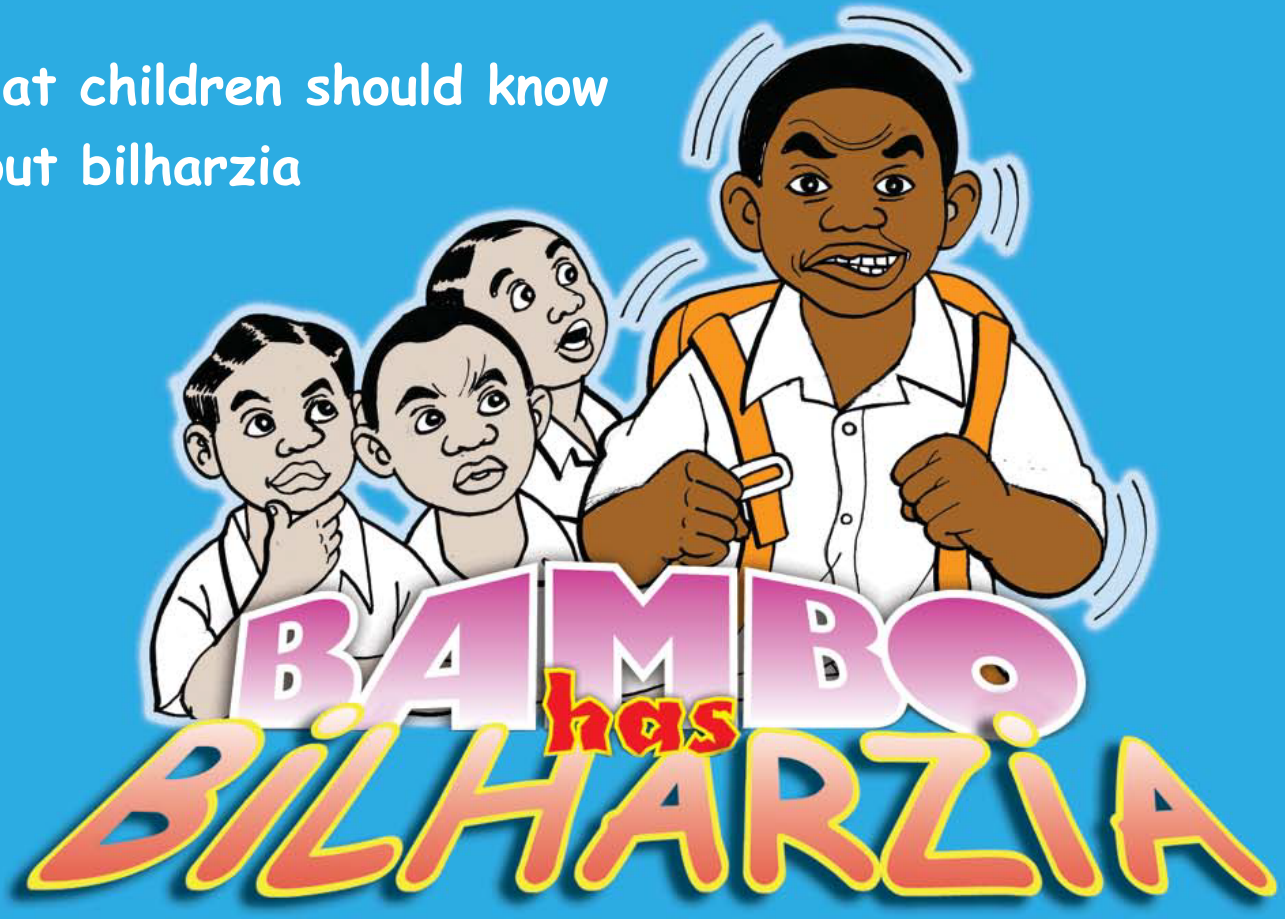
What children should know about bilharzia



