

How to talk to kids about climate change?

A Kat Kid Adventure workshop
supporting materials

KatKid
Adventure

A real simple guide to climate change.

1. What is the difference between weather and climate?

Weather refers to atmospheric conditions that occur locally over short periods of time. Examples include rain, snow, clouds, winds, floods, or thunderstorms.

Climate refers to the long-term change in the average weather conditions. (usually 30 years)

2. What is global warming?

Global warming is the long-term heating of Earth's surface primarily due to human activities, such as fossil fuel burning to create energy for their homes, factories and transport. When these fossil fuels burn, they release greenhouse gases - such as carbon dioxide that trap the sun's heat and cause the planet's temperature to rise. The term "global warming" is not interchangeable with the term "climate change."

3. What is climate change?

Climate is the average weather in a place over many years (usually 30 years). Climate change is a shift in those average conditions.

The world is now about 1.2C warmer than it was in the 19th Century - and the amount of CO₂ in the atmosphere has risen by 50%. However, unless further action is taken, the planet could still warm by more than 2C by the end of this century. A report in 2021 by the Climate Action Tracker group calculated that the world was heading for 2.4C of warming by the end of the century.

If nothing is done, scientists think global warming could exceed 4C in the future, leading to devastating heatwaves, millions losing their homes to rising sea levels and irreversible loss of plant and animal species.

4. 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 turn 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 driven by climate change.
- Wildfires are becoming more frequent as climate change increases the risk of hot, dry weather.
- In a warmer world, animals will find it harder to find the food and water they need to live. For example, polar bears could die out as the ice they rely on melts away, and 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.

5. 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.

6. What are governments doing?

- Countries agree climate change can only be tackled by working together, and in a landmark agreement in Paris in 2015, they pledged to try to keep global warming to 1.5C.
- Many countries have pledged to get to net zero by 2050. This means reducing greenhouse gas emissions as much as possible and balancing out remaining emissions by absorbing an equivalent amount from the atmosphere.
- Experts agree that this is achievable, but it will require governments, businesses and individuals to make big changes.

What can we do to tackle climate change?

Major changes need to come from governments and businesses, but small changes in our homes can limit our impact on the climate. For example:

- Go electric, when it's time to replace your gas powered vehicle or appliances
- Buy energy efficient products, such as washing machines, when they need replacing
- Insulate your home
- Vote / write to your city council members
- Make the Eco-Pledge

The Eco-Pledge

An eco-checklist for kids and families



A few sample scripts to kick-start an eco-chat with kids

#1

"Humans are burning lots and lots of fossil fuels for energy, in planes, in cars, to light our houses, and that's putting greenhouse gases into the air. Those gases wrap around the planet like a blanket and make everything hotter.

A hotter planet means bigger storms, it melts ice at the poles so oceans will rise, it makes it harder for animals to find places to live.

And it's a really, really big problem, and there are a lot of smart people working hard on it, and there's also lots that we can do as a family to help."

#2

"Did you know more than two dump trucks of trash enter the ocean every minute!? Much of that trash is plastic waste that ends up in breaking down into teeny tiny bits called microplastics. The fish and seabirds accidentally eat them and get very sick, which is very sad.

Did you also know that plastic contributes to climate change because it takes a ton of energy from fossil fuels to power the factories that make plastic items.

The good news is you can do something about it! We can carry our own water bottles to school and bring a reusable bag to the store so we avoid those single-use plastic items. What other single use plastic items do you think we can avoid using?"

Open ended questions based on the FIRE exhibit

Questions for K - 2 grade

1. Who loves playing outside? What do you enjoy the most about being outdoors?
2. What is your favorite animal and why? What environment do they live in and what do they eat?
3. What excites you the most? The beach, mountains, forest? What about it is so special?
4. Who loves camping? What do you love about it?

Questions for grade 4-5

1. Can anyone tell me the difference between weather and climate? Have you experienced extreme weather? How did it make you feel?
2. What is the biggest change you can make in your daily life to help Earth?
3. If you were to write to a government official, what would you ask them to do for the wellbeing of the planet?
4. What do you see happening that you don't agree with? How can you share your opinions/thoughts?
5. What is your promise to the Earth?

