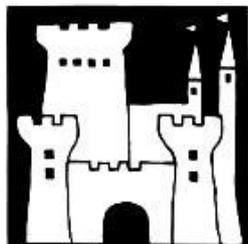


Science and Social Studies

Year 4 Term 4

Student Book

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God is our Protector – Taste and Smell

God has given us the senses of taste and smell for our protection.

Saved From the Sea

Biography

A true story told by Colin Marsland of South Australia

Schnapper fish live in the seas around Australia and New Zealand, and are excellent for eating. In December the Schnapper are plentiful. Each year Colin and his cousin would go on a camping trip with their boats, to catch fish.

They began fishing early in the morning. This day the waters were calm and clear, but by 9 am the wind began to get stronger and by 10 am they decided they should set out again for shore. By this time the wind was near gale force, so Colin reefed down his main sail and began running before the wind, heading for the shore. He had only been under way a few minutes when he heard the eerie hissing of a freak wave about to break over him.

In a moment the boat was filled with water and immediately went down by the stern. Colin was flung out of the boat. Filled with a dreadful fear, he screamed out to God, above the howling wind. Immediately, he was conscious of a wonderful peace of mind and the feeling of the power of God.

For two hours Colin clung to the boat, which was reasonably air-tight, kept afloat by an airlock in the bow. He had hoped that the wind and swell of the waves would carry the boat towards the shore. But he realized that an under-current was carrying him further out to the open sea. Finally, he decided to remove his clothes and try to swim to the shore, since by this time the boat was beginning to slowly sink.

Colin had never swum any distance and only considered himself a good 50-metre swimmer. He doubted if he could reach the shore under these extremely difficult circumstances. But he kept thinking of his wife and daughter and would not give up the fight. With an unusual feeling of great strength and power in his body he noted a land-mark on the shore and set out to swim towards it. The crest of each wave gave him a glimpse of the coast line gradually drawing nearer, and by the time he was half-way there he knew in his heart that he was going to reach the shore.

Suddenly his heart sank. Quite close by he noticed a dorsal fin. Sharks are always often seen in these waters at that time of year, because they love schnapper and often take them off a fishing line. He remembered the time a huge, hungry eighteen-footer attacked his boat. It reared itself out of the water and snapped at the side of the boat, only a metre from where he was standing. He could see straight into its great jaws with its rows of evil-looking teeth. It left its teeth marks on the water line of the boat, and one of its teeth was left embedded in the timber.

So you can imagine his relief when he realized that the dorsal fin belonged to a friendly dolphin. Colin was greatly comforted for some distance by three dolphins that swam with

him. He firmly believed that the dolphins helped to save his life. Sharks do not come near to where dolphins are. As he neared the coast, he could see the great waves breaking over the reefs in a long, white line. Colin knew he could be dashed to death on them; but eventually he found himself in calmer water beyond the reefs. Then, to his relief, a wave swept him up on to a patch of golden sand.

However, the same wave that brought him in also swept him out again. He had completely lost the use of his legs, so that each time a wave carried him up on shore, the powerful under-tow drew him back again into the water. Colin began to panic. Had he been saved from the reef only to be drowned in the shallow water? But in that moment of panic he received a clear thought from God. "Dig your elbows into the sand and this will hold you against the tremendous strength of the under-tow." As he obeyed that instruction, each wave carried him further up the beach, until he was out of the water. There he lay for a full hour in the baking sun. He was safe at last, three hours after leaving the boat.

After regaining some strength in his legs, he set out on a seven-mile trek along the beach to their camp, two and a half hours later. You can imagine the reaction of his cousin and our other fishermen friends when they saw him alive. They had kept been watching and searching the coast-line for Colin. They had given up hope of ever seeing him alive again.

They gave him clothing, food and hot drinks and took him home to his wife and daughter. After recovering from his ordeal Colin returned from the place where he had been swept ashore, because he could not understand how he had escaped being dashed to death on the reefs. Colin discovered that he had been guided through the narrow gap, only 7 metres wide, which was the only break in the reef on that particular part of the coast. He knew that God, who gave him the super-natural power in his body to swim to the shore, had also guided him to the one gap in the reef where he could swim through safely.

A week later, after recovering the use of his legs, the local fishermen asked Colin if he knew where his boat had sunk. It had not been washed ashore, and there was no sign of any wreckage along the shore, so it was assumed it was still out there where it had sunk.

