



Billowing breezes, twisting tornadoes



Overview

Tornadoes are one of the most powerful and destructive weather systems on earth. They can be scary, but not if you are a Rainbow Weatherling!

“**Wobbling windsock!**” In the story of Rainbow Grey by Laura Ellen Anderson, we find Ray travelling through a duck-nado on Nimothy “Nim”, her cloud-cat pet, dodging Wind Rogues and their tormenting tornadoes. But do we experience duck-nadoes or shoe-nadoes in the UK or other areas of the world? Your answer would probably be no, but some of us in different countries around the world experience tornadoes.



Time required

60 minutes



Materials required

- Imagination!
- Rainbow Grey stories
- Tornado information guide
- [Tornado footage](#)



In this activity, create your own “not-so-scary” tornado and explore how to keep safe from extreme weather.

Activity Steps

01 What is extreme weather?

If the group are unfamiliar with extreme weather, start by watching [this video](#) and ask them if they can think of any examples of extreme weather. Take suggestions.

Read an extract from *Rainbow Grey*

“Rogues, Rogues, Rogues,” he trilled. “They refuse to use instruments to channel their weather magic, making it chaotic, unpredictable and destructive. They have created some of the WORST weather the Earth has ever seen. What do we call a group of Rogues working together?”

Ray put her hand up. “A storm?” she said. “A stooooorm!” Mr Windbreaker repeated with emphasis. “The Earth has seen some terrible storms. And every storm is named after the Rogue who planned it... (*Rainbow Grey* pg30)

Ask the group if they can remember any of the characters in *Rainbow Grey* who cause extreme weather events. For example, Lightning Rogues, Wind Rogues, Frazzle and Frump with their lightning rods. What about Tornadia Twist?

02 What is a tornado?

Explain to the group that we are going to be looking at tornadoes and how they form on Earth and will also be creating our own special tornado with the help of *Rainbow Grey*.

N.B If the students are unfamiliar with what a tornado is please refer to the Tornado information guide which contains additional links and explanation videos.

Show the group a [video of a tornado](#)

Tell the group that a tornado is a giant, rapidly-rotating column of air that usually starts with a big thunderstorm. We see this occur in the story of *Rainbow Grey* when she is travelling on Nim through a storm. (pg93 - *Rainbow Grey*)

When warm, moist air mixes with cold, dry air it causes instability or change in the atmosphere. Large, dark clouds swirl and rotate in the sky, we call this a supercell or vortex. This forms a funnel cloud which, if it reaches the ground, can become a tornado. The



10 minutes



Video



Groupwork



10 minutes



Video



Groupwork



[Tornado information guide](#)

winds inside a tornado spin very fast and can destroy most of what is in their path. It can also be quite scary as lots of rain and hailstones can fall, causing flash flooding too.

This type of weather is extreme and can be frightening to the people and communities that are in its path. However, with careful planning and acting on advice when tornadoes are predicted, it's possible to stay safe.

03 Create your tornado

Ask the group to think about how we could turn a scary tornado into something that sounds less frightening, just like a Rainbow Weatherling would do. What could a tornado be made of to make it sound less fearsome, and what could you do to protect yourself from it?

For example, think about a swirling choco-nado, can the group think of some suggestions to keep themselves safe from swirly-whirly chocolate?

A suggestion could be to design a marshmallow shelter that they could eat afterwards!

What about a designing a shelter to protect people from a swirling tornado of flower petals? Take suggestions and get creative!

Alternatively, tell the group that they could be a mischievous Rogue, just like Tornadia, who loves to create tornadoes that cause complete havoc such as a knicker-nado or a glitter-nado (which is way worse than it sounds!) or even a bogie-nado (yuck!).

What would be your naughty-themed tornado if you were a Rogue and how would you keep safe from it?

The group can work in pairs or individually to create their tornadoes and decide how they could keep safe from them. Using different materials, get creative with designing the tornadoes.



30 minutes



Groupwork



For example, you could write labels to describe your tornado, use different arts and craft materials to decorate, or even write a short story about your tornado. Use your imagination!

04 Present your tornado ideas to the group

Read an excerpt from *Rainbow Grey – Eye of the storm* (pg63) to set the scene for the not-so-scary tornado ideas.

“The Council of Forecasters has urged Weatherlings not to panic”. Head Forecaster Flurryweather Floatatious assures us, “We have the situation under control and have deployed our top Forecasters, Weather Warriors, doctors and detectives to try and get to the bottom of the situation”.

After the groups have created their tornadoes, ask them to present their tornado ideas to the group. Remember to mention how to keep safe and if it's edible! Yum!

Share your designs with [@metofficelearn](#) and with Laura Ellen Anderson [@lillustrator](#)

Experiment

Create your own [tornado in a jar](#)



Illustration from *Rainbow Grey*, © Laura Ellen Anderson, 2023



10 minutes



Groupwork

The Met Office provides free education content to support young people aged 5-14 to be prepared for the effects of weather and climate change on them and their communities. Find out more at www.metoffice.gov.uk/schools

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