World Health Organization

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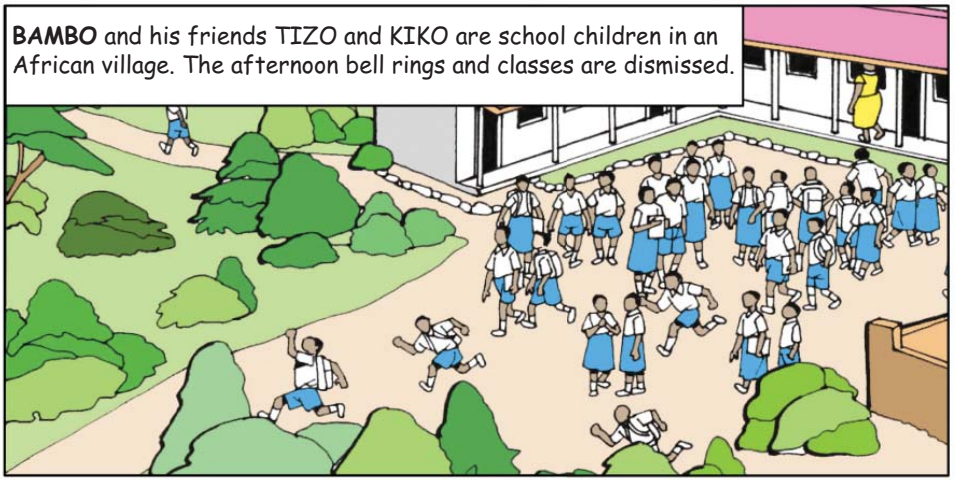
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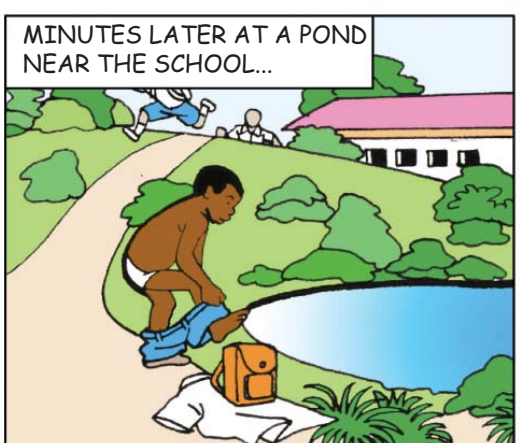
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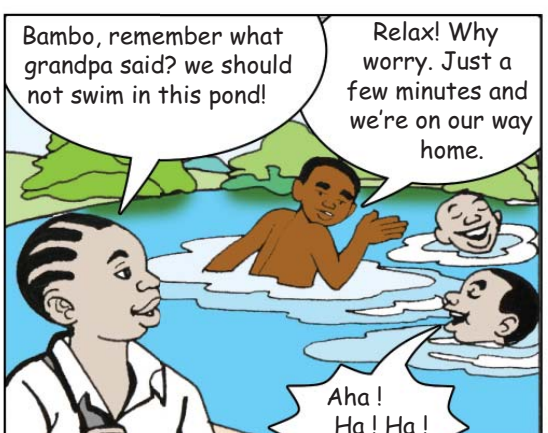
**Formerly published under the title: Bambo has schistosomiasis: what children should know about schistosomiasis

