

#### **TEACHER'S NOTES**

**TITLE:** Recipe For Perfect Planet Pie

**AUTHOR:** Kim Michelle Toft

**ILLUSTRATOR:** Kim Michelle Toft

**PUBLISHER:** Silkim Books

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**Recipe For Perfect Planet Pie** reads like a recipe, each 'method' using natural resources which need to be nurtured and sustained. Using cooking terms, it's a fun way to look at solutions to 'greening' the planet.

It is an excellent springboard for discussion on sustainability, cleaner alternate energy supplies and the preservation of nature.

Each detailed illustration in the book is hand painted onto silk.

#### **About the Book**

The cover echoes a traditional cookbook with the wallpaper pattern of animals which are used throughout the book. The Sun and Moon are also used on the cover representing the planets constant rhythm of day and night.

A photo of Kim Michelle Toft on the back cover, shows Kim painting one of the silk illustrations from the book. Wearing a chef's hat and apron adds a whimsical element to the story.

The end pages continue the wallpaper theme and leads the reader to the half title page which lists the ingredients used in the recipe and gives a short introduction for the 'method' –

Put on your apron
And explore this book
For now is the time
To become a good cook!

Each double page represents the 'method' and is numbered in sequence. Using nature's natural resources a 'pie' is created. A 'Helpful Hints' box on each double page lists some additional information about the particular resources/ingredients featured in that 'method'.

The book builds to a spectacular fold out finish in the shape of circle. When folded flat it reveals an aerial view of nature's 'pie'.

Additional information in the back 3 pages of the book looks at each resource in greater detail, looking at both scientific and environmental issues associated with that resource.

The notes will look at each double page under the following categories-

- Main Resources/Concepts
- Cooking Terms
- Illustration
- Questions / Discussion
- Suggested Activity

The overall educational concepts are

- SUSTAINABILITY
- ENVIRONMENTAL STUDIES
- SCIENCE
- NUMBER
- HEALTH

### 1. To prepare the base, sift the rich chocolate earth and crystallised minerals together. Make a well and pour in one cloud full of rain.

#### Main Resorces/Concepts

- MINERALS limited resource
- RAIN water conservation

#### **Cooking Terms**

• Prepare , sift, chocolate , crystallised, 'make a well' ,pour

#### **Illustration**

• Varying types of crystallised minerals are dispersed in the chocolate earth and the water pours into the well formed by the dirt like a waterfall.

#### Questions / Discussion

- What are some of the colours of the crystallised minerals?
- What type of mineral do you think they are?
- What do you normally sift when cooking?
- What do we need to do to maintain a healthy body?
- Why is it important to save water?

#### **Suggested Activity**

- Look through various cookbooks, find a recipe which sifts ingredients together ie. flour and cocoa powder. Then make the recipe eg. chocolate treat or a healthy option like carrot or banana cake or muffins
- Collect a variety of rocks/minerals and sort them into colour or texture and then research to try and find out what type of rocks they are, then label.

### 2. Dot seedlings along the edge of the well and sprinkle with another cloud full of rain.

#### Main Resources/Concepts

- PLANTS importance of planting
- RAIN/WATER conservation

#### **Cooking Terms**

• Dot, edge, sprinkle

#### **Illustration**

Seedlings contrast in colour to the chocolate earth with crystallised minerals.
 The rain in the well creates a serene ripple effect on the surface of the well and drips off the seedlings leaves

#### Questions / Discussion

- How does a plant grow and get its colour?
- Can plants grow without water?
- How can we save and store water?

#### **Suggested Activity**

Sow some seeds or plant seedlings and water regularly in a sunny position.
 Record their progress by measuring, drawing or photographing the plant and writing a brief description.

### 3. Gently heat with a good dose of sunshine and allow to rise. Stuff with assorted animals. For best results- leave undisturbed.

#### Main Resources/Concepts

- SUN Solar Energy
- FORESTS conversation and reforestation
- ANIMALS diversity

?

#### **Cooking Terms**

• Gently heat ,allow to rise , stuff

#### Illustration

- At the centre of the dense rainforest is the sun , which gives life to the animals and plants below
- A variety of animals are scattered throughout ,covering all groups of animals except insects , which are featured on the next page
- Life giving water flows through the middle of the scene

#### **Questions / Discussion**

- What animals can you find in the forest and then identify what type of animal each one is?
- What is the only group of animals which is not featured?
- What ingredients do you need to grow a tree?
- How do trees and forests help the planet?

#### **Suggested Activity**

• On a globe locate where most rainforests grow and discuss why. Find pictures of forests and make a collage using the pictures. The children then paint and cut out their own animals to paste into the forest scene.

