on your country. Draw them.

Some important building structures

Engineers are people who work out the strength of a building. They must understand the strength of the materials and the forces that will make a building stay upright. Bridges, towers, domes, arches are some of the structures built by engineers.

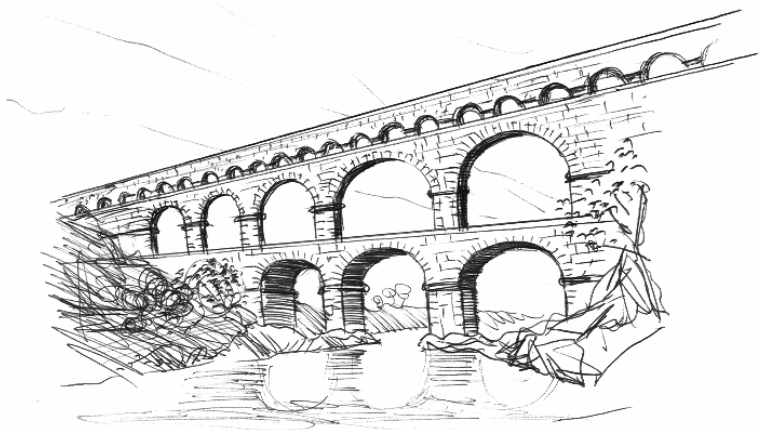
Arches

The Romans were the first to use the arch. They put an arch shaped wooden frame on top of two stone pillars. Stones were tightly packed together around the frame. Sometimes a wedge-shaped stone at the top held the other stones in place. This was called a **keystone**.

The arch is a very strong shape. Fold a card into an arch shape. Hold it in position with two drawing pins. The arch shape can support a heavier weight than a flat card placed on top of two boxes. Try it!

The Romans also used arches for strength in the building of aqueducts. An aqueduct is a canal built on top of a bridge made of arches. The string arches support the canal of water above.

Find pictures of buildings that have arches.



Bowstring bridges

Stone and brick are strong, but they are too heavy for a long bridge. A long bridge has to support its own weight as well as the loads that cross it, so lighter materials are needed. Engineers use steel girders, linked together in lattice patterns, to build long bridges that are strong and light.

Roof frames

Making a strong waterproof roof can be the most difficult part of building a house. Flat roofs often leak. A sloping roof works better because the water runs off, but the roof must be strong enough to support the weight and stand up to high winds.

Domes

It was the Romans who learned to make domes. They made a frame from wood and poured concrete over the wooden moulds. When the mixture dried, the framework was taken down.

The top of the dome was made of a slightly different mixture to make it lighter. At the top of the dome was a window called the **eye**.

Domes are very strong. Try making a dome with cane or vines. Make a ring for the base. Make hoops and tie them together where they meet at the top of the dome. An overturned basket is a good example of a dome.

Find a picture a famous building that has one or more domes.

Triangles

If we look around us, we will see that many structures are triangular in design. Unlike the square frame, the triangular frame is rigid. Experiment with straw and pins. Make a triangle and a square shape. The triangle will not change its shape.

Quick Quiz

1. Who invented the arch?

2. Why are arches useful?

3. Name a type of construction that uses arches.

4. Why are bowstring bridges useful?

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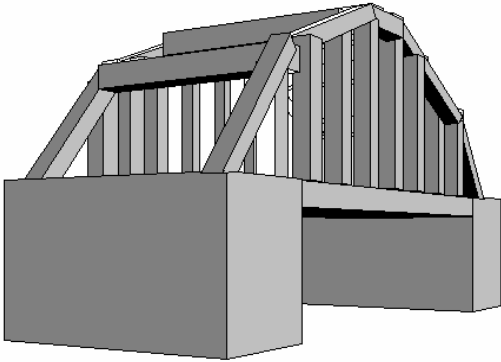
5. How did the Romans build domes?

6. Why is a sloping roof better than a flat one?

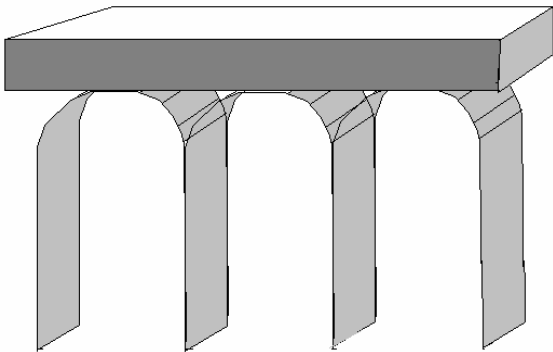
7. What is special about the triangle shape?

Some construction challenges

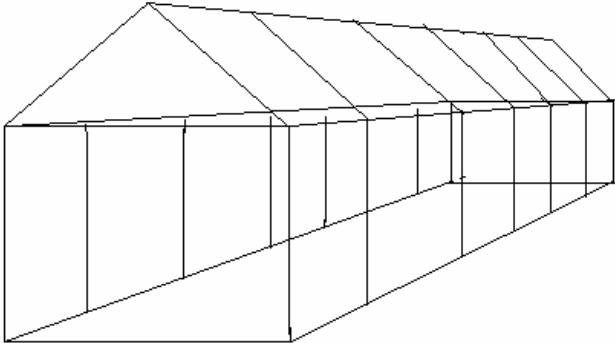
1. Make a bowstring bridge from plastic straws, house bricks and thin card, glue and sticky tape. For the piece which bends, join lengths of plastic straw.



2. Make an aqueduct out of cardboard strips. For the arches, you will need to score lines across the middle of the card.



3. Make a straw construction with a sloping roof. Use plastic straws, sticky tape or plasticine.



4. Use plastic straws or cardboard strips to make a construction made of triangles.

