

GOD IS

A SERVANT

**Transport, tools &
machines**

Year 6

Term 2

Thinking Skills Servant Yr 6

<p>Tools, machines and technology 1</p> <p>Invent a “supertool” that can fix all household problems.</p>	<p>Tools, machines and technology 2</p> <p>List 10 ways that technology and machines can serve by helping to spread the Gospel.</p>
<p>Tools, machines and technology 3</p> <p>What will a computer look like 100 years from now?</p> <p>Draw it.</p>	<p>Tools, machines and technology 4</p> <p>Place the letters A-Z down the side of a page.</p> <p>For each letter name a tool or machine that assists us.</p>
<p>Tools, machines and technology 5</p> <p>Draw a screw driver. Now redesign it using the following steps:</p> <p>B –igger I –nstead of N –onsense G –et rid of O –ther uses</p>	<p>Tools, machines and technology 6</p> <p>What if all tools were banned. Write down 10 possible consequences.</p>

Thinking Skills Servant Yr 6

<p>Tools, machines and technology 7</p> <p>Brainstorm 10 ways we can use machines to help people.</p>	<p>Tools, machines and technology 8</p> <p>Write down 4 disadvantages of computers. Now work out an improvement for each of these.</p>
<p>Tools, machines and technology 9</p> <p>Create a new machine using: pliers and a lawn mower</p>	<p>Tools, machines and technology 10</p> <p>All machines in the world have suddenly broken down.</p> <p>Give 3 interesting explanations.</p>
<p>Tools, machines and technology 11</p> <p>Design a power tool that can work in an alternative way in the case of power failure.</p>	<p>Tools, machines and technology 12</p> <p>Design a clean, efficient and economical means of transport for the future.</p>

William Booth

Biography

Before Jesus came, people lived in 'darkness'. This did not mean that it was dark all the time. It meant that people were suffering from sadness and guilt. They felt guilty for their sin. They felt distant from God because of the original separation that took place in the Garden of Eden.

However the prophets promised that a 'light' was coming. The light was a symbol of hope. The light was to be Jesus. Just as a light lights up the darkness, Jesus would bring hope to a world of sorrow. There would now be a chance for people to be free from guilt. Jesus could forgive them.

When Jesus grew up and started His work, He announced to everyone that He was the light promised from long ago. Jesus said, "I am the light of the world".

Jesus told all those who followed Him that they too could be lights. A Christian can be a light by bringing the Good News to others. Those who do this are called missionaries.

In England in the 19th century lived a man who felt God calling him to bring light to people in darkness. His name was William Booth. In 1855, after marrying his wife Catherine, he decided to become a church minister. However, he soon felt dissatisfied with preaching to the well-dressed people in churches. His heart went out to the poor people on the streets of London. These were the people who really needed to hear God's word. Perhaps they felt too ashamed to enter the beautiful church buildings.

William decided to erect a tent and hold a meeting for them. Many came to see what it was all about. Some were drunk and the meetings were often noisy. William also preached on the streets outside the pubs. Many would leave the pubs to listen to him. In days when there was no TV or radio, many people would come out to hear street preaching. However, some did not like the preaching. They did not want to receive God's forgiveness. They laughed and threw things at William.

William cared particularly for the poor. He knew that he must do more than just tell them the Good News. He must show them God's care by helping them in a practical way. In those days there were many poor people in England. Most people received a very low wage and often one family had to sleep in one room. Many could not afford beds, nor adequate food or clothing. Many were so depressed about their poverty that they turned to drink. Drinking was a huge problem, even for children.

William decided to set up a 'soup kitchen'. He collected unwanted vegetables from the market, and unwanted bones from the butcher. With these ingredients, he and his wife made soup and served it to the hungry. Soon William had many helpers. Together they decided that they were like an army. They were soldiers for God, fighting against a world of poverty and suffering. They became known as the 'Salvation Army' because they preached the Good News...that Jesus came

to save people from sadness and guilt. They told people how they could receive God's forgiveness and begin a new life as a follower of Jesus.

Activities

1. Make a list of ways in which we can receive news today.
2. How do you think news would have been spread in Bible times?
3. How did people receive news in the 19th century?
4. How did William proclaim the Good News of Jesus?
5. How did he show the love of Jesus?
6. What is the Good News?
7. Who is the **light to the world**, promised in the Old Testament? (Read Isaiah 42:6-7 and Isaiah 60:1).
8. Read Matthew 5:13-14. How can Christians be lights to the world?
9. Find out what the Bible says about 'feet' which carry the Good News. (Romans 10:14 and Ephesians 6:15).
10. Draw a set of foot-prints and write one of these Bible verses inside the foot-prints. You will need one foot-print for each word.