### 4. Add a pinch of butterflies and a splash of frangipani fragrance. Set base aside.

#### Main Resorces/Concepts

- INSECTS Resilience
- FLOWERS how they work with insects

#### **Cooking Terms**

• Pinch, splash, fragrance, set base aside

#### **Illustration**

 An array of butterflies, different in appearance and size, flood the page against a backdrop of frangipanis and other flowers.

#### Questions / Discussion

- How many butterflies can you count?
- What type of creature is a butterfly?
- Name other animals which are insects
- How do insects and flowers help each other?

#### **Suggested Activity**

 Using recycled materials such as plastic bottles, cans, sticks, pipe cleaners wire make 3D insects. Attach a string so it can be hung up. Then create a garden of flowers using crepe paper and coloured paper and suspend the 'recycled' insects above it.

## 5. To make the filling, whip the wind and clouds together to form white fluffy peaks. When peaks turn purple squeeze out excess water and combine with a big blue ocean.

#### Main Resources/Concepts

- WIND harnessing for energy
- CLOUDS storms, lightning, thunder
- RAINBOWS colours

#### **Cooking Terms**

• Filling, whip, fluffy peaks, squeeze, combine

#### **Illustration**

The clouds are whipped together to create a spectacular storm front.
 Under the storm the lightning strikes and the sun shines through the rain creating a rainbow.

#### **Questions / Discussion**

- How is a rainbow formed and what are the order of colours from the outside in? (red, orange, yellow, green, blue, violet, pink)
- How is wind used to create power?
- During a storm how are thunder and lightning related?

#### **Suggested Activities**

Paint a large rainbow on a mural in the correct order of colours .Then
paint a second rainbow underneath, making sure the colours are in reverse.
Talk about primary and secondary colours.

# 6. Stir in a pod of whales, a pod of dolphins, a dozen green jellies (just cracked from their eggs), 3 schools of fish, 2 bony seahorses, a pretzel shaped orange octopus and a large lean shark DO NOT remove ingredients from the mix.

#### Main Resources/Concepts

- OCEAN conservation
- SEA CREATURES variety and vulnerability

#### **Cooking Terms**

 Stir, lime green jellies, tasty, cracked from their eggs, pretzel, lean, ingredients

#### **Illustration**

 The wide variety of sea creatures are swirling around in the blue currents of the ocean

#### **Questions / Discussion**

- What is a pod and how many dolphins are in this pod?
- What type of shark is in the illustration?
- Name two different types of fish in the illustration
- Why shouldn't we take these ingredients out of the ocean?

#### **Suggested Activity**

 Using a blue wash on a long piece of paper or plastic, stick on a variety of sea creatures, that the students have drawn or cut out of magazines. Along the bottom stick coral and seaweed which is painted or drawn in the following activity.

### 7. Pour the ocean mix over the base and trim with multi-coloured coral and fresh green seaweed.

#### Main Resources/Concepts

• CORAL – Diversity and conversation

#### **Cooking Terms**

• Pour, mix, trim, fresh

#### **Illustration**

• Fringing the tunnel of light shining through the ocean is a variety of brightly coloured corals and seaweeds.

#### **Questions / Discussion**

- What is the largest coral reef in the world and where is it found?
- What makes coral reefs so unique?
- List as many different creatures as you can that live and depend on coral reefs to survive

#### Suggested Activity

 Research the reef and draw and paint as many different types of coral and seaweeds as you can, then cut them out and stick them on the bottom of the ocean mural created in the previous activity

### 8. Continue stirring until a golden sandy crust forms at the base of the trees. Spread crust with a blend of shells and crabs.

#### Main Resources/Concepts

- COASTLINES keeping beaches clean
- SHELLS and CRABS

#### **Cooking Terms**

• Stirring, golden crust, spread, blend

#### **Illustration**

 A close up view of a stretch of beach between the base of some palm trees and the foam of the surf. A blend of shells and crabs are scattered along the shoreline.

#### Questions / Discussion

- Why do we need to plant vegetation along the shoreline?
- How many crabs can you count among the shells?
- What other animals might you find along the beach?

#### **Suggested Activity**

Visit a beach and sketch any creatures or shells you find.
 Blind fold children and place a shell, sponge, coral, seaweed, sea star or any other object you might find on the beach. Get the children to describe what they are feeling and then name the object.

#### 9. Skim any oil and harmful lumps of rubbish from the ocean surface.

#### Main Resources/Concepts

• POLLUTION - oil spills, non-degradable rubbish

#### **Cooking Terms**

• Skim, oil, lumps

#### Illustration

 A wide variety of rubbish and oil is being skimmed from the clean blue ocean with a net.

#### **Questions / Discussion**

- Why is it important to always put your rubbish in the bin?
- What are some of the different types of rubbish in the illustration?
- What animals are affected by an oil spill?

