

FOR THE EXTRAORDINARY NIA AND RHIAN YATES!

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THE GUTSY TALE OF GRETA THUNBERG

SWEDEN



Greta shifted around, trying to get comfortable on the hard ground. The cobblestones underneath her were cold and rough. People walked by, looking down at her, then glancing at her home-made sign. She had been sitting here alone, outside the Swedish Parliament building, for six hours.

IT WAS NEARLY TIME TO LEAVE,
BUT SHE WOULD BE BACK AGAIN SOON.

It was Friday 20th August, 2018. Greta promised herself that she would sit here every single Friday from now on, come rain or shine. She would never give up because there was too much at stake. The future of the Earth was in peril – she couldn't let climate change be ignored anymore.

When she was eight years old, Greta Thunberg learned about climate change and wondered why more wasn't being done about it. Greta and her family did their best to recycle their rubbish, they

were conscious of not wasting water and they tried to cycle instead of drive. Greta even became a vegan to try and reduce her personal impact on climate change.

Then, in the summer of 2018, a scorching heatwave hit Europe and devastating forest fires broke out in Sweden. It was impossible for Greta to overlook this. She knew it had happened because of climate change. Greta was 15 and she realized she had to do something more – for her generation, and for all generations to come.

SO, SHE DECIDED TO GO ON STRIKE.

She painted a sign on a piece of wood that said 'Skolstrejk För Klimatet' – 'School Strike For Climate'. Instead of going to school that day, Greta cycled to the Parliament building and sat down outside. She would make her voice heard. She would make the government and the big companies take notice of her and take urgent action against climate change.

That first day, Greta sat alone. On the second day, a few people joined her.

SINCE THEN, GRETA HAS NEVER BEEN ALONE.

Gradually, thousands of school children from more than a hundred countries around the world have joined her, holding their own climate strikes on Fridays.

Greta had started a movement, now known as 'Fridays For The Future'. She has appeared on TV, and spread her ideas

by giving TED talks and by speaking at important world events, such as the United Nations Climate Change Conference.

This is even more of an achievement for Greta, as she has Asperger syndrome and often finds it difficult to communicate with other people. But she doesn't let this get in the way of her goals. She knows that stopping the effects of climate change is the most important thing in the world.

Greta's message is clear: This is the greatest threat that humankind has ever faced, and we need to take action – now.

WHAT CAN YOU DO?

HERE ARE SOME SMALL CHANGES THAT MAKE A BIG DIFFERENCE:

- Don't use a car for short trips. Walk instead. You'll be fitter and it will help the environment at the same time.
- Always turn the light off when leaving a room.
- Don't leave TVs and computers on standby. Switch them off at the mains.
- Recycle everything you can and try not to buy things with lots of packaging.
- To save water, turn off the taps when brushing your teeth. Take showers, and fewer baths.
- Buy and use less stuff. Ask yourself if you really need something before you buy it.
- Eat less meat. The farming of animals contributes to climate change. Replace some of your meals with vegan alternatives – such as oat milk and soya mince.

WHAT IS CLIMATE CHANGE?

- Our planet is slowly heating up. The changing climate is making our weather much more extreme. As temperatures rise, some parts of the world are getting wetter, while others are getting hotter and have droughts.
- Trees and plants absorb carbon dioxide. When forests are cut down for wood and other products, we have fewer trees to get rid of the carbon dioxide.
- Climate change is mostly caused by humans. Our cars, planes, homes, factories and farms use fuel and release gases that trap heat from the sun.
- If climate change continues, it will continue to have very serious affects on the future of animals, plants and humans.

HOW TO BE AN ENVIRONMENTAL ACTIVIST

1. **Get informed.** Find out as much as you can about climate change, its causes and its effects. Why not start an eco-club at school or with friends?
2. **Give your time to the cause.** Volunteer and help out in any way you can.
3. **Make your voice heard.** Sharing your views could help to change other people's attitudes.
4. **Don't give up.** It can take a long time to make a difference but it will be worth it. Every little helps!

