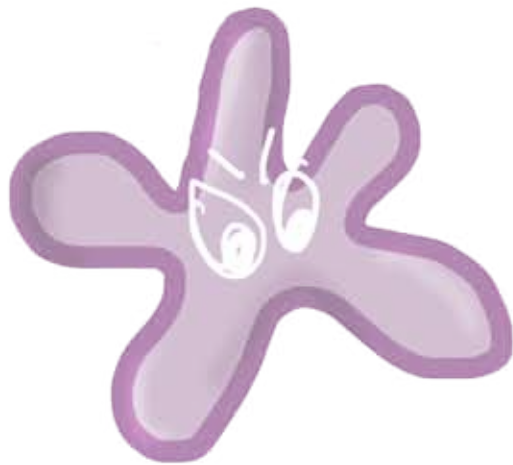


Disease, Prevention & Control

Reference book on Malaria for children



Project 3

Visual Communication

Guide : Prof. Mandar Rane

Shiba Sheikh

VC 08625805

11.06.10



Motivation

- Personal interest in Public Health
 - Designing for people
 - Children
 - Illustration & Writing
- Prevention, Control & Awareness
Application
Learning
Discovery

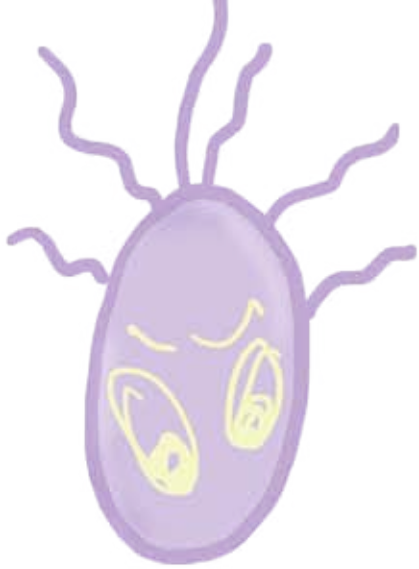


Back Ground study

Primary	Doctor's	Concept of Health, Factors affecting health
	Health Officers	conditions, Indian Health care Delivery
	Books	system & Public Health
	Web	
	Published Papers	

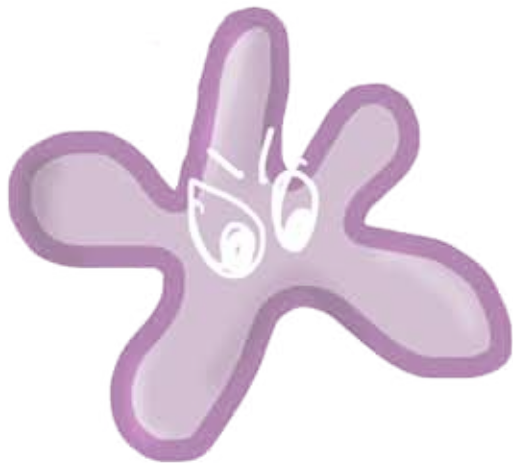
Secondary	Meeting Children	Interpretation of concept of Health & Disease, Gauging level of awareness, Immediate influences
------------------	------------------	---





Problems Identified

- Short term damage control policies in place to serve immediate concerns
- Long term, sustained goal of educating people is yet not rigorous
- Public health to be taken seriously
- Health Education in schools should be a part of their systemic curriculum





Children

- In order to achieve the long term goal of understanding the value of healthy living, concepts must be clear from a young age.
- Children have a right to understand and learn about their body and the make informed choices as adults.
- Behaviour is more easily controlled and developed in young
- Knowledge will empower them to become active members of the community thereby bringing about a positive social change for the future





Learning in Schools

Learn about Nature & Animals. People & shelter. Environments. Food & Water. How different cultures consume both. Saving water. Transportation and different professions. Empathy towards other.

Continuation of learning about different animals. Different families and their traditions. Water conservation and what can be done to prevent it from wastage.

They learn about digestion as a process, what happens to milk, eggs in the body and how much time it takes to digest. Spoilage of food due to fungus and bacteria. Conservation, saving & wastage. What is Malaria? what is a blood test?

Matter, elements & compounds. What is an ecosystem? Pollution & acid rain Chapter on Health & Hygiene is introduced. Deficiency diseases and how they occur like Anaemia, Scurvy & Goitre. Deeper understanding of what is Bacteria and Fungi

Learn body process's. Concept of a cell and what it comprises of. Digestion, Circulation & Respiration covered in detail.

3rd

4th

5th

6th

7th



Diseases, Prevention & Control

- Children at this age are learning multiple new concepts which are isolated from each other due to the methods used in school
- Due to the pressure of keeping curriculum simple and precise yet covering major subjects, a lot is discussed only briefly.
- Disease, prevention and control is introduced during the latter years of schooling.
- They are very much capable of understanding complex ideas of global warming and the web of life.
- Children have half baked information about a lot ailments that even they themselves have experienced leading to inaccurate information which they sometimes even share with friends.
- They are curious and are willing to learn more if interest is generated in certain subjects.