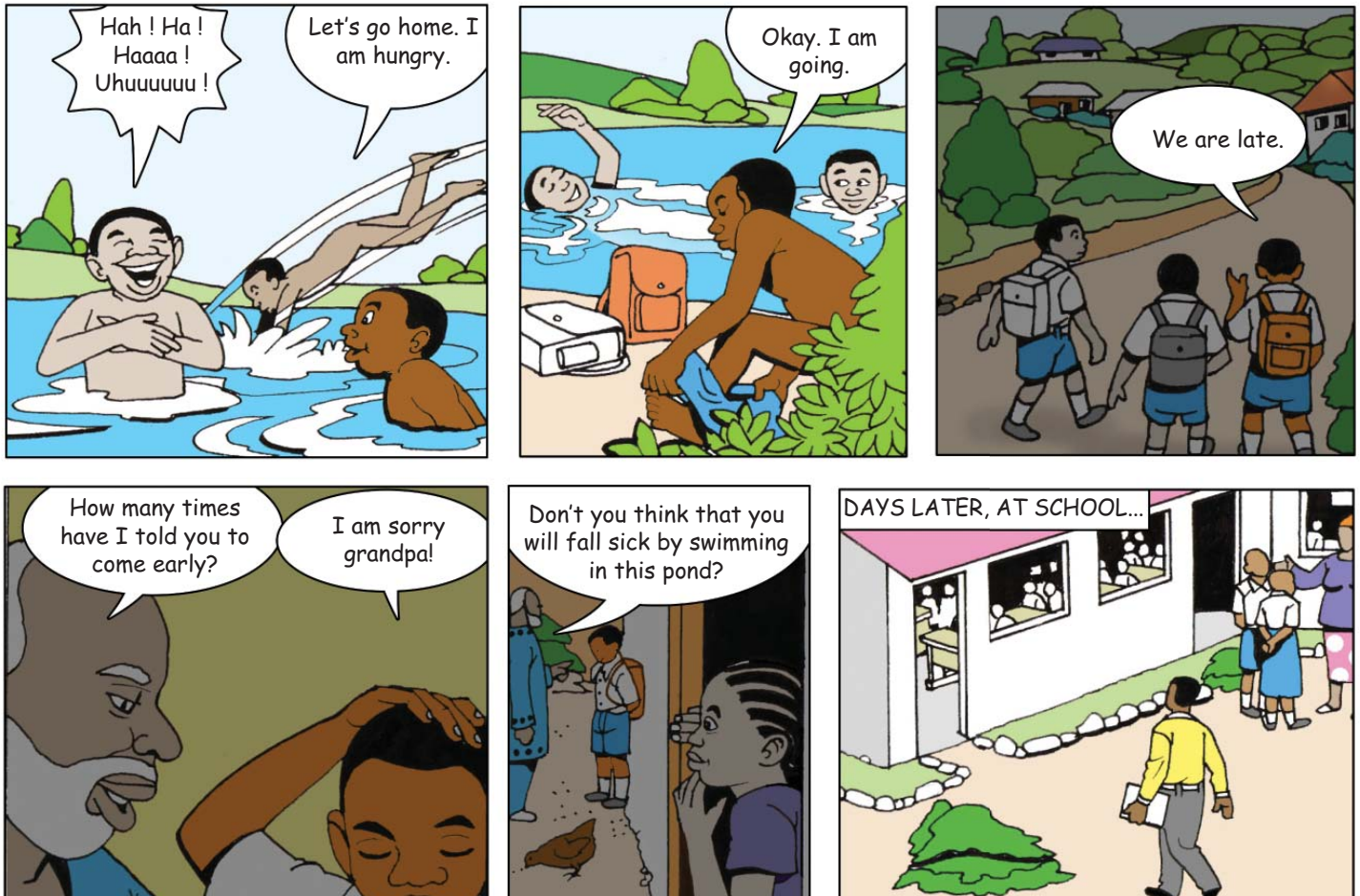

BAMBO
has
BILHARZIA


BAMBO and his friends TIZO and KIKO are school children in an African village. The afternoon bell rings and classes are dismissed.