A few days later, thirty fishermen in twenty-two boats formed a line, each towing small grappling hooks and schnapper lines in the area where Colin was clinging to his boat. The boats moved forward together dragging the lines in the hope of striking the boat. On the very first run a schnapper line hooked the boat! Excitedly, the men worked together to raise the boat to the surface. Imagine our surprise when they found that the schnapper hook had caught in a small ring on the very tip of the mast! How amazed they were at this further miracle of God. There was no damage to the hull at all, except that a little paint had scraped off.

Up to the time of Colin's ordeal, he was not concerned about God. He knew God was "out there somewhere", but did not know Him personally. Yet God cared for Colin and heard his desperate cry for help. That adventure changed his life. Colin decided that if God cared enough for him, to not only save his life and his boat, but enough to send His Son, Jesus, to save us for eternity, then he wanted to love and serve Him for the rest of his days.

Activities – Saved from the sea

PART A

1. When was the schnapper season?
2. Who was fishing with Colin?
3. What did Colin do when his boat went down?
4. How was he kept afloat?
5. Why did he decide to swim for the shore?
6. Why was the presence of dolphins a good sign?
7. Explain several ways in which God showed his care and protection.
8. How did this adventure change Colin's life?

PART B - God is protector

Read:

God knows everyone in the world by name. He even loves those who do not love Him. He wants everyone to come to know Him. Sometimes God does special miracles for people who do not know Him. The way in which God protected this fisherman was a miracle. It made him understand that God is real, and cares for each one of us.

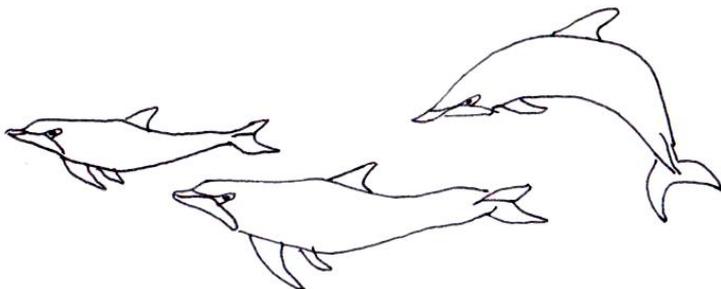
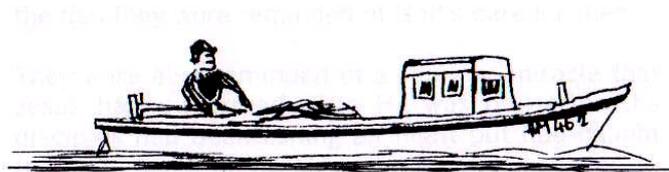
Copy and fill in the missing words:

How do I know that God loves and cares for me?

The _____ tells me that He does.

When I make Jesus my _____ I can feel His love.

Missing words: friend Bible



Five senses: taste and smell 1

Taste and smell facts

| |
|--------------------|
| Student activities |
|--------------------|

Name two of your favourite tastes.

Name two of your favourite smells.

This is how does our body give us a sense of taste or smell.

The nose contains millions of little cells called *receptors*. A receptor is part of a *nerve*. Nerves are like very thin threads that carry messages to the brain.

The receptors in the nose are found in the tiny hairs inside the nose. They recognize particles in the air and tell the brain about it. That is when we smell something.

There are sweet smells, delicious smells and bad smells.

What smells sweet?

What smells delicious?

What smells bad?

Sometimes smells can tell us that there is something wrong. Perhaps the food smells “off”. Then we know not to eat it. Perhaps there is a smell of gas. It may be a leak of poisonous gas. Our nose tells us to get out of the room or else the gas will make us sick. This is the protection God has given us through our nose.

How does our sense of smell protect us?

How does our sense of taste protect us?

Smell Poem

I hate the smell of rubbish dumps

Where rotten rubbish sits in clumps

Where piles and piles of garbage lie,

While round them buzz those smelly flies.

I'd rather be in my backyard,

Where pretty smelling flowers are,

Where grass as soft as carpet lies,

While high above sail butterflies.