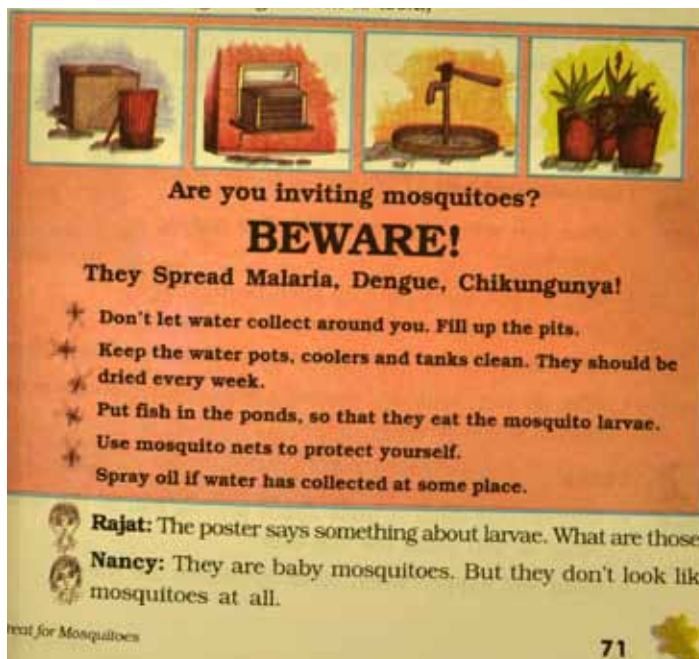




Science textbooks



Activities to do and observe



Illustrated drawings & posters

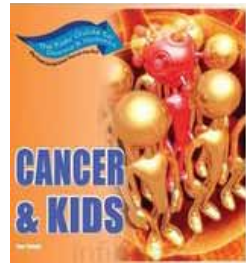
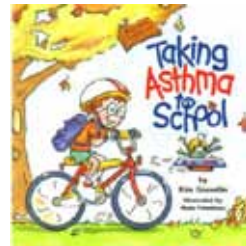
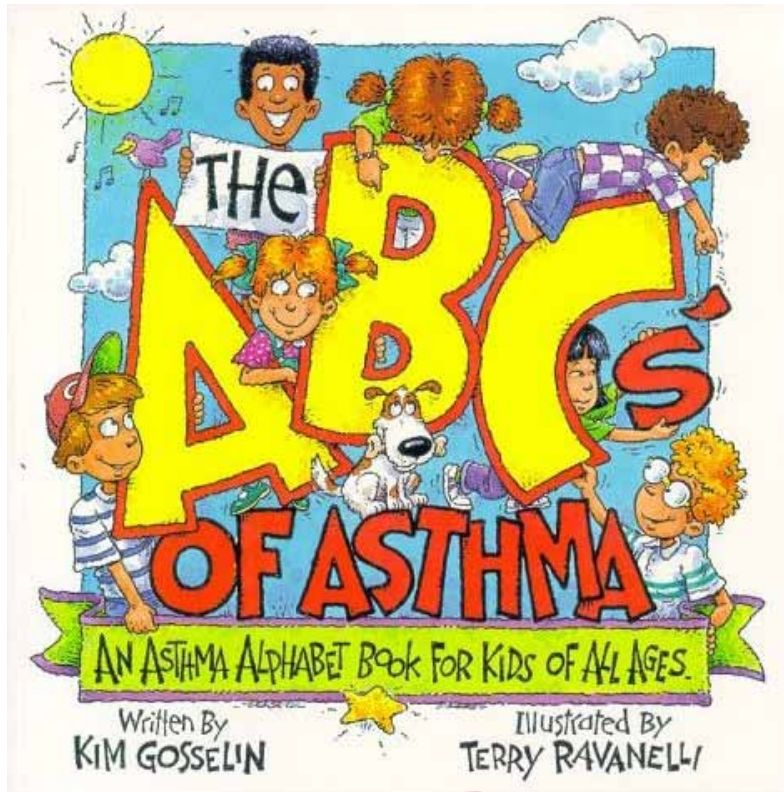
Food item with plant as the major source	Ingredients/source	Plant part which gives us the ingredient
1. Brinjal curry	Brinjal	Fruit
	Chilli as spice (any other)	Fruit
	Oil from groundnut, mustard, soybean, any other plant	Seed
2.		

Tables and charts

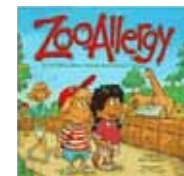
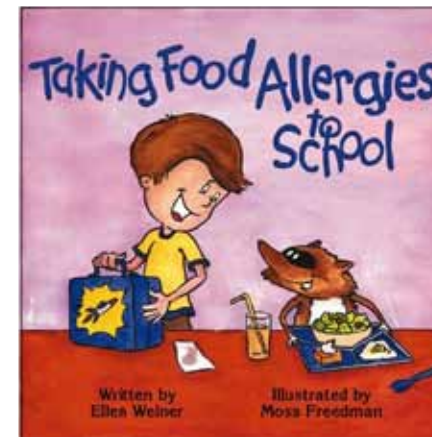
Body Part	Movement			
	Rotates completely	Rotates partly (turns)	Bends	Lifts
Neck	Yes			
Wrist				
Elbow				
Hand				
Foot				
Toe				
Back				
Head				
Elbow				
Arm	Yes			



Material on diseases in schools



Material on diseases in Book stores



Idea!

Popular misconception to not talk about a sickness or ailment to children assuming that they are hard concepts to understand and grasp.

Hence, A book on diseases for children.

A comprehensive compilation using illustrations and a narrative to help children learn and discover.



Plan of Action

To introduce a series of books for children, one book on each disease. Each book will follow a structure which will be common to all in the series.

Key words : Engaging, Informative, Factual, Fun, Colorful & Child Centric.



Process

A list of 10 diseases was identified which was short listed. They were on the basis of what children at a certain have already experienced or have heard of. Also to cover the spectrum of communicable and non communicable diseases.

Fever

Common Cold

Malaria/ Dengue

Typhoid/ Jaundice

Polio

Anaemia

Chicken Pox

TB

Cancer

Heart Attack

Diabetes

Swine Flu

From which one was selected to detail out the structure and analyse how the information would flow and book would take shape. Based on which the same model would be then applied to the rest of the diseases.



