

# *Climate Change tutorial:*

Following on from this week's assembly on the COP26 and the current talks going on between all the major nations, lets have a spotlight on Climate Change.

## *What is climate change?*

Climate is the average weather in a place over many years. Climate change is a shift in those average conditions.

The rapid climate change we are now seeing is caused by humans using oil, gas and coal for their homes, factories and transport.

When these fossil fuels burn, they releases greenhouse gases - mostly carbon dioxide (CO<sub>2</sub>). These gases trap the Sun's heat and cause the planet's temperature to rise.

The world is now about 1.2C warmer than it was in the 19th Century - and the amount of CO<sub>2</sub> in the atmosphere has risen by 50%.

## *What is the impact of climate change?*

Extreme weather events are already more intense, threatening lives and livelihoods.

With further warming, some regions could become uninhabitable, as farmland turns into desert. In other regions, the opposite is happening, with extreme rainfall causing historic flooding - as seen recently in China, Germany, Belgium and the Netherlands.

People in poorer countries will suffer the most as they do not have the money to adapt to climate change. Many farms in developing countries already have to endure climates that are too hot and this will only get worse.

Our oceans and its habitats are also under threat. The Great Barrier Reef in Australia, for example, has already lost half of its corals since 1995 due to warmer seas.

Wildfires are becoming more frequent as climate change increases the risk of hot, dry weather.

And as frozen ground melts in places like Siberia, greenhouse gases trapped for centuries will be released into the atmosphere, worsening climate change.

In a warmer world, animals will find it harder to find the food and water they need to live. For example, elephants will struggle to find the 150-300 litres of water a day they need.

Scientists believe at least 550 species could be lost this century if action is not taken.

## *How will different parts of the world be affected?*

Climate change has different effects in different areas of the world. Some places will warm more than others, some will receive more rainfall and others will face more droughts.

If temperature rise cannot be kept within 1.5C:

- The **UK** and **Europe** will be vulnerable to flooding caused by extreme rainfall
- Countries in the **Middle East** will experience extreme heatwaves and farmland could turn to desert
- Island nations in the **Pacific region** could disappear under rising seas
- Many **African nations** are likely to suffer droughts and food shortages
- Drought conditions are likely in the western **US**, while other areas will see more intense storms
- **Australia** is likely to suffer extremes of heat and drought

## *What can individuals do?*

Major changes need to come from governments and businesses, but scientists say some small changes in our lives can limit our impact on the climate:

Some of the ways you can help may have to wait until you are a little older—like choosing an energy-efficient car, installing solar panels on the roof of your house

But there are many important ways you can help right now.

You can help by growing your own vegetables and fruits. You can help by planting a tree. Your new plants and trees will help to remove the greenhouse gas CO<sub>2</sub> from the air. If you grow some of your own food, you will also help to prevent more CO<sub>2</sub> from entering the air from the fossil-fuel-burning trucks, planes, and ships that transport your food to you from far away.

Swap old light bulbs for the new compact fluorescent lights. They use only 25% as much electricity to give the same light. They last ten times longer.

Turn off lights, TVs, computers, when you do not need them.

Unplug! Any electronic gadget you can turn on with a remote (TV, DVD player, Nintendo, Xbox) uses power even when it is "off." Appliances with a digital clock (like a coffee maker) or a power adapter (like a laptop computer) also suck power.

Turn down the thermostat on the heating when it's cold. Sweaters, blankets, and socks are good for you and better for the planet.

Walk or ride your bike instead of taking a car everywhere. Even a 2-mile car trip puts 2 pounds of CO<sub>2</sub> into the atmosphere!

Ask your parents to buy reusable grocery bags. Help them to remember to get them out of the car and take them into the store. Recycle everything you can.

Drink tap water—filtered, if you like—instead of bottled water. Carry your drinking water in a reusable bottle. Plastic water bottles are an environmental disaster!

## *Points to consider:*

1. Whose responsibility is it to tackle Climate change?
2. If all the countries do not agree to change can we really make a difference?
3. Can climate change be seen as a positive thing?
4. As Muslims, why is climate change something we should care about?
5. Why is the polar bear often used as a symbol for climate change?