#### **Suggested Activity**

- Walk around the school and pick up as much rubbish as you can find. Sort into bio-degradable and non-degradable items.
- Put and apple core in a bucket of water and a plastic bag in another bucket of water. Check regularly and record the changes over a 2 month period.

### 10. Meanwhile, freeze the freshwater. When frozen, dust with soft, white, powdered snow.

#### Main Resources/ Concepts

- ICE the melting
- SNOW how its formed

#### **Cooking Terms**

• Freeze , frozen , dust , powdered

#### **Illustration**

• The colours of the ice and snow mirror the sky and clouds ,while the branches and leaves of the snow laden trees are in contrast

The Sun shines through a frozen drip from a snow gums branch.

#### **Questions / Discussion**

• What temperature does it need to be before it will snow?

Why does ice float?

#### **Suggested Activity**

In a jug of water, place 6 ice cubes and mark the height of the water.
 Allow the ice to melt and then mark again. Compare the heights and discuss the results.

### 11. Decorate frosting with polar bears, penguins, seals and a fat juicy walrus. Keep frozen with cool clean air.

#### Main Resources/Concepts

- POLAR CAPS the differences
- POLAR CREATURES in danger

#### **Cooking Terms**

Decorate , frosting , juicy , frozen , cool

#### **Illustration**

 A collection of polar animals swim and wander on the polar caps under the Moon, Sun and Aurora Borealis

#### Questions / Discussion

- Why do polar bears need ice to survive?
- What is the Aurora Borealis?
- What other animals live at the poles?
- Investigate the length of the days and nights at the poles in winter and summer.

#### **Suggested Activity**

 List all the creatures you can see in the illustration plus any other animals that live at the poles. Sort in either the North or South Poles.

### 12. Rest the pie overnight under a blanket of sparkling stars and a sliver of moonlight.

#### Main Resources/Concepts

- MOON night
- STARS abundance in the universe

#### **Cooking Terms**

• Rest the pie, sparkling, sliver

#### Illustration

 An owl and baby turtles are pictured under a new moon and a blanket of stars.

#### Questions / Discussion

- What kind of animals come out at night to travel and hunt?
- List as many nocturnal animals as you know
- Why does the Moon look different at different times of the month?
- The Sun is only one star out of the billions of stars that exist in the universe. Do you think there are other solar systems in the universe?

#### **Suggested Activity**

 Beginning with a Full Moon draw the size of the Moon and record what time you drew it. Do this until the next Full Moon. Discuss why the Moon changes and how many days between each Full Moon.

### 13. Next day, bake with the power of the Sun until lightly browned. Cool slightly and top with frozen caps.

#### Main Resources/Concepts

- SUN solar energy
- AIR clean and cool

#### **Cooking Terms**

Bake , lightly browned , cool , top , frozen caps

#### **Illustration**

 Sunrise and a new day with slightly browned silhouettes of the land and trees. A solitary humpback whale breaching contrasts with the sunrise backdrop depicted using a monochromatic colour scheme of yellows and pinks.

#### Questions / Discussion

- How important is the Sun in the solar system?
- How can we use the Sun as an energy supply?
- How does solar energy work?
- What are the possibilities for solar energy in the future?

#### **Suggested Activity**

Explore how solar energy works and how it used today.
 Draw a futuristic solar powered car.

### 14. Serve the pie immediately with a side of love and a slice of happiness

#### Main Resources/Concepts

• POSITIVE THINKING and ACTION – how it helps

#### **Cooking Terms**

• Serve, side of ...., slice

#### Illustration

• The Earth and crystallised minerals form the base and background for this 'method'. It also is the base for the fold view of the 'pie'.

#### Questions / Discussion

- What makes you happy and why?
- What can you do that makes you feel good and also helps the planet?
- What does the author say about positive thinking and action?

#### **Suggested Activity**

 Write down as many positive and helpful things you can do to help make a healthy planet pie.

#### **FOLD OUT ILLUSTRATION**

- An aerial view of nature's 'perfect planet pie'
- The crust around the edge is the blend of shells and crabs, then the coral
  fringes the outer edge of the pie dotted with various sea creatures which
  were featured in the book, followed by a thin line of blue which can be
  either the water or sky.
- An aerial view of the trees and the animals that live there make up a big part of the pie's filling and in the centre the big blue ocean and its creatures are featured.
- Finally topped with a polar cap and animals.

#### **Information Pages**

Three pages of additional information about each ingredient/resource is listed in the back of the book and is also discussed in the "Helpful Hints" box on each double page. Both scientific and environmental topics are looked at.

The final page looks at how people can do practical things to help make their own 'planet pie'.