Malaria

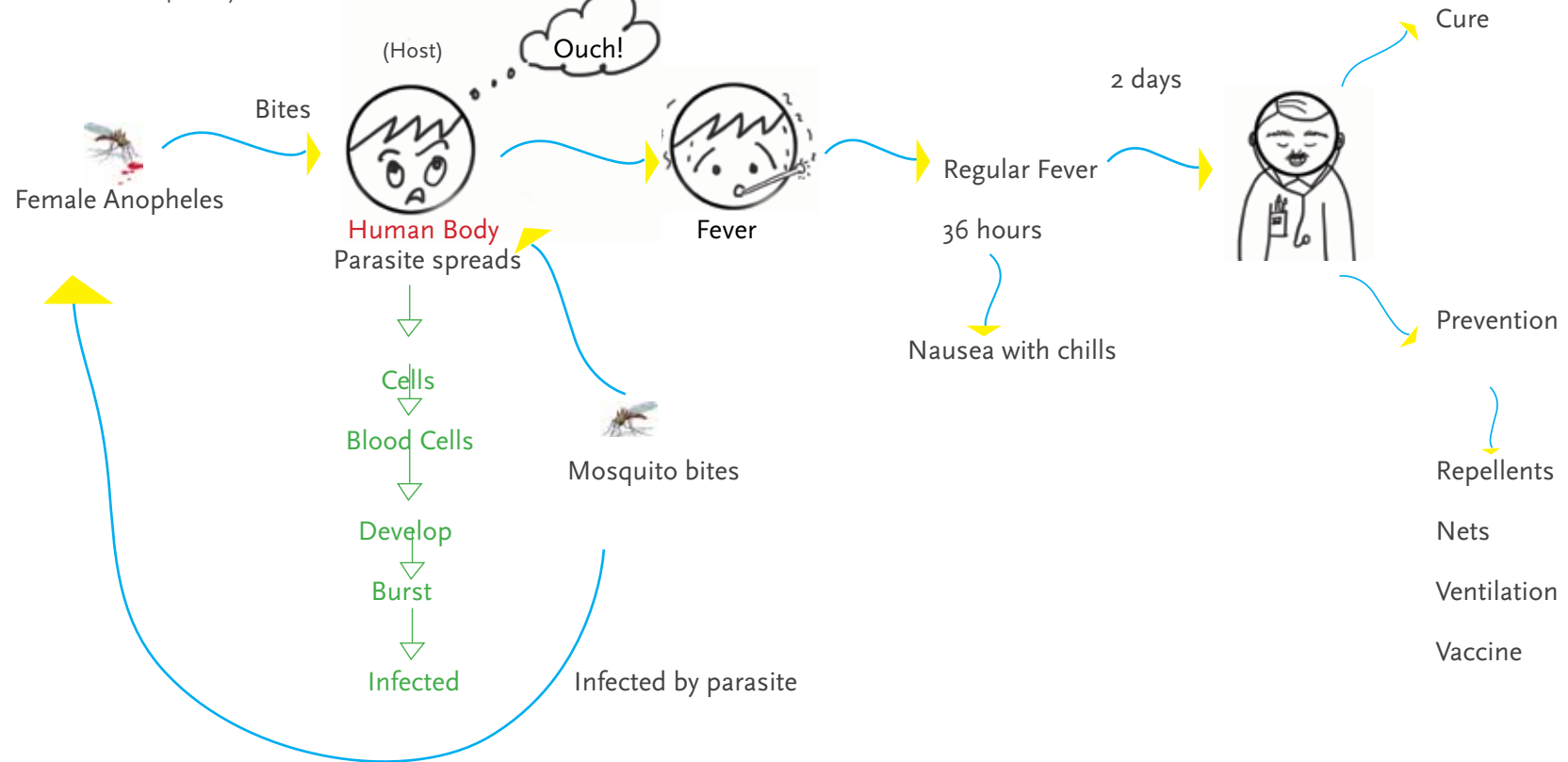
Taking Malaria as the example the content was detailed out. There are five important aspects that need to be covered while talking of any disease.

1. Agent
2. Host
3. Mode
4. Incubation Period
5. Environment

Based on this information any diseases can be easily identified. Prevention and Cure is also necessary in learning about each disease. Hence a short abstract about the disease was written to identify the above mentioned criteria.



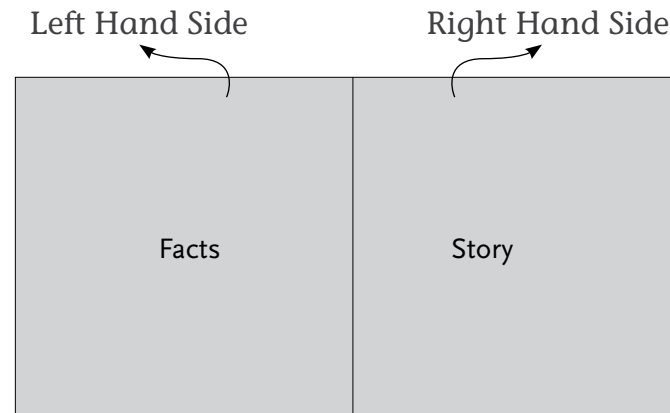
(Carrying Malaria parasite
Plasmodium Falciparum)



Design Idea

A book which has a narrative which decides the flow of content. A combination of a story based on the disease and factual data which is represented alongside.

Disease causing agent plays the role of the lead character and takes a child through the entire process of a disease.



Type of Book

The children's books category can be briefly divided into the following sub categories :

- Fairy Tales
- Picture Books
- Activity Books
- Work Books
- Young Reference ————— Book is a combination of story and facts
- Young Fiction
- Pre School & Toddler



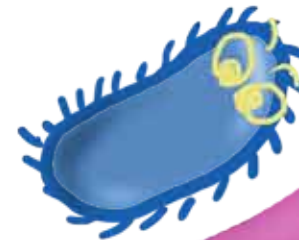
Story

Sui, A young curious anopheles mosquito who begins to learn about being a mosquito, how to look for humans to bite? who are her natural enemies? How does she spread diseases? Why do only female mosquito's need blood to feed on?

