# Autumn 1 Knowledge Mats

### Upper Key Stage 2 – Unit 2b.1 – God

### What does it mean if God is holy and loving?

### Outcomes

Identify some different types of biblical texts, using technical terms accurately.

Explain connections between biblical texts and Christian ideas of God, using theological terms.

Make clear connections between Bible texts studied and what Christians believe about God; for example, through how churches are designed.

Show how Christians put their beliefs into practice in worship.

Weigh up how biblical ideas and teachings about God as holy and loving might make a difference in the world today, developing insights of their own.

Christians believe God is omnipotent, omniscient

### Key Vocabulary

### Omnipotent

God is all-powerful

### Omniscient

God knows all things

### Eternal

God created time and is not limited by it - God is outside time: God does not get old like human beings

God is morally pure and hates sin - God is separate from human beings, who are sinful

### Loving

God wants the very best for human beings, and does a lot to care for

### Spirit

God is not physical - God does not have a body

transgress those boundaries God has set for us

### Holiness

The state of being holy

Confession Being transparent and honest before God.

### Reconciliation

Bridging of the gap between God and humans caused by original sin

## Zones around the world KS2 Knowledge Mat

Subject Specific Vocabulary		Sticky Facts	
Latitude	-Lines of latitude circle the Earth parallel to the EquatorLines of latitude run in an east-west direction all of the way around the EarthLatitude is measured in degrees. The Equator is located at 0°.	Time Zones	
Longitude	Lines of longitude run between the North and South Poles. These lines are called meridians.  -Like latitude, longitude is measured in degrees.	Creenwich/ Prime Meridian  -The Greenwich Meridian is an imaginary line of longitude that divides Earth into the Eastem/Western hemispheresIt is the start point for measuring longitude & time zonesGreenwich was chosen because its Royal Observatory was used as a major navigational base at the time.	
Equator	The Equator is an imaginary line of latitude which circles the Earth. It lies halfway between the North/ South PolesIt splits Earth into the Northern/ Southern Hemispheres	Time Zones  Time Zones run longitudinally and are measured in relation to the time in Greenwich (Greenwich Mean Time).	
Tropics of Cancer	The Tropic of Cancer is an imaginary line of latitude which circles the Earth. It lies at 23 degrees north	-There are 24 time zones across the world.	
Tropics of Capricorn	The Tropic of Capricorn is an imaginary line of latitude which circles the Earth. It lies at 23 degrees south	Labelled Diagram	
Northern Hemisphere	The Northern Hemisphere is the section of the Earth that is north of the Equator.	Labelled Diagram	
Southern Hemisphere	The Southern Hemisphere is the section of the Earth that is south of the Equator	North Pole 55°N Arctic Circle 66.5°N Northern Hemisphere	
Arctic Circle	The Arctic Circle is the area north of an imaginary line of latitude situated at around 66°N	Tropic of Cancer  23.5'N  Greenwich / Frime Meridian	
Antarctic Circle	The Antarctic Circle is the area south of an imaginary line of latitude situated at around 66°S	Tropic of Capiticon  Antarctic Circle  1075  South Pole  South Pole	



### **UKS2 Properties and Changes of Materials Knowledge Mat**

Subject Specific Vocabulary		Interesting Books	Sticky Knowledge about	
solubility	Is a chemical property referring to the ability for a given substance, the solute, to dissolve in a solvent.	Important facts to know by the end of the reversible and irreversible changes topic:	Reversible and Irreversible changes	
conductivity	Conductivity defines a material's ability to conduct electricity.		<ul> <li>Irreversible changes, like burning, cannot be undone. Reversible changes, like melting and dissolving, can be changed back again.</li> </ul>	
transparency	In general, transparency is the quality of being easily seen through.			
thermal evaporation	Something that is thermal is hot, retains heat, or has a warming effect.  Evaporation is the process of a substance in a liquid state changing to a gaseous state due to an increase in temperature and/or pressure.		Mixtures can be separated out by methods like filtering and evaporating. A change is called irreversible if it cannot be changed back again.	
dissolve	To dissolve is defined as to become broken up or absorbed by something or to disappear into something else.	Know what a reversible change means.     Know what an irreversible change means.     Give examples of reversible and irreversible changes.     Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.     Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	<ul> <li>Examples of reversible changes: Melting is when a solid converts into a liquid after heating. An example of melting is turning</li> </ul>	
bicarbonate of soda	A white water-soluble powder, used chiefly as an antacid, a fire extinguisher, and a leavening agent in baking.		ice into water. Freezing is when a liquid converts into a solid.	
thermal	Something that is thermal is hot, retains heat, or has a warming effect.		A cooked egg cannot be changed back to a raw egg again. Mixing substances can cause an irreversible change. For example, when vinegar and bicarbonate of soda are mixed, the mixture changes	
filtering	To filter a substance means to pass it through a device which is designed to remove certain particles contained within.			
melting	Melting is a physical process that results in the transition of a substance from a solid to a liquid.		and lots of bubbles of carbon dioxide are made. Burning is an example of an irreversible change.	
separate	Separate, part, and divide mean to break into parts or to keep apart.			