Written by Mark Gliori

Five senses: taste and smell 2

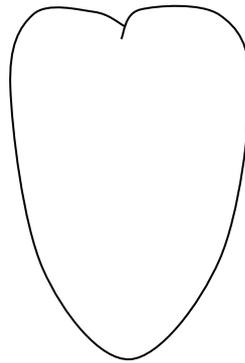
Taste buds

There are four kinds of tastes: sweet, sour, bitter, salty.

Taste is when you can tell the flavor of food and how nice the food tastes. Taste gives you signals of dangerous gases and toxic food. All over your tongue, there are little bumps called taste buds. There are four different types of **taste buds**: sweet, sour, bitter, salty.

You can taste:

sweet things in the front of your tongue
sour things at both sides of your tongue
bitter things at the back of your tongue
salty things all over your tongue



Name a food that tastes sweet.

Name a food that tastes sour.

Name a food that tastes bitter.

Name a food that tastes salty.

Label the parts of the tongue.

Draw the tongue and draw arrows to the different parts. Also write the different kinds of taste.

tip: sweet

sides: sour

back: bitter

What part of the tongue allows us to taste salty foods?

Five senses: taste and smell 3

Getting used to different tastes and smells

Did you know that taste buds and smell receptors have the ability to *adapt*. 'Adapt' means 'to get used to something'. This means that when you first taste something new, the taste or smell may be very strong. But the more you taste that food, it becomes not so strong. This is very important to remember when trying new foods. At first you may think. "Oh no, I could never eat that!" But keep trying it, and before long your taste buds will adapt.

Indian food is very spicy. Even young Indian children eat very spicy food. If you tasted it for the first time, you would probably think this food is far too spicy for you. This is not because Indian children have different taste buds to everyone else. It is because they have adapted, or got used to spicy food.

Sadly, there are some children who think they cannot accept the taste of fruits and vegetables. This is because they have been allowed to eat mostly junk food. Can you imagine that! Some children have never even tried vegetables. If they were to try them, at first their taste buds would tell them that these foods are far too strong.

1. Where are your taste buds?
2. How would hot curry taste if you had never tasted it before?
3. How could you help a child who does not eat fruits and vegetables? What would you say to them?
4. Name a new healthy food that you would like to try.

Five senses: taste and smell 4

Taste and smell work together

Our sense of taste and sense of smell are very similar. In fact, they work together. The receptors we use for tasting are found mostly on the tongue, and some in the roof of the mouth. Taste buds are connected to nerves that send messages to the brain. When the brain receives the message, we "taste" something.

Our sense of taste protects us from eating food that has gone "off". Our taste buds can also protect us from eating things that are poisonous. If something tastes unusual then we shouldn't eat it.

1. Why is it important to be able to smell?
2. Why is it important to be able to taste?
3. What happens to your sense of taste when you hold your nose?
4. What happens to your sense of taste when your nose is blocked from a cold?
5. Which foods smell delicious to you?

Taste and smell 5

Copy the sentences and add the word at the end.

1. In the kitchen I smell _____.
2. In the garden I smell _____.
3. Near a fire I smell _____.
4. On my mum I smell _____.
5. In the bin I smell _____.



Use these words:
perfume smoke food
garbage flowers

Draw and write a sentence to describe each of these noses:



shark



pig



dog



elephant



person



rat

God is Truth – Geology (Rocks)

Learning about geology reminds us that the Bible is the only truth, and is like a solid rock.

Mary Jones and her Bible

Biography

Mary Jones was a girl who lived in Wales more than 200 years ago. If you look at a map of Great Britain you will find Wales next to England. In those days the people of Wales didn't speak English. They only spoke their own language, Welsh.

Mary started school when she was nine years old and soon became a very good reader. At school there was a big Bible written in Welsh. One day she was asked by the teacher to read aloud from the Bible. Mary was excited. She loved the Bible stories and was now able to read them for herself.

She told her parents about her opportunity to read the Bible at school, but at the same time felt sad that there was no Bible at home. Her family was poor and could not afford to buy a Bible.

Mary decided that she would save up to buy one, no matter how long it took. Mary worked hard. She collected fire-wood and helped her neighbours with cleaning and baby-sitting. Every job earned her a few pennies. Finally, after six years she had enough money.

Mary was fifteen now. She knew of a man who sold Bibles in a village 40 kilometres away. Mary decided to go to see this man.

"How will you get there?" asked her parents.