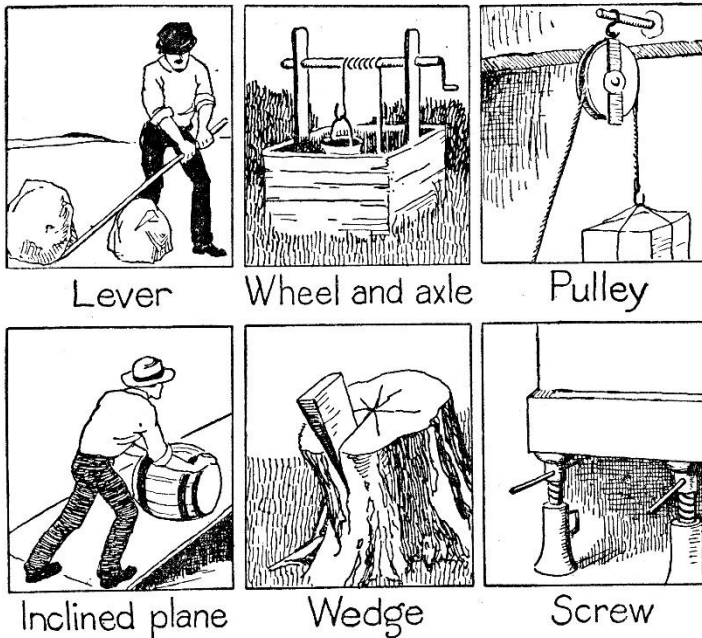
Simple machines 1

The six simple machines

Student activities

Simple machines can be used to make work easier. They can change the direction of movement and can lessen the amount of work needed for moving things.

Although people had been using simple machines in earlier times, scientists like Galileo and Da Vinci identified the six simple machines we have today: pulley, screw, wheel & axle, lever, wedge, and inclined plane. Most modern machines use one or more of these six simple machines.



Draw the six simple machines and explain how they are being used in each picture.

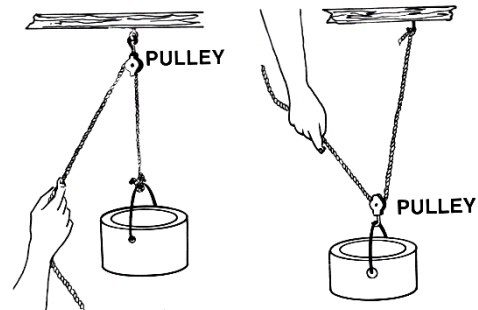
Simple machines 2

Pulleys

A pulley is a simple machine that uses a rope over a wheel, or a tree branch or similar. When one side of the rope is pulled down, the other side goes up. The direction of movement is changed, and the load is easier to lift.

Here are some examples:

- a flag pole
- an old fashioned well where a bucket was pulled up by a rope
- pulleys in construction work
- window blinds and sails on a ship that get hoisted up.



Draw and name two pulleys in action.

Simple machines 3

Wheel and axle

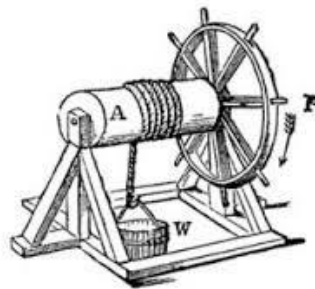
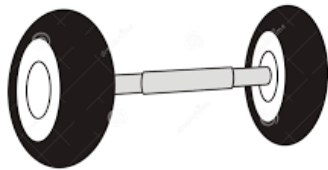
The wheel and axle is a machine used to help move heavy things. It is a large wheel with an axle connected at the center of it. When the wheel is spun the axle spins with it.

Examples of wheel and axle:

- a wheel barrow
- a car
- roller skates

Write a list of machines that use the wheel and axle. Add two things that are not on the list above.

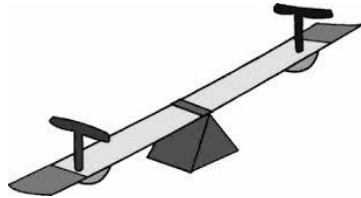
Draw two things that use the wheel and axle.



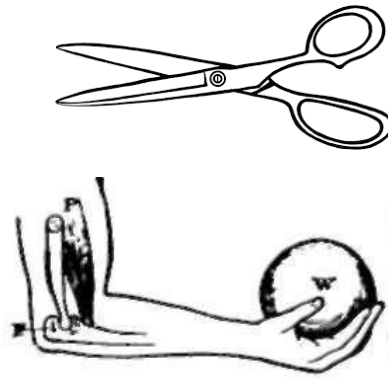
Simple machines 4

Lever

A lever is a machine with a board or bar that is fixed on a support called a fulcrum. The fulcrum is a pivot point. Find the pivot point on this see saw.