## Autumn 2

**Knowledge Mats** 





# Upper Key Stage 2 – Unit 2b.3 – People of God – How can following God bring freedom and justice?

### Outcomes

Explain connections between the story of Moses and the concepts of freedom and salvation, using theological terms.

Make clear connections between Bible texts studied and what Christians believe about being the People of God and how they should behave.

Explain ways in which some Christians put their beliefs into practice by trying to bring freedom to others.

Identify ideas about freedom and justice arising from their study of Bible texts and comment on how far these are helpful or inspiring, justifying their responses.

The Old Testament pieces together the story of the People of God.

The story of Moses and the Exodus shows how God rescued his people from slavery in Egypt; Christians see this story as looking forward to how Jesus' death and resurrection also rescue people from slavery to sin

Christians apply this idea to living today by trying to serve God and to bring freedom to others; for example, loving others, caring for them, bringing health, food, justice, and telling the story of Jesus

### Key Vocabulary

### Covenant

Promises made by two people to each other

### Command

Being told to do something

### **Promise**

Saying you will do something.

### Freedom

the state of not being imprisoned or enslaved
Justice

just behaviour or treatment

### **Old Testament**

the first part of the Christian Bible

### Exodus

the departure of the Israelites from Egypt

### Plague

An incident of affliction or disease

### Moses

One of God's prophets

### Promised Land

A land promised by God

# **UKS2 Forces Knowledge Mat**

Subject Specific Vocabulary		Interesting Book	Sticky Knowledge about Forces
friction	Friction is a force between two surfaces that are sliding, or trying to slide, across each other.	Important facts to know by the end of the forces topic:	☐ Frictional force is any force that is caused due to friction. An example of this might be
gravity	Gravity is a force which tries to pull two objects towards each other.		when you put on the brakes on your bike.
air resistance	Air resistance is a type of friction between air and another material. For example, when an aeroplane flies through the air.		Gravity is the pulling force acting between the Earth and a falling object, for example when you drop something. Gravity pulls
water resistance	If you go swimming, there is friction between your skin and the water particles.		objects to the ground.  □ Surface resistance is the force on objects
levers	A lever can be described as a long rigid body with a fulcrum along its length.		moving across a surface, such as an ice-skater skating on ice.
pulleys	Pulley is a simple machine and comprises of a wheel on a fixed axle, with a groove along the edges to guide a rope or cable.		☐ Any kind of force is really just a push or a pull.
gears	Gears are wheels with teeth that slot together. When one gear is turned the other one turns as well.	<ul> <li>Know what gravity is and its impact on our lives.</li> <li>Identify and know the effect of air resistance.</li> <li>Identify and know the effect of water</li> </ul>	Air resistance is the force on an object moving through air, such as a plane moving through the sky. Air resistance affects how fast or slowly objects move through the air
parachute	A parachute is a device used to slow down an object that is falling towards the ground. As the parachute opens, the air resistance increases.	resistance.  Identify and know the effect of friction.	
		<ul> <li>Explain how levers, pulleys and gears allow a smaller force to have a greater effect.</li> <li>Know who Isaac Newton and Galileo were.</li> </ul>	☐ Water resistance is the force on objects floating on or moving in water.
Galileo	Galileo developed the telescope to enable close observation of the night sky.		
Newton	During his lifetime, Newton developed the theory of gravity and made breakthroughs in the area of optics, such as the reflecting telescope.		Magnetic force is an invisible force created by electrons. Magnetic force controls magnetism and electricity.