"I'll walk," said Mary. "I know I can walk that far."

"We will pray that God will keep you safe," said her parents.

Mary had only one pair of shoes. She knew that she couldn't afford them to wear out, so she decided to walk barefoot. It was rough and stony. Mary's feet became sore but she pressed on. Finally she arrived at the village.

"Can you direct me to the house of Mr. Charles?" she asked a friendly minister. The minister took her to the home of Mr. Charles.

"I'm so sorry, Mary," said Mr. Charles, "but I only have one Bible left and I have already promised that to a friend."

Mary started to cry. Mr. Charles felt sad too.

"Mary," he said, "I will let you have the Bible. My friend can have an English Bible while I am waiting to get some more."

Mary's tearful face quickly changed to a happy one.

The next day she started the long journey home with her Bible under her arm. After some days she arrived home. How happy her parents were to see her. God had protected Mary and helped her to get the Bible. Now they too could read the Bible.

Meanwhile Mr. Charles thought of Mary's eagerness to own a Bible.

"I'm sure there are others who would like to have their own Bibles as well," he thought. Mr. Charles went to London, and with a friend started working to produce Bibles for the many people who needed them. This involved translating and printing. It was his aim that one day there would be enough Bibles for the whole world. The work started by Mr. Charles in 1804 later became known as the British and Foreign Bible Society.

Activities – Mary Jones and her Bible

PART A

1. What language did Mary speak?
2. Where is Wales?
3. How did Mary save enough money for a Bible?
4. How far did she have to walk to get the Bible?
5. Why did she walk barefoot?
6. Why was she disappointed when she got to the village?
7. What did Mr. Charles do for Mary?
8. What work did Mr. Charles start in 1804?

PART B - God is Truth

Read

When we know the truth, then we must not turn away from it, even when things get difficult. God shows us His truth in His word, the Bible. Having the word of God in our hearts helps us to stay with the truth.

Look up the Bible verses and write sentences to explain how God's word can help us when we are:

angry.....James 1:19-20

sad.....2 Corinthians 1:3-5

afraid.....Psalm 27:1

Rocks 1

What are rocks made of?

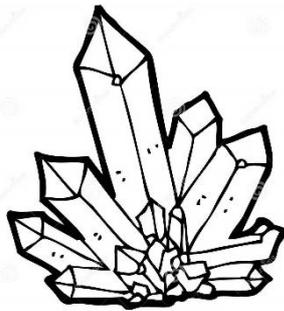
Student Activities

Rocks are made up of different minerals. Minerals are part of God's creation. They are found in the ground. You will know some of them: silver, gold, iron, aluminium and silicon. Silicon is the mineral that sand is made from.

Some rocks are made from crystals. Crystals form when the mineral particles are arranged in repeated patterns. The particles can be coloured. Gemstones are made of coloured crystals. These are very valuable.

To see them sparkle and shine they have to be cut and polished. Here are some examples of gemstones. You may have even seen one in someone's jewellery... diamonds (clear), rubies (red), sapphires (blue), emeralds (green).

1. What are rocks made from?
2. Draw a crystal.
3. Draw some gemstones, label and colour them the right colour.



crystals

Rocks 2

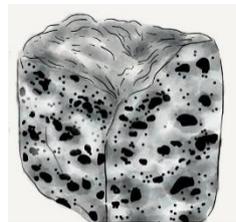
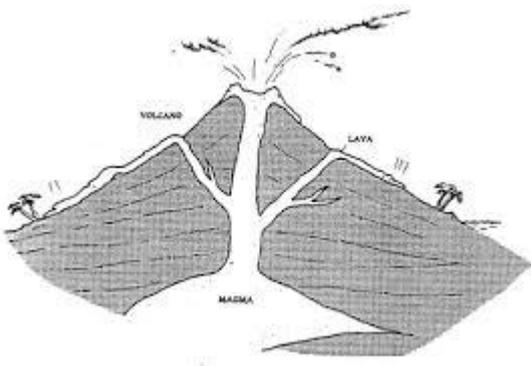
Types of rocks: Igneous

There are three types of rocks: Igneous, Metamorphic and Sedimentary.