XIUHTEZCATL MARTINEZ

USA

Xiuhtezcalt Martinez was taught from an early age that protecting the Earth is everyone's responsibility. He has made it his mission to share these views and uses rap as a way to make his voice heard. He is the Youth Director for Earth Guardians, a group of activists, artists and musicians from around the world who work together to make change happen in their communities. Hip-hop artist, activist, voice for his generation, Xiuhtezcalt Martinez is changing the world, little by little, every day, whether performing hip-hop at music festivals or speaking at rallies.

THE INVENTIVE IDEAS OF **WILLIAM KAMKWAMBA**

MALAWI

William balanced on top of the tower that he had built from wood and bamboo.

It was a strange-looking contraption. It had an old bicycle wheel attached to the top, a large fan alongside it and various other machine parts. A gust of wind blew and the fan's blades began spinning around. William held up a light bulb that was attached to the machinery. The bulb flickered and died. Then it lit up brightly.

"He's made light!" shouted the crowd, which had gathered below to watch this crazy boy. They were right. William had made electricity. But how?

A few months before, 14-year-old William Kamkwamba had been sitting in the library, trying not to think about how hungry he was. This wasn't an everyday

kind of hunger – this was starvation. The maize harvest had failed in Malawi that year and there was hardly anything to eat. People were starving, selling anything they could just to buy a few grains. Nobody had food or much money. William went to the library to learn because his family could not afford to pay his school fees.

A book called *Using Energy* caught William's eye. He'd always been interested in how things worked and had spent hours fixing old radios. On the book's cover was a picture of tall, grey towers with large, spinning blades. William was intrigued. He flipped through the pages to find out more. These machines were called wind turbines and they used the energy from wind to make power. This was exciting! If William had a windmill,

**"HE'S MADE LIGHT!"
SHOUTED THE CROWD.**



maybe he could make electricity to light the dark nights in Malawi. He might be able to pump water to the fields to help to grow the crops. Electricity would be the answer to many of his family's problems.

William set to work straight away. He knew what he wanted to make, but finding the right materials was difficult when there were only bits of scrap around. He used lots of different things: a washing line, an old bicycle frame, plastic pipes. William heated and flattened the pipes, then cut them into blades for the windmill.

It took him a long time to gather everything he needed but, after several months of hard work, he had finally built his windmill.

THE MOMENT WHEN HE PRODUCED LIGHT FOR THE FIRST TIME WAS INCREDIBLE!

The windmill was able to power four lights and two radios in his family home. Soon, everyone in the village wanted one.

William's windmill got him a lot of attention. He was invited to speak at a TED conference about his idea – and about his dreams of building a bigger windmill to help the village. His speech was a great success and he got lots of help and advice from the people he met at the conference.

Since then, William has been working on many projects for his area. Lots of them are sustainable, including solar power and lighting for several homes, a deep-water well with a solar-powered pump for clean water and an irrigation system for crops. William is full of bright ideas. His inventive thinking shows that something huge can be achieved from very little.

WHERE IS HE NOW?

William's story is told in his book, and the film of the same name, *The Boy Who Harnessed the Wind*. He is now working on a project that encourages young people to follow in his footsteps and create something practical to improve their lives and that of their community.

HOW TO BE AN INVENTOR

1. Look at the world around you and find a problem that needs solving.
2. Be creative! Use your imagination to think differently about the way things work.
3. Keep a book in which to make notes and sketches of your ideas.
4. Make a prototype. This is a working model of your idea.
5. Test your idea out. Ask family and friends what they think.
6. Make your product! Do some research and ask an adult to help you to contact companies that might be interested in producing it.

GREEN MEASURES IN YOUR OWN HOME

Here are some simple things you can do to be more environmentally friendly.

- **Use less water.** Take shorter showers and definitely don't leave the water running while you brush your teeth.
- **Remember to save electricity whenever you can.** Turn lights off when you leave the room and use energy-efficient modes on your devices.
- **Think about how you get around.** If you can, walk or cycle to where you need to be. If you need to use transport, get a bus or share the car journey with friends.

ANN MAKOSINSKI

CANADA

Ann Makosinski invented a thermoelectric torch when she was just 15 years old. The light is powered by the heat of the hand that holds it. She was inspired to create it after hearing that a friend in the Philippines was struggling to study because she couldn't afford to pay for electricity after it got dark in the evening.