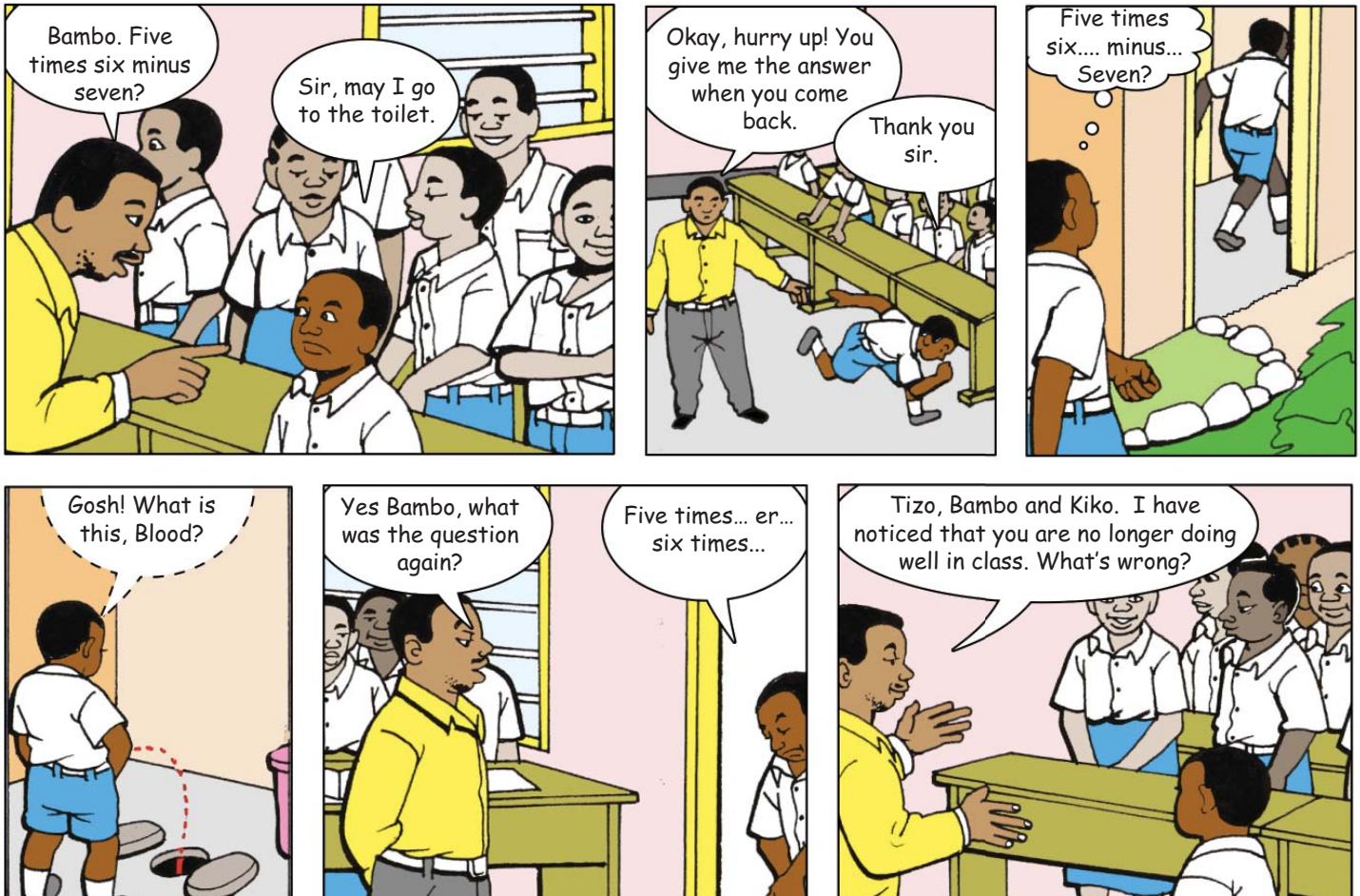

MINUTES LATER AT A POND NEAR THE SCHOOL...


Uhuuuu !
Uhuuuu !

