## **CLIMATE CHANGE COMPREHENSION**

The earth, your home, is an incredible place. It's at least 4.5 billion years old, is the only planet known to support life, and is constantly travelling around the sun at 30 kilometres per second! It takes precisely one year travel around the sun.

The earth can support life—just like me and you—because it has plenty of air to breathe and plenty of water. Without air or water, everything would die. What's more, the earth keeps everything that lives on it safe from the sun's heat. It has a protective blanket wrapped around it called the atmosphere. The atmosphere is made of gases—mostly oxygen, nitrogen, methane and a little bit of carbon dioxide. These gases stop too much of the sun's heat from warming up the earth and stops the earth's heat escaping into space. Without the atmosphere, the earth would be far too hot and everything would die.

Sadly, a process called climate change is making the planet heat up. Climate change means that our weather is becoming more extreme and unpredictable. It's causing our polar ice caps to melt and sea levels to rise. It's causing flooding, droughts, storms and other severe weather types. Climate change is having a devastating impact on people who are struggling to cope with the extra heat and the extra cold. It's also putting many types of animals at risk of extinction.

Climate change is happening because of changes to the protective blanket of gases called the atmosphere. The blanket is becoming too thick and trapping too much of the sun's heat. Humans are doing this by burning 'fossil fuels' like oil; by dairy farming (cows eat lots of food and every time they burp they release methane into the atmosphere), and by cutting down forests (trees suck up harmful gases like carbon dioxide and clean the air for us).

Climate change could be slowed down if we each do our bit to help. Walking and cycling instead of taking the bus or car would help because vehicles need to burn oil to work. Eating less meat and dairy products would help because if we did, there would not need to be so many cows (there are 1.5 billion cows on earth), and by reusing and recycling plastic.