#### **Overall Book**

#### Questions / Discussion

- Who is the author and illustrator?
- What medium has the illustrator used? (Refer to the photo on the back cover which shows a silk painting from the book in progress)
- What is your favourite illustration and why?
- What would you put in your own 'planet pie'?

#### **Recommended Websites**

www.googolpower.com
www.benefits-of-recycling/globalwarmingforkids
www.information.org
www.olliesworld.com
www.sustainability.org.au
type in SUSTAINABILITY FOR KIDS and look for the
www.youtube.com and view over 250 videos suitable for children

#### **Author/Illustrator Background**

Kim Michelle Toft has been drawing since the age of 4, her love of art has stayed with her throughout her 'colourful' life. Spanning over the past 48 years Kim has been a teacher in far North Queensland, a graphic designer living on the beach in Adelaide, South Australia, a full time marine and silk artist based in beautiful Northern NSW and for the past 18 years a celebrated author and illustrator, still living in beautiful Northern NSW. Her multi-award winning environmental children's books are quite unique as they are illustrated with hand painted silks. Kim's silk paintings are sold worldwide and have been purchased by some very famous people including the late Morris West, Mick Jagger and Jerry Hall.

#### Kim's Environmental Picture Books

All Kim's books have a strong environmental focus and reflect her love of the ocean and the coastal habitats which support it. The combination of interesting, interactive prose-style text and stunningly detailed hand painted silk illustrations have made her books internationally and nationally renowned, winning many coveted awards including-

One Less Fish – Honour Book – Children's Book Council of Australia 1998

The World That We Want - Honour Book-Green Earth Book Awards, USA 2006

A Sea Of Words – Notable Book – Children's Book Council of Australia 2007

Tick Tock Tick Tock What's Up Croc? – Whitley Award for Best illustrated

Children's Book - Royal Zoological Society of NSW 2010

All Kim's books are still in print, which is a testament to their quality.

Her past titles include:

- One Less Fish (UQP)
- Neptune's Nursery (UQP)
- Turtle's Song (UQP)
- The World That We Want (UQP)
- Reef Superstar (Brolly Books)
- A Sea of Words (Silkim Books)
- The Twelve Underwater Days of Christmas (Silkim Books)
- Tick Tock Tick Tock What's Up Croc? (Silkim Books)
- Recipe For Perfect Planet Pie (Silkim Books)

Silkim Books was set up by Kim 8 years ago, publishing the last 4 books. Each book takes approximately 18 months to 2 years to research, draw, paint, design and produce. One hand painted silk illustration takes 2-3 weeks to produce and an original silk can measure up to 2 metres x 1 metre!

Kim visits thousands of children each year throughout Australia spreading the environmental message as well as demonstrating and teaching her unique illustration style – silk painting.

If you would like Kim Michelle Toft to visit your school please go to her website to make an enquiry visit **www.kimtoft.com.au** or email Kim directly info@kimtoft.com.au

**Recipe For Perfect Planet Pie** is Kim's 9<sup>th</sup> book. She is already working on her next two books, *The Forgotten Sea* and *Coral Sea Dreaming : The Picture Book*.

#### **Author Motivation**

"Being surrounded by nature has always sustained and nurtured me. Whether it's diving under the waves, snorkelling on a coral reef, hiking through a rainforest or swimming under a desert waterfall, all of nature's wonders continually motivate me to write and illustrate books about their preservation.

Climate change and its causes are very current and controversial topics and no matter what your personal opinion, it is still important to create a healthier planet by conserving forests , planting more trees, aiming for cool clean air and oceans and protecting animals and their habitats. By looking at and using cleaner renewable energy supplies we can go a long way to achieving this. Each day we can also put practical things into place like recycling, conserving water and electricity and planting lots of trees.

This book is intended to be an introduction for children to look at different ways we can help create a healthier, happier planet.

The idea for the book began with my love of nature and the title.

The concept of creating a recipe using nature's natural resources as ingredients followed. I love to cook and using cooking terms also seemed like a 'fun' way for kids to examine some very serious topics, such as, global warming, renewable energy supplies, sustainability and conservation.

I wanted the recipe to build to the end result which is the fold out of the aerial view of the pie, using all the resources/ingredients which featured throughout the recipe.

I always enjoy researching and providing additional information for the children to extend their knowledge. My goal is to get kids thinking about positive ways of helping this planet. Children are our future and therefor it is them who will ultimately make 'greener' decisions and create a better place to live.

My wish is that this book is put into every school in the world."

Kim Michelle Toft

#### **Marketing and Selling Points**

- For ages pre-school to middle-upper primary
- Clever text and stunning hand painted silk illustrations
- Topics which are both politically current and environmentally relevant
- Bonus full colour fold out ending
- Three pages of child friendly information, ideal for research
- Kim Michelle Toft's record for producing excellent educational, environmental and visually beautiful children's books. All still in print.