

Weather or Not... it's a Climate for Change

Table of Contents & REFERENCE POINTS

Meet the Weather-Makers...4

What is Weather? ...5

Understanding the Atmosphere...6

Atmospheric Pressure...7,8

Gravity...9

Air Pressure...10

The Water Cycle...11

Ocean Currents...12

Gulf Stream...12

El Nino.....12

Winds of the World.....13

Trade Winds.....13

Jet Streams...13

World Meteorological
Organisation...13,17

What is Climate?...14

Wettest & Driest parts of
the World...14

Planetary
temperatures...14

Rain Worship.....15

The Weather Gods...15

Weather forecasting...16

Cloud Seeding.....17

ARGO project.....17



Weather patterns.....18

Weather Pollution.....19

Greenhouse Gases.....20

Climate Change21

GHG Gang...22

Cooking a planet... 24

Using Fossil Fuel...25

IPCC...26

Global warming...26

Fuelling the Weather.....27

Clean Green Energy.....28

Harnessing the Weather.....28

Power to moderate Climate
Change – what you can do...30

Renewable Energy Ideas.....31

Ozone hole.....32

Kyoto Protocol.....32



Teaching Tools & Suggestions

This book provides instant units of work for weather based and climate change learning.



Suitable for HSIE, Art, Geography, Science, History, English and Media.

Climate Change is a critical environmental issue, but it is complex. In this book the issues of global warming, climate change & weather, are broken into understandable components.

The layout, pictorial content and scientific accuracy is both topical and synergistic, creating a valuable teaching and lesson planning resource.

This book simplifies the complex science of weather in a way that makes readers of all ages appreciate what's happening to our climate and what we can do to help our planet.'

Mike Bailey, weather presenter and producer ABC TV

Weather of not... it's a Climate for Change, supports many of the outcomes in the Board of Studies Syllabus for 7-10: Science/Geography and K-6: HSIE/Science & Technology.

For example:

K-4: Suitable as a supported text. Teachers can use the book for reference and to share sections with students

Years 5-6: Students can easily access the text themselves and read independently or discuss in class

Years 7-10: Appeals on an interest level with multi-layers of meaning, humour and aspects of visual literacy for older students eg molecular characters

The text is suitable for Stage 3 and some Stage 4 activities. The illustrations are suitable for Stage 2 learning upwards.

"What a great help to the school science project"

"I wish all books were this much fun. Learning would be so much easier." **Maddie C Year 9**



Additional suggested activities:

- Assign different characters to tell a story about the weather and climate change from their particular point of view.
- Create posters showing how the atmosphere works; why the climate is changing, how the atmosphere is made up, what effect pollution has on your local area, how the greenhouse gang are trying to keep the balance, what is cloud seeding, what is the Ozone hole? What is green, clean energy?
- Imagine you are interviewing Muzbar. How does the Earth's atmosphere compare to that on Mars? What other differences are there? If Muzbar had visited you 2,000 years ago or 200 years ago, what would have been different?
- Create a news report on the future of Climate Change/ how climate change is affecting your particular locality.
- Film – making: Who are the main characters. What are their roles?
- Use the factoids to confirm learning of weather and climate change principles.
- Explain the illustrations. How can you remedy some of these scenarios?
- Research the Kyoto Protocol and Carbon Trading. What are the advantages and disadvantages?
- Research the ARGO project, the IPCC and submit a news story.
- What policies would you change locally and globally to relieve the Climate Change pressures.
- Discuss the pros and cons of Renewable energy from A) your own understanding B) China's view point c) the USA's.