The story addresses all dimensions to understanding the disease and the life cycle of a mosquito.

Naming the Character

Mosquito's point of view



1	2
---	---

“Ahek” “Ahek” “
Harummm”
“Fly” “Fly”
“We must evacuate
Immediately”

3	4
---	---

The wandering mosqui-
toes, once again looking
for a new home.....

What is a mosquito?
Different from a fly?
Origin. Evolution

5	6
---	---

There search ended by a
small muddy pond in a
garden. It was damp and
dark, just what they were
looking for.....

Anopheles?
Species
Weather?
Parts of the world.

7	8
---	---

“I am starving” grum-
bled one of the female
mosquitoes. “Where do
we go looking for food!”
.....

Difference between male
& Female?
What do they feed on?
Body Parts?

9	10
---	----

They then set out looking
for the closest colony of
humans.
“Lets split up, you two
head to left, you to the
right and sui follow
...me”

Dusk and Dark they
move out
Lay eggs,
How do they breed?

11	12
----	----

Sui and her partner
landed on a dimly lit
balcony packed with
creepers and potted
plants. “

Places where they are
ideally found in a home
environment



13	14
----	----

As soon as they were about to spring over they heard a rustling sound closing in on them from the back.....

Natural Predators of the mosquitoes, Dragon Fly. Guppy Fish. Flight of the mosquito. Speed at which they fly

15	16
----	----

Traumatized Sui leapt across the balcony and landed straight into what appeared as a closed dark room. me"....

Nature's balance continuation.
Compound eyes

17	18
----	----

"Alright then this is how its done, look for exposed parts of the body. Don't go close to the face because they can see you...

How do they bite?
The saliva...

19	20
----	----

" Now off you go, while I look for some more people"
Sui followed instructions carefully and finally was about to make the

Where do they mostly bite?
Co2 released ares they are attracted to. to certain smells.

21	22
----	----

" Enough sui. He is about to wake up. Before he switches on the light lets go."

How does the bite look? Do they bite other organisms?

23	24
----	----

Sui soon learnt the tricks and could find multiple people to bite in one night.....

Nuisance? Why? Itch. Irritation

25	26
----	----

After a few weeks she went back to the same man she had first bitten. She at once recognized him.....

What is a disease? How do you know when someone is sick or has a disease? What do you do?

27	28
----	----

"The blood test results show he has Malaria" he said. "We need to treat him immediately with medicines.....

Doctor Hospitals Some diseases cannot be discovered hence blood test.

29	30
----	----

" What is Malaria?" she asked.....

What is Malaria? Different from other diseases

What is a virus?

31	32	33	34	35	36
----	----	----	----	----	----

Sui learnt more from her group mates not just about herself but also about other mosquito families and their whereabouts.

Prevention methods

The time came for the wandering mosquitoes to again look for a new home. Sui and her new family left the pond.....

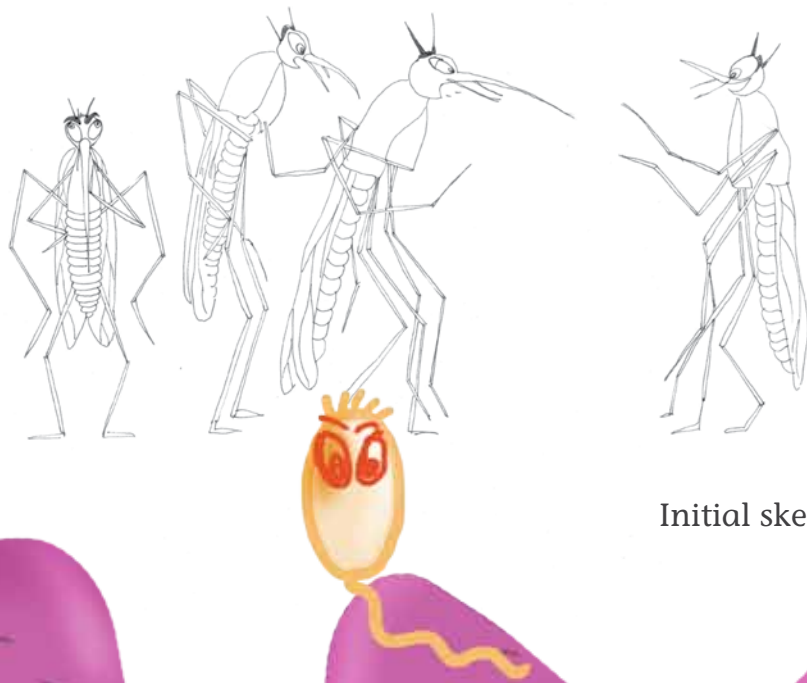
The time came for the wandering mosquitoes to again look for a new home. Sui and her new family left the pond.