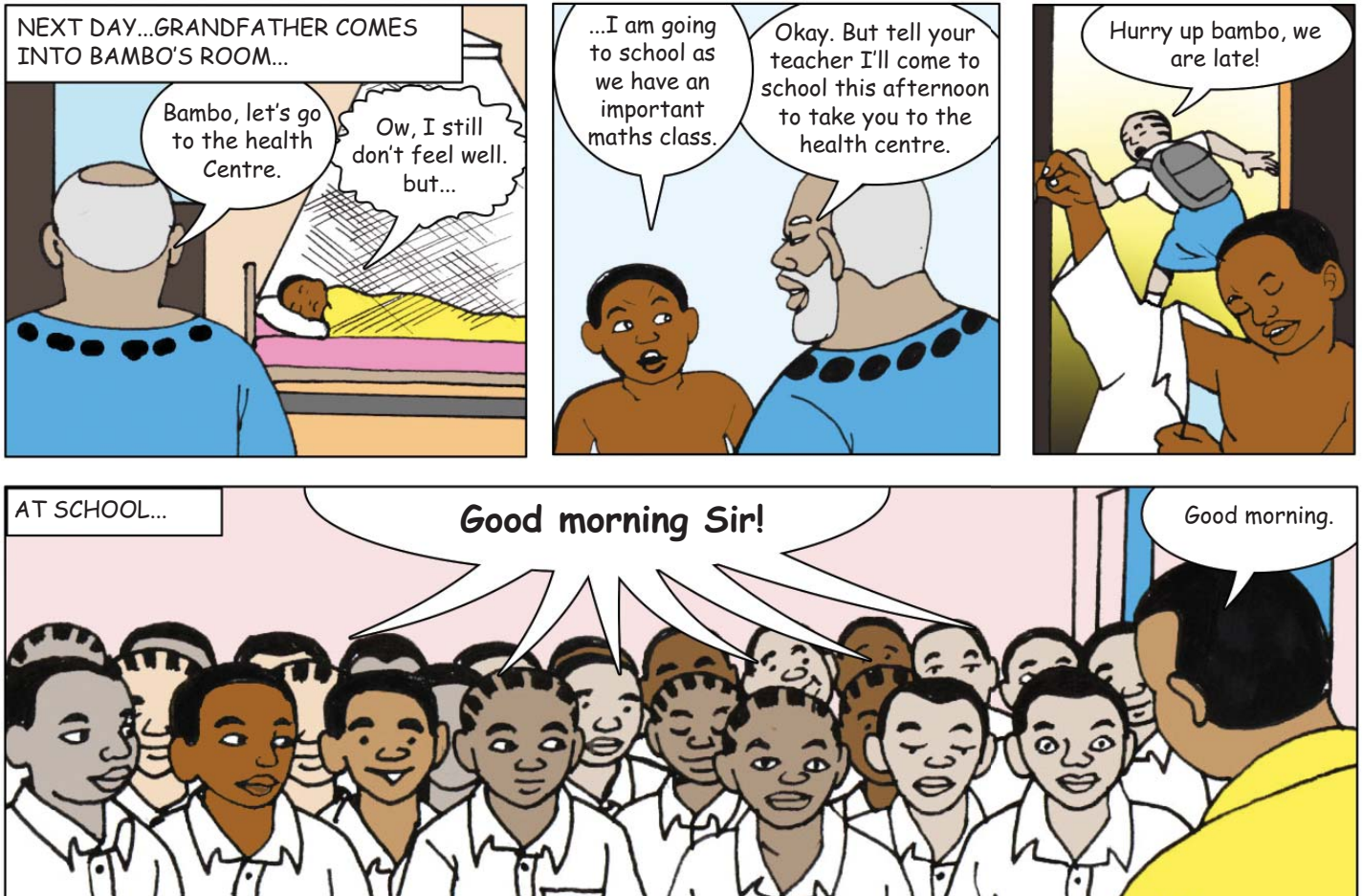

Bambo, remember what grandpa said? we should not swim in this pond!
Relax! Why worry. Just a few minutes and we're on our way home.
Aha !
Ha ! Ha !


Hah ! Ha ! Haaaa ! Uhuuuuuu !
Let's go home. I am hungry.
Okay. I am going.
We are late.
How many times have I told you to come early?
I am sorry grandpa!
Don't you think that you will fall sick by swimming in this pond?
DAYS LATER, AT SCHOOL...

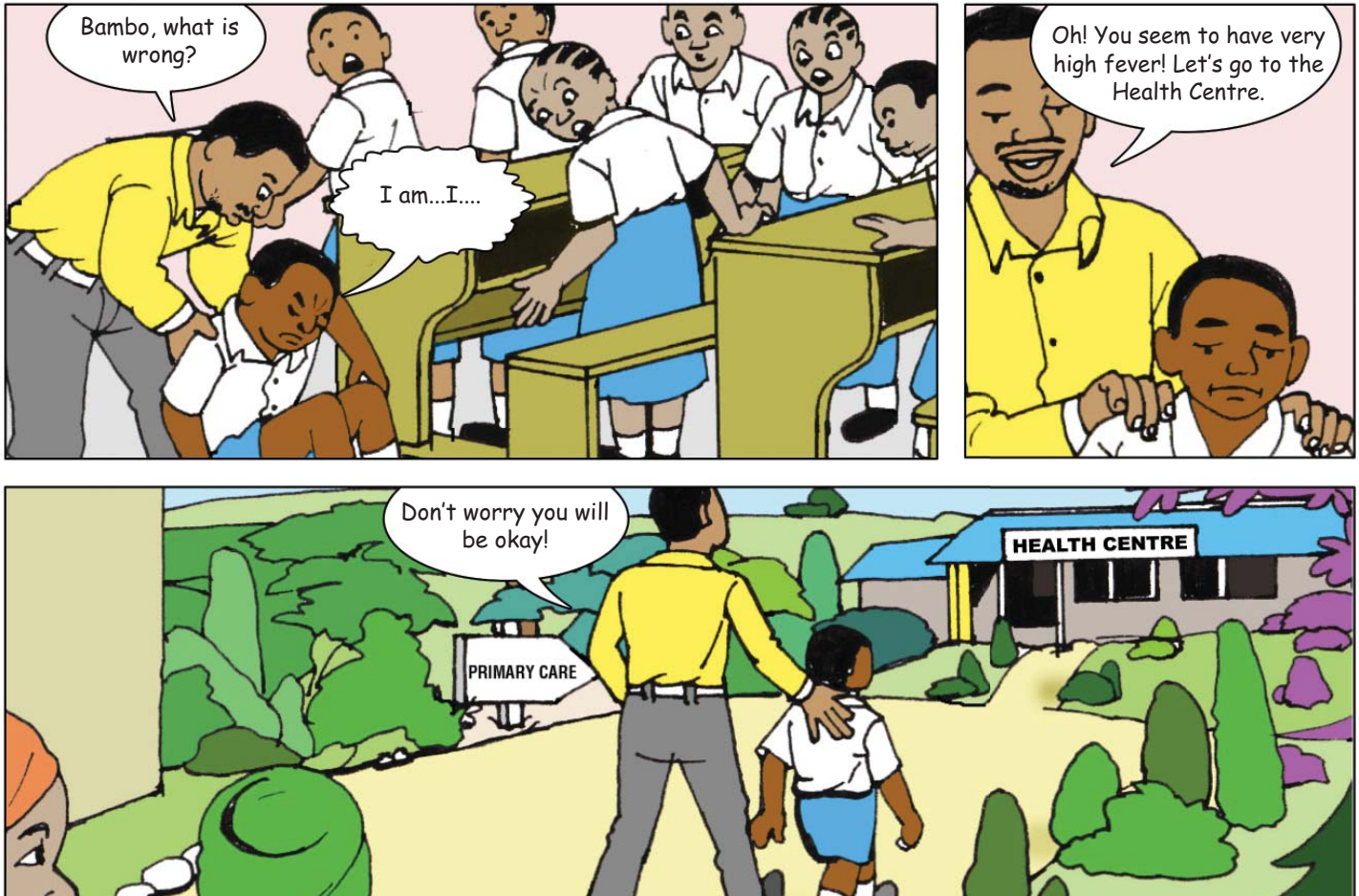

Good morning children!
Good morning sir!
Now we are going to learn about...
hey, Bambo what is wrong with you?
Well, nothing!
Okay, all of you stand up, please, time to practise mathematics.