By changing how much of the board (or bar) is on each the side of the fulcrum it can be made more difficult or easier to lift a weight. If you push down on the long side it will be easier to lift something on the short side.

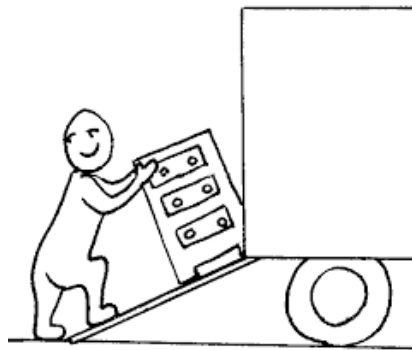
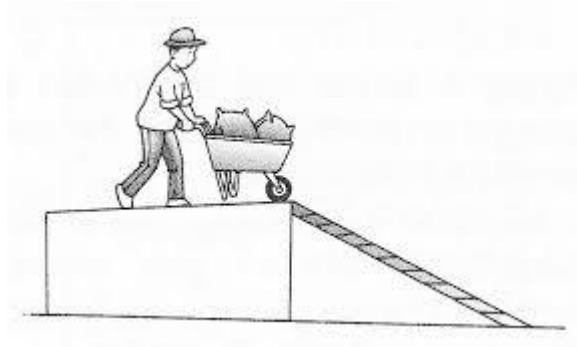


Draw three different types of levers and explain where the fulcrum is.

Simple machines 5

Inclined plane

An inclined plane, also known as a ramp, is a flat supporting surface tilted at an angle, with one end higher than the other. It is used to help raise or lower objects more easily by allowing them to move diagonally instead of up and down.



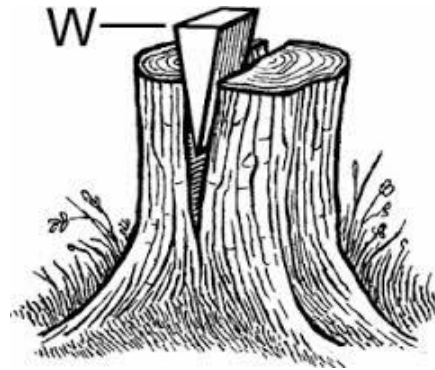
1. How would the man in the first picture get his sacks down if he didn't have the ramp?
2. How would the man in the second picture get his chest of drawers into the van if he didn't have the ramp?

Simple machines 6

The wedge

A wedge is triangle shaped. It can be used to stop or hold things in place. When a wedge is pushed under a door, the diagonal edge pushes up against the bottom of the door and holds it still.

An axe is an example of a double-wedge. It is also triangle shaped. It is used to split wood or separate things. When the triangle is pushed down, its two sides push out diagonally.



1. Give examples of two types of wedges and draw them doing work.
2. How do they make the work easier?

Simple machines 7

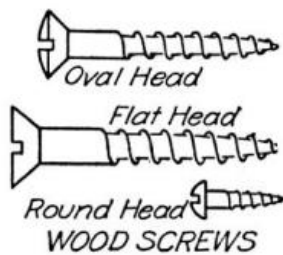
A screw

A screw is a nail-shaped rod with threads spiraling down it. A screw twists as it goes into wood, but it goes in straight. It stops turning because of the head.

Examples of screws:

A corkscrew

A bolt



1. Draw different kinds of screws.
2. Why is a screw sometimes stronger than a nail?

Simple machines 8

Machines in the Bible

1. Here are some machines used in Bible times:

A sling shot

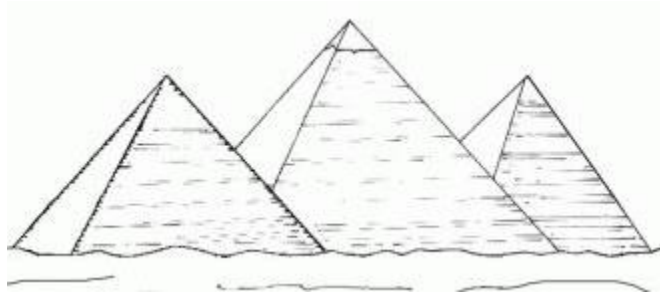
An axe

A bow and arrow

A chariot

Explain where in the Bible these machines were mentioned. Explain what type of machine they are and how they were used.

2. In the time of Moses, the Israelite slaves worked on building the Great Pyramids of Egypt. The slaves had to transport huge block of stone to the top of the pyramids. What kind of machines do you think they may have used? Draw a picture to explain, and label your drawing.



3. Machines can help us serve the Lord

God created us with intelligence. Over history, scientists have discovered the energy principles built into God's creation, and used these principles to develop machines.

Explain how machines can help us serve the Lord and spread the Gospel.