Places affected around the world
Cycle of malaria

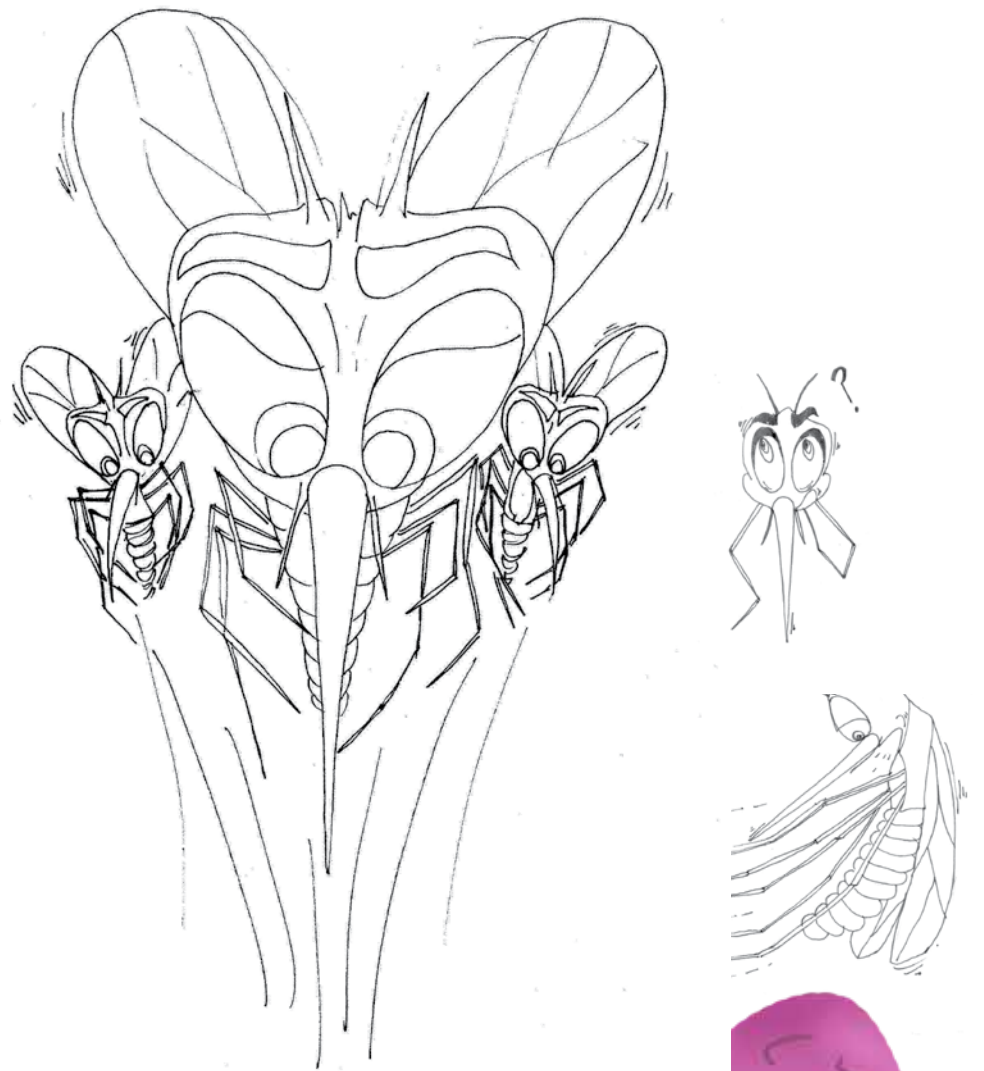


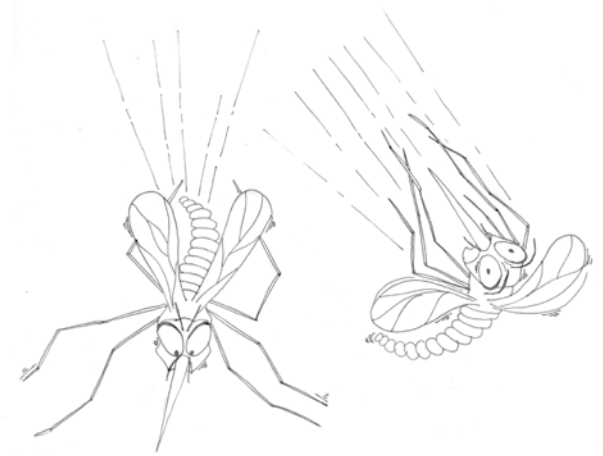
Illustration style

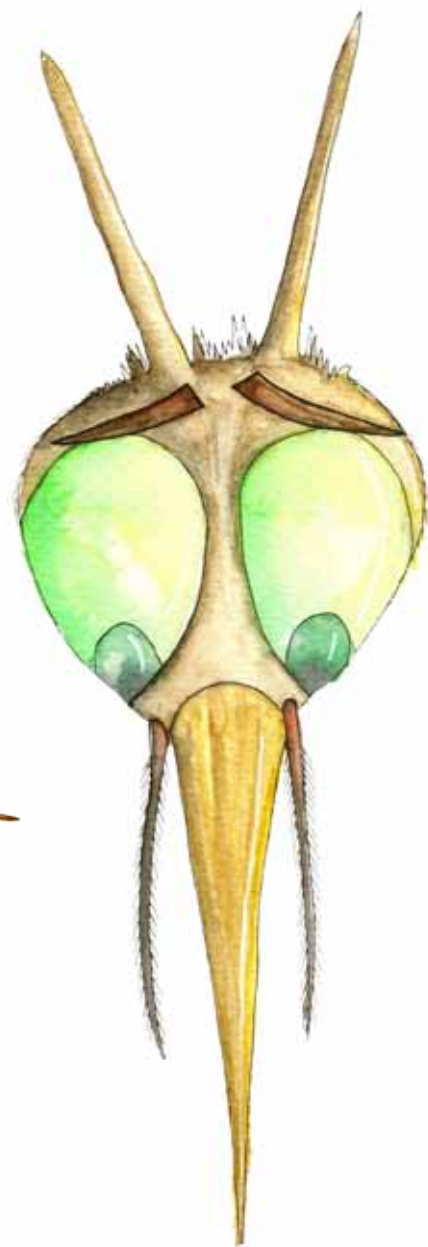
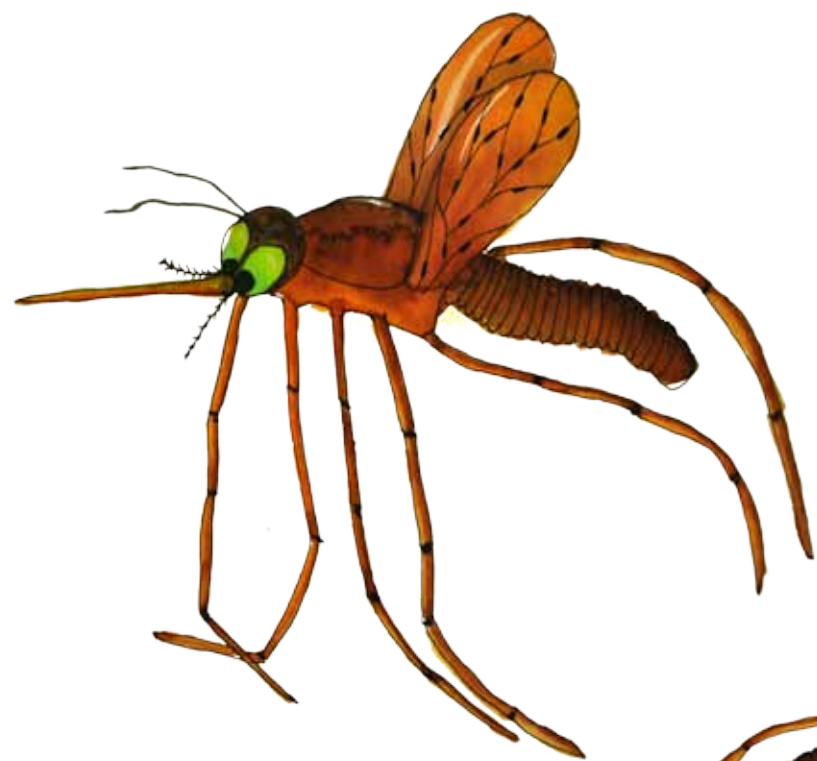
From the number of styles initial explorations were done in water colors & photo inks. The final art works were made on the computer.