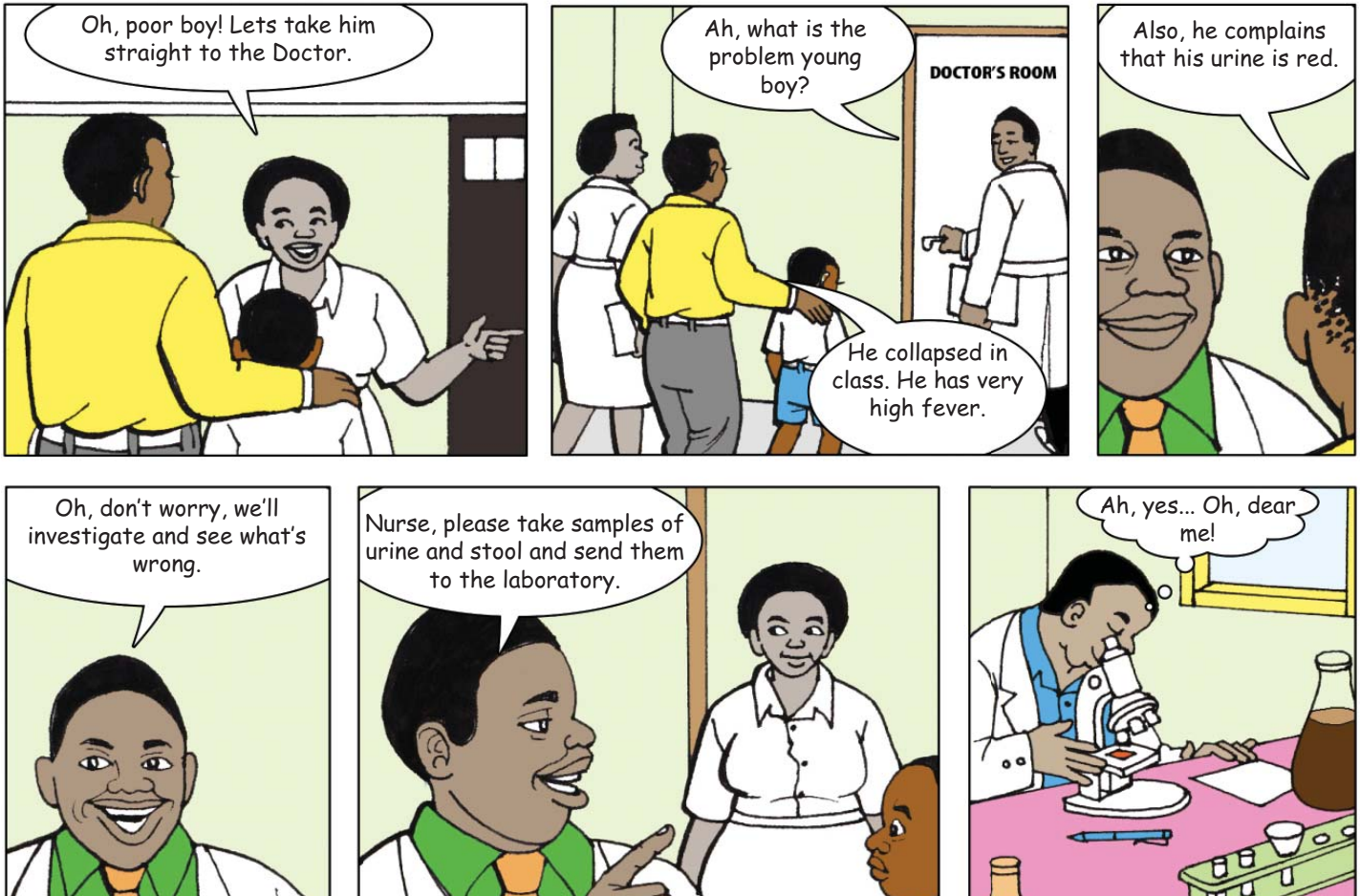

Bambo. Five times six minus seven?
Sir, may I go to the toilet.
Okay, hurry up! You give me the answer when you come back.
Thank you sir.
Five times six.... minus... Seven?
Gosh! What is this, Blood?
Yes Bambo, what was the question again?
Five times... er... six times...
Tizo, Bambo and Kiko. I have noticed that you are no longer doing well in class. What's wrong?