Igneous Rocks

This type of rock is formed from the lava of a volcano. Deep inside the earth, rocks are melted and become magma. When magma comes out of a volcano it is called lava. When the lava cools down, it forms igneous rock. If the lava cools quickly, the rocks will look smooth and shiny. But if the lava cools slowly, the rocks will have plenty of texture, gas bubbles, tiny holes and spaces. These rocks are hard.

Examples: granite, basalt



1. How are igneous rocks formed?
2. Why are there often holes in igneous rocks?

Rocks 3

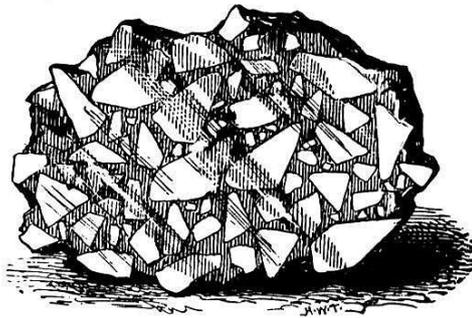
Types of rocks: Metamorphic

There are three types of rocks: Igneous, Metamorphic and Sedimentary

Metamorphic Rocks

These rocks form beneath the surface of the earth. They form from intense heat and pressure. They have ribbon-like layers. Some of them have shiny crystals on their surface. They have been changed by the heat and pressure, sometimes splitting into many layers that look like a stack of pancakes with different mineral grains running through the rock. These rocks are hard.

Examples: quartz, marble



1. What are quartz and marble made from?
2. How are metamorphic rocks formed?
3. Find out how marble is used.

Rocks 4

Types of rocks: Sedimentary

There are three types of rocks: Igneous, Metamorphic and Sedimentary

Sedimentary Rocks

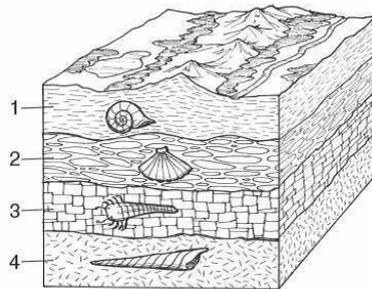
These rocks form beneath the surface of the earth. They form from the intense heat and pressure. They have ribbon-like layers. Some of them have shiny crystals on their surface. They have been changed by the heat and pressure, sometimes splitting into many layers that look like a stack of pancakes with different mineral grains running through the rock. These rocks are hard. Fossils are often found in sedimentary rocks.

Examples:

Sandstone (a rock made of sand cemented together)

Shale (compressed hard mud)

Limestone (made from layers of sediment which is soft when in water but becomes hard when out of water)



1. How are sedimentary rocks formed?
2. What do sedimentary rocks look like?

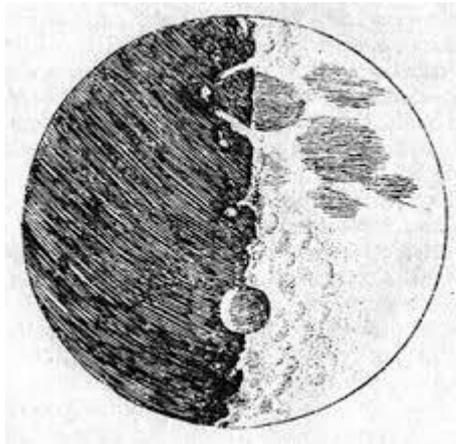
Rocks 5

Meteorites

Meteorites are chunks of rock that fly onto the earth from space. Most meteorites are burned up by our atmosphere, but some still make it through as small rocks.

Craters on the moon

If you look at the moon you will see darker areas. Those are actually huge craters from the impact of meteors. The moon does not have an atmosphere to protect it like the earth does. Large meteors can do a lot of damaged because of the fast speed at which they travel through space.



1. How were the craters on the moon made?
2. Why doesn't the earth get hit by large meteors?

Rocks 6

The age of rocks

It is not always possible to tell how old rocks are because no one was there to see certain rocks formed.

When there is a volcanic eruption, rocks called “igneous rocks” will form from the lava when it cools. If we see a volcanic eruption, we can go and look at the rocks formed around the volcano when they cool. We know how old these rocks are because we have just seen the volcano erupt. But that doesn’t mean we know the age of every rock in the world.

Many scientists think that rock layers took millions of years to be laid down. But because the scientists were not there to see the formation of the layers they can only guess.