A short quiz for kids

What can you do to help the Earth?

Sort and put all of your recycling in the correct bin



Turn off your lights when they don't have to be on



Use plastic water bottles instead of reusable ones



To help the environment, what should you NOT do?

Walk, bike, or carpool when you can



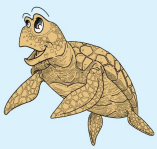
Leave your trash on the ground if a trash can is too far



Use reusable bags when you go to the grocery store



Which of these animals will be affected by rising temperatures?

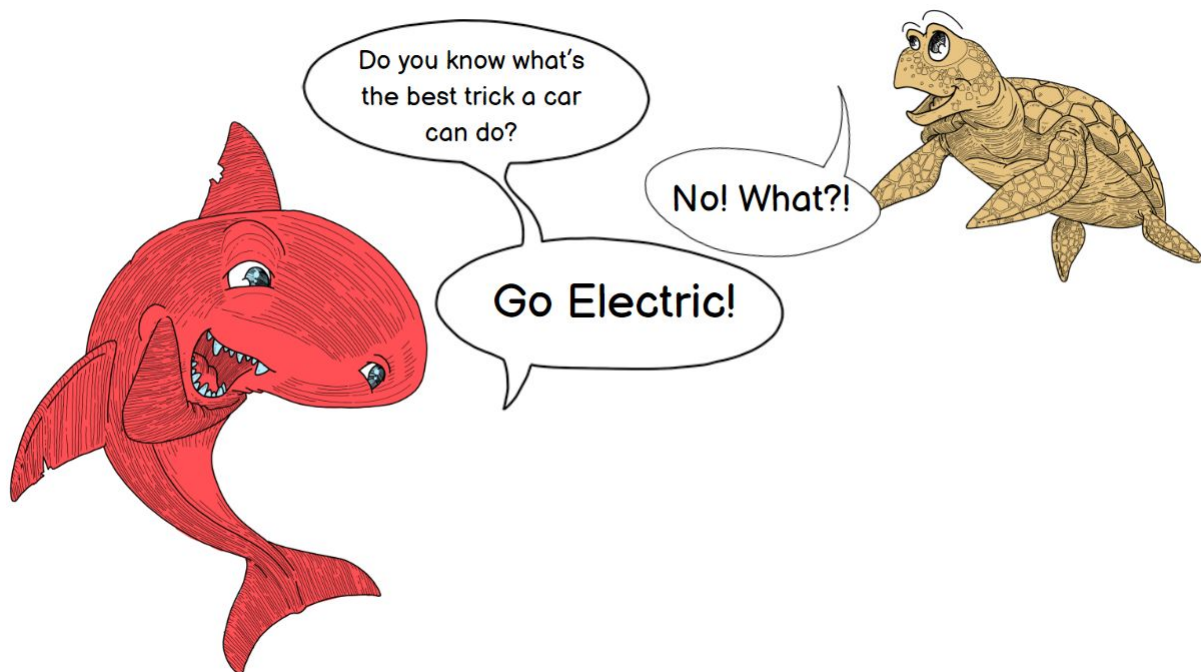


Why should we try to stop climate change?

Because Earth is our home, so we should try to protect it.

Because we want to help all of the Earth's animals and plants.

Because human action is hurting our planet, so we should help fix it.



About Kat Kid Adventure

At Kat Kid Adventure, our mission is to raise the next generation of eco-heroes.

We believe that it's never too early to learn, discuss and act on the state of our planet, which is why we are always striving to make eco-learning fun and exciting!

We believe that turning eco-knowledge into eco-action helps the planet. And every little eco-action our kids take, make them eco-heroes in our eyes!

Saying no to single use-straws. Choosing an ice-cream cone instead of a plastic cup. Flipping the lights when they leave the room.

It's that easy to become an eco-hero. And it's impossible to stop one.

As eco-conscious parents, caregivers and teachers, we believe it's our collective responsibility to not only leave a better planet for our kids, but also better kids for our planet. We hope you join us on this eco-adventure to educate and inspire a generation of eco-heroes.

To get touch email anu@katkidadventure.com

Visit www.katkidadventure.com

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We'd love to hear from you!