Oh, Gosh!
Okay, you three should see me after class.
Yes boys...tell me, what is the matter?
Sir, I am so scared, I had red urine this morning.
Blood in urine? You should go to the health centre.
Okay. You can go now. but don't forget to tell your parents to take you to the health centre.
ONCE HOME, BAMBO INFORMS GRANDFATHER ABOUT GOING TO THE HEALTH CENTRE...
Oh! this sounds serious I'll take you to the health centre tomorrow!

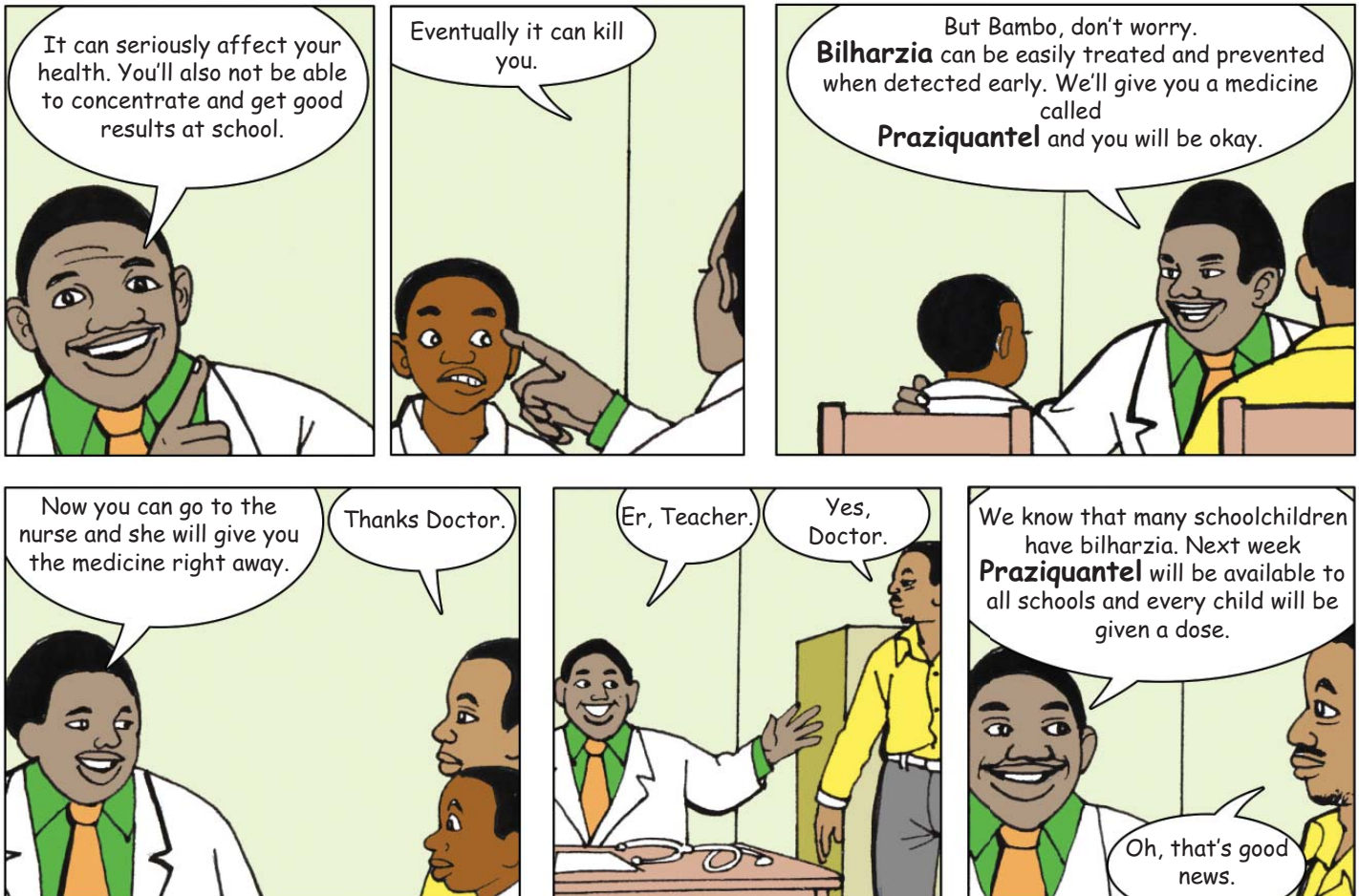

NEXT DAY...GRANDFATHER COMES INTO BAMBO'S ROOM...
Bambo, let's go to the health Centre.
Ow, I still don't feel well. but...
...I am going to school as we have an important maths class.
Okay. But tell your teacher I'll come to school this afternoon to take you to the health centre.
Hurry up bambo, we are late!
AT SCHOOL...
Good morning Sir!
Good morning.