We know from the Bible that many layers of mud were laid down very quickly during the Great Flood. Many sedimentary rocks were formed at this time, about 4,000 years ago. Sedimentary rocks are rocks that have formed through layers of mud or dirt. Many of these rock layers contain fossils because during the Great Flood many animals died and were buried quickly in the mud layers. These rocks did not take millions of years to form. So when you hear someone say that a rock is millions of years old, remember that this cannot be proven. According to the Bible the earth is thousands of years old, not millions.

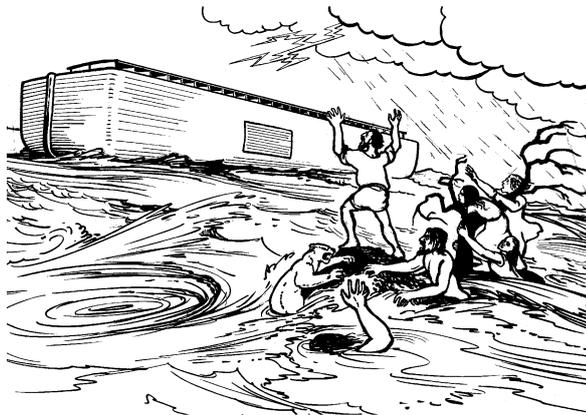
1. When did most fossils form?
2. What do we find them in?

Rocks 7

Sediment becomes hard rock

The earth's crust moved a lot during the Great Flood. Volcanoes were exploding. Fountains of water were gushing out of the earth. Rocks bumped into each other and broke into smaller pieces. All this made a lot of muddy water. The mud was carried along quickly by strong Flood currents and settled as sediment when the Flood waters slowed down. The sediments settled in layers.

Sediments become hard rock when they are squeezed together by pressure. During the Flood, the weight of each new layer of sediment increased the pressure and squeezed the sediments together. They were cemented together by silica and limestone which dissolved in the water during the Great Flood.



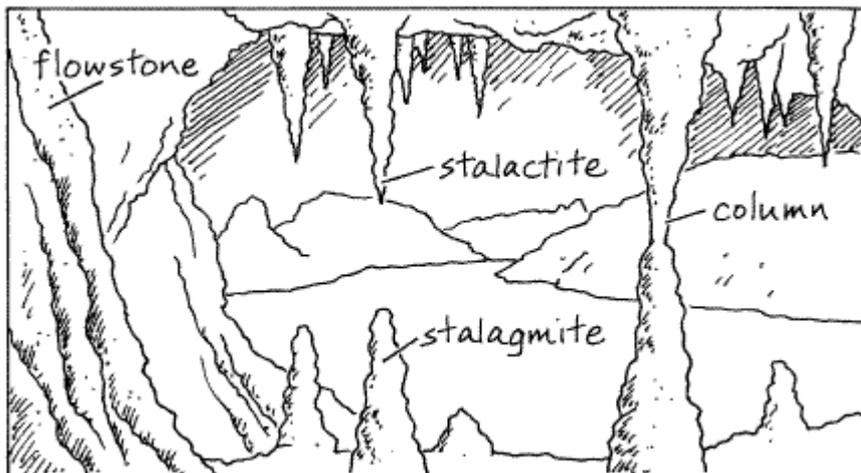
1. What is the "earth's crust"?
2. What happened to the mud and rocks during the Great Flood?
3. Which two minerals can act as cement?

Rocks 8

Limestone Caves

Limestone caves are found in limestone rock. Many of these caves have large rooms are exciting places to explore. Rivers and streams sometimes run through passage ways. Stalactites hang from the ceiling. (They hold 'tight' to the ceiling.) Stalagmites rise up from the cave floor. They are formed by dripping water that is loaded with dissolved limestone. The limestone hardens and forms beautiful and colourful shapes. Chalk is made from limestone.

1. Draw a picture of a limestone cave and label the stalactites and stalagmites. Use colours: yellow, orange, brown, white and grey.
2. Look at the picture below. What do we call it when a stalactite and stalagmite join?
3. Write three facts about limestone.