Initial sketches

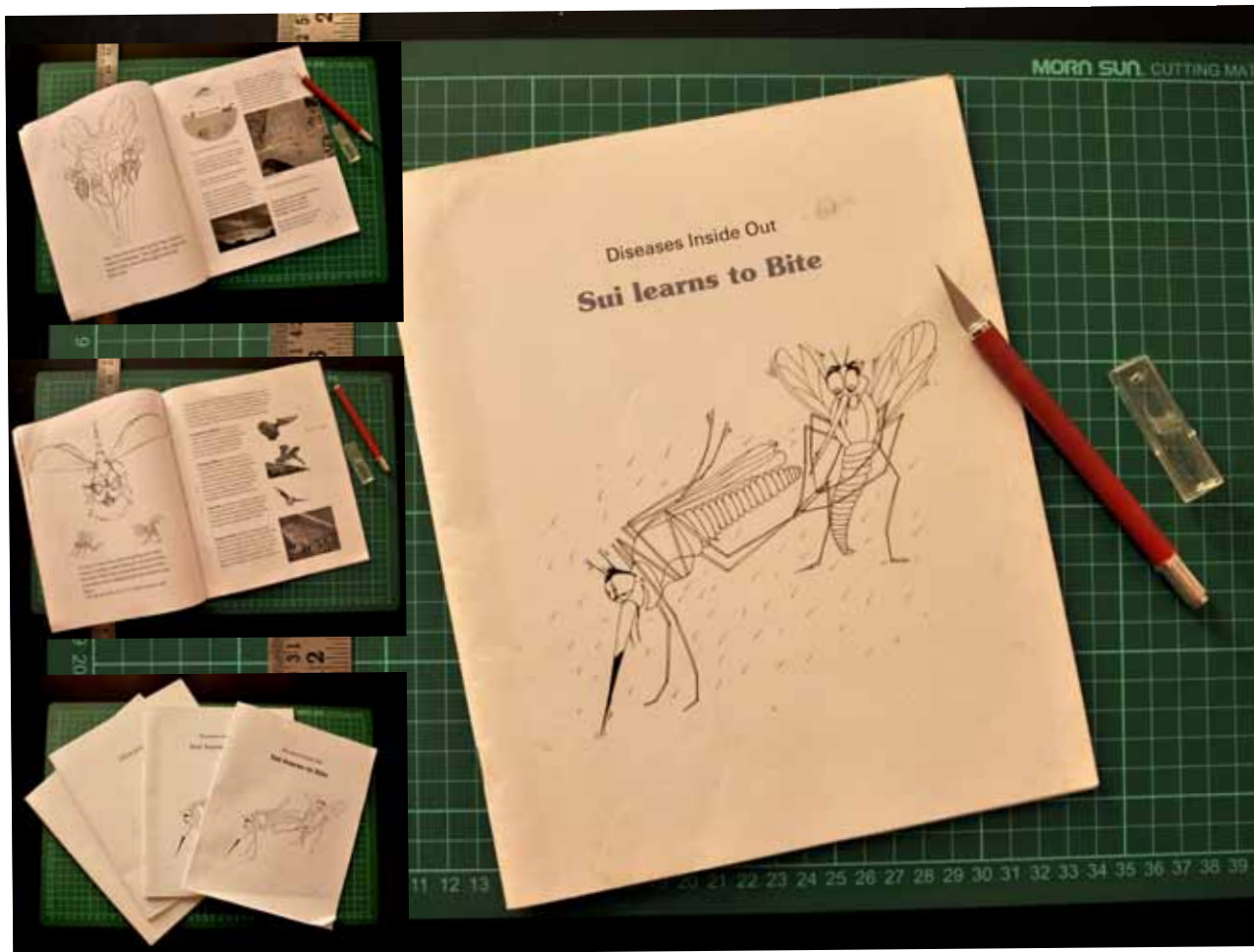












Book Size:

20.5 cm/ 25.5 cm

Font : Body Text

Stone serif informal

pt size 10.5

Body Text 2

Stone serif informal

pt size 10

Title Text

Stone Sans Bold

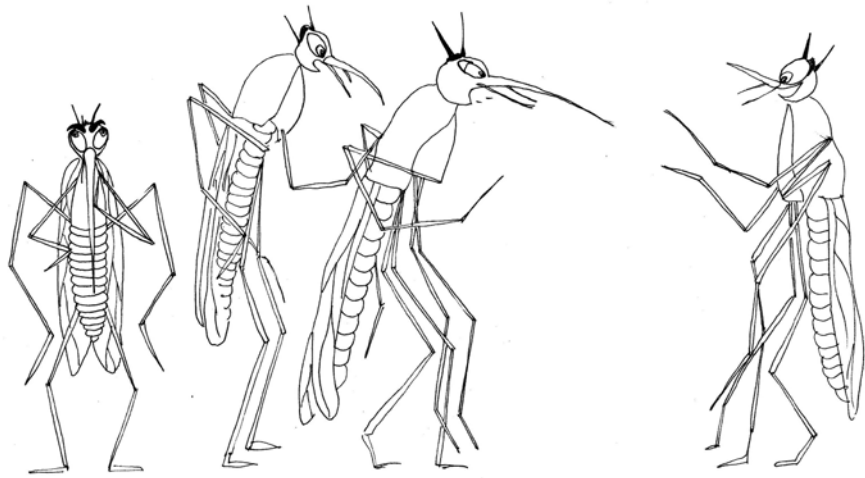
pt size 14

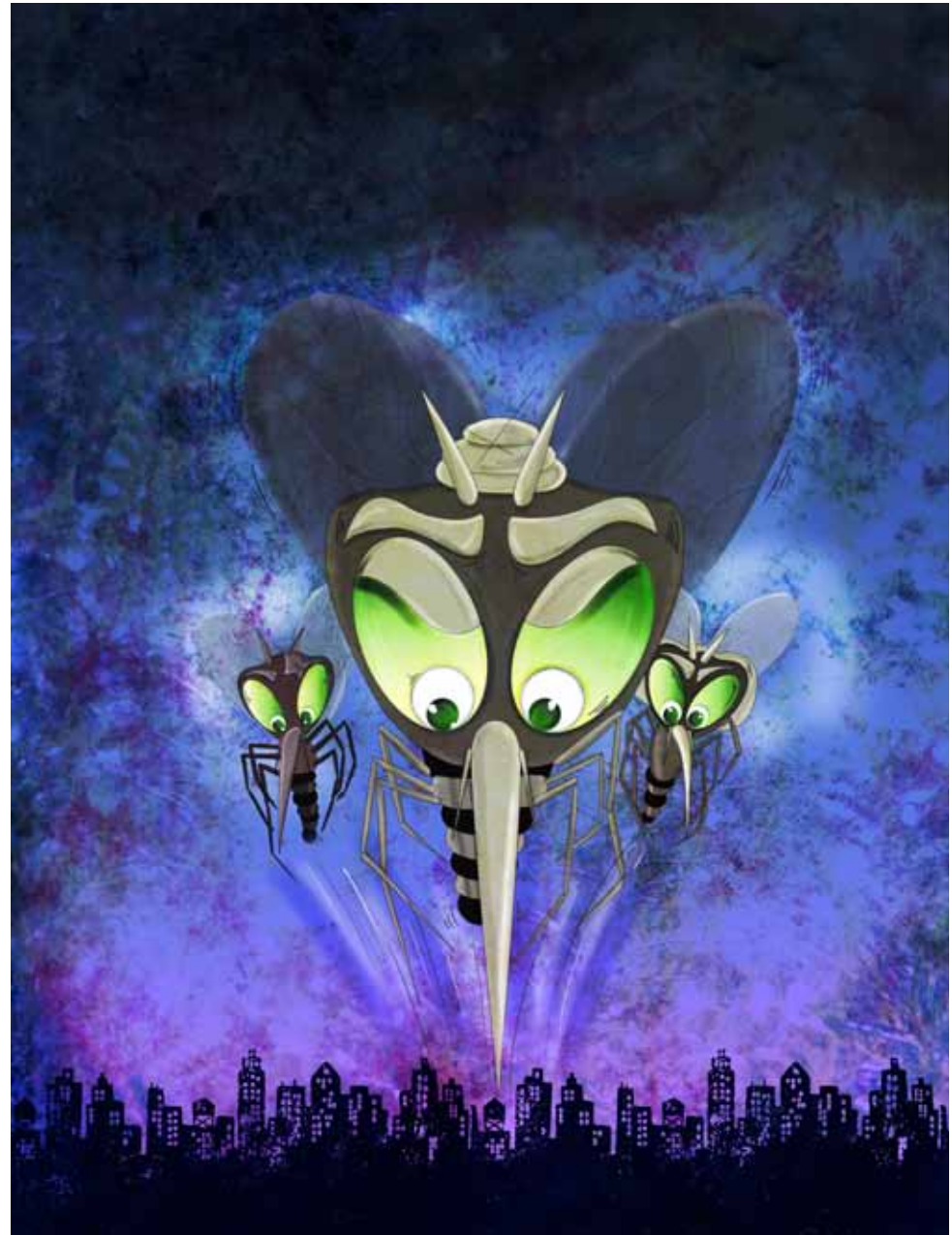
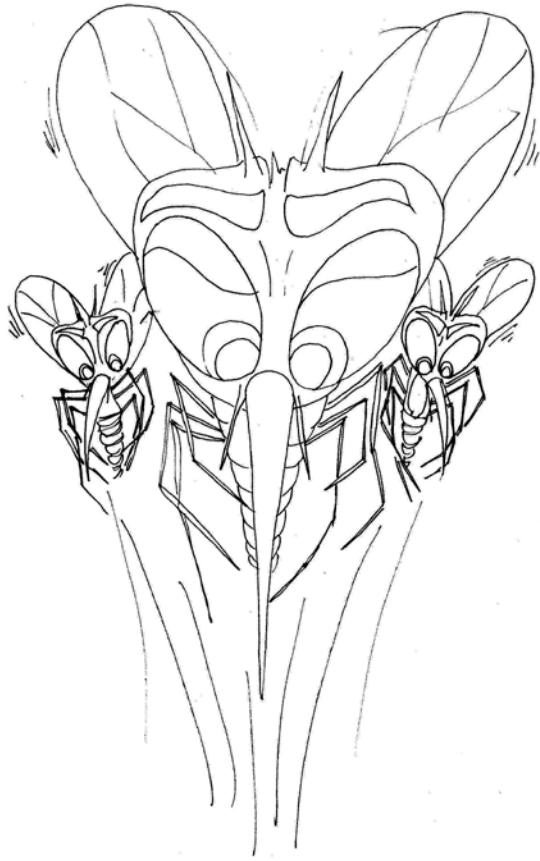
Title:

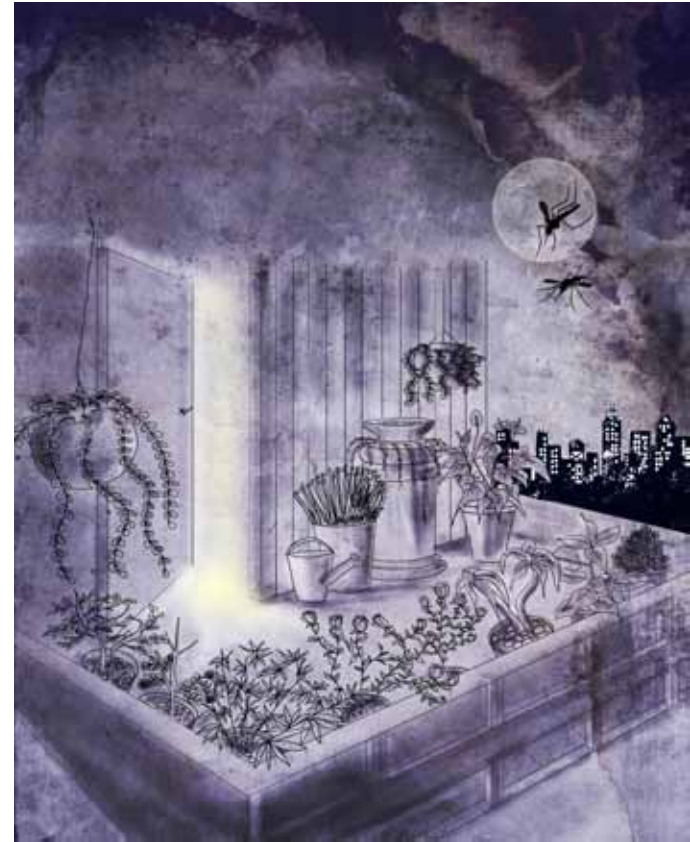
“Sui learns to bite, Diseases inside out”


Pages: 40

Category: Young Reference Book









As soon as they were about to spring over they heard a rattling sound coming in on them from the back.

When they turned there back to their pure shock was a roving dragon fly about to get them—
"Fly for your life, Sui!!!!!! as fast as you can"




There are a number of insects and small animals that are natural predators of the mosquito. To help appreciate these animals it is best to know how they can help to reduce the number of mosquitoes. That way, instead of treating them like another annoyance, we can encourage them, to a certain degree, to help to control the pesky mosquitoes.

Carabididae Beetles also known as the mosquito fish. According to some studies, a single mosquito fish can eat up to 30 mosquito larvae in half an hour and a maximum of 100 in an eight hour period.

Dragon Flies often referred to as "mosquito hawks" for their apparent ability to kill thousands of mosquitoes. Though they do consume their fair share of mosquitoes, dragonflies like most natural predators of mosquitoes do not consume enough mosquitoes to cause a significant impact on mosquito populations in the wild.

The Bat is another natural predator of the mosquito that is often described as a voracious mosquito eater. In reality bats like other natural predators of the mosquito are opportunistic feeders.

Frogs, toads and their young called tadpoles are often found as excellent for mosquito control. In reality, while they do consume their fair share some species it is not enough to seriously put a dent in most mosquito populations. When frogs and toads do consume mosquitoes

Left hand side
Facts

Right hand side,
Story

If you must have noticed, most of the times we get bitten by mosquito's at night or late evening. Reason being, the peak feeding hours are from dusk until dawn, mosquitoes actually being nocturnal.

*They can be classified as :
Crepuscular (active at dusk or dawn) Nocturnal (active at night), Endophagic (feed indoors) & Exophagic (feed outdoors)*

Life Cycle

All mosquitoes go through a life cycle of four stages, to wit egg, larva, pupa and adult. To begin the cycle a female mosquito first has to obtain a blood meal. Just one blood meal supplies enough nutrients for the mother mosquito to produce up to two hundred and fifty eggs at one time.

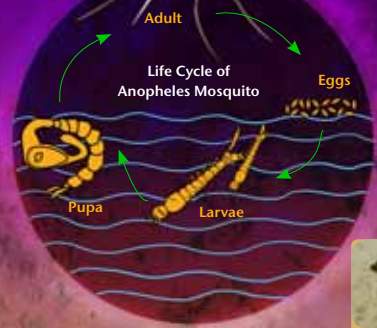
Adult: The duration from egg to adult varies considerably among species and is strongly influenced by ambient temperature. Mosquitoes can develop from egg to adult in as little as 5 days but usually take 10-14 days in tropical areas



Pupa: The pupa is comma-shaped when viewed from the side



Larva : Mosquito larvae have a well-developed head with mouth brushes used for feeding, a large



Egg : Adult females lay 50-200 eggs

They then set out looking for the closest colony of humans. "Let's split up, you two head to left, you to the right and I follow me"



Thank you!