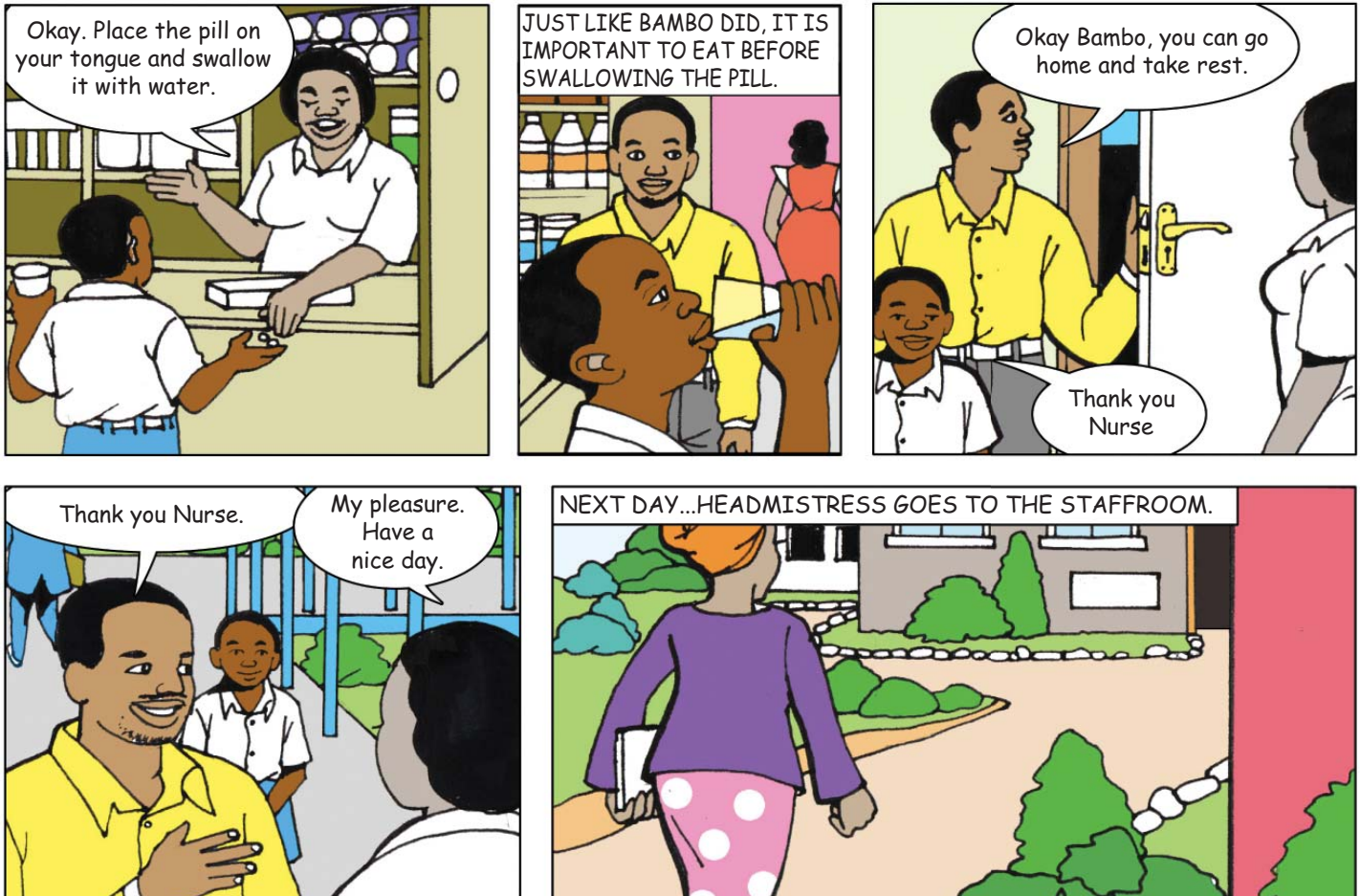

First of all, let's do some more maths practice.
There were 10 runners in a race. Two fell down as the starter said go! Three fell down in the middle of the race...
...And one fell down before the finish line. How many runners finished the race? Bambo!
Ahaa ! Ha ! Ha ! Teh ! Teh ! Teh !
Hey! Don't laugh!


Bambo, what is wrong?
I am...I....
Oh! You seem to have very high fever! Let's go to the Health Centre.
Don't worry you will be okay!
PRIMARY CARE
HEALTH CENTRE