God is Lord and King - Christmas

Thinking Skills Lord & King Yr 4

| | |
|---|---|
| <p style="text-align: center;">Christmas 1</p> <p>Name 10 things that a Christmas wreath and a key have in common.</p> | <p style="text-align: center;">Christmas 2</p> <p>Old Testament prophecies told that a special star would appear when the King was born.</p> <p>List 5 reasons why God would use a star in this great event.</p> |
| <p style="text-align: center;">Christmas 3</p> <p>You and your family are stranded on an isolated island.</p> <p>List 5 ways you can celebrate Christmas.</p> | <p style="text-align: center;">Christmas 4</p> <p>Construct a new Christmas decoration.</p> |
| <p style="text-align: center;">Christmas 5</p> <p>Design a Christmas gift you could make for someone using:</p> <ul style="list-style-type: none">a socka piece of fabricsome string | <p style="text-align: center;">Christmas 6</p> <p>List 10 ways of helping people at Christmas.</p> |

A Saviour is Born: Nativity Play

Scene is dark. Narrator begins speaking.

Narrator: It came to pass in those days, that a message went out from Caesar Augustus, that the whole country had to pay a tax. Joseph, was engaged to Mary, who was pregnant with a child from the Holy Spirit. Together they made the journey to Bethlehem to pay the tax. On the night they arrived, the baby was due to be born. They could not find a place to stay, so they had to spend the night in a stable at the back of an inn.

Scene 1

Baby Jesus is placed in the manger.

Narrator: Mary gave birth to a son, and wrapped him in cloths that she had brought with her, and laid him in a manger, an animal feeding box, filled with straw.

Song: silent night (first verse)

Enter sheep and shepherds.

Sheep: baaaaaa, baaaaaaa.

Shepherd 1: It feels like there is something special going on tonight.

Shepherd 2: I agree. like there is something special in the air.

Sheep: baaaa, baaaaa.

Narrator: In the area there were some shepherds in the fields, keeping watch over their flock by night.

Single angel appears in the field.

Narrator: Then the Angel of the Lord came upon them, and the glory of the Lord shone round about them: and they were afraid. The angel said unto them:

Angel: Fear not: for I bring you good news of great joy, which shall be to all people. for to you, this day in the city of David, a Savior has been born. He is Christ the Lord. and this shall be a sign; you shall find the baby wrapped in cloths, lying in a manger.

The multitude of heavenly hosts appears!

Narrator: Suddenly there was a whole host of angels praising God, and saying,

Heavenly hosts: “Glory to god in the highest, and on earth peace, good will toward men.”

Song: Angels we have heard on high (chorus)

Angels leave the scene. shepherds stay.

Narrator: And it came to pass, when the angels had gone back to heaven, the shepherds said one to another:

Shepherd 1: Let us now go to Bethlehem, and see the baby.

Shepherd 2: Yes. what a wonderful night it has been. Let’s hurry!

The shepherds walk around for a moment, then, baby Jesus is the center of attention. The shepherds stand by the baby.

Narrator: So they hurried to the town, and found Mary, and Joseph, and the baby lying in a manger. And so the prophecy was fulfilled. “For unto us a child is born, unto us a son is given, and his name shall be called wonderful, counsellor, the mighty God, the everlasting Father, the prince of peace.

Song: Silent night.

Scene 2

Make a sign and bring on stage: 'one year later'

Wise men with Herod

Narrator: Now when Jesus was born in Bethlehem, in the days of king Herod, there were some wise men from the east, travelling to Jerusalem. They went to king Herod and said:

Wise man 1: Where is the baby that is born king of the Jews?

Wise man 2: For we have seen his star in the east, and we have come to worship him.

Narrator: Herod sent them to Bethlehem, and said, “Go and search for the young child, and when you find him, come back and tell me where he is, so that I may come and worship him too.”

Wise man 3: Let’s go and find the baby king. We will bring him these valuable gifts to show our respect and love.

The wise men walk around the scene for a minute then, come to the house where the 1-year-old Jesus is living with Mary and Joseph in a house.

Wise man 1: The star has led us to him. now, let us go inside so we can worship him.

Narrator: When they were in the house, they saw the young child with Mary his mother, and fell down, and worshiped him, and when they presented him gifts of gold, and frankincense, and myrrh.

The wise men leave so only the baby Jesus, Mary, and Joseph are left on stage.

Narrator: More than 2,000 years ago, God sent Jesus Christ to be our Savior. Jesus Christ was born to save us from our sins, born so we can be born again and return to live with God someday. Let us rejoice greatly this Christmas season, for unto all of us a savior is born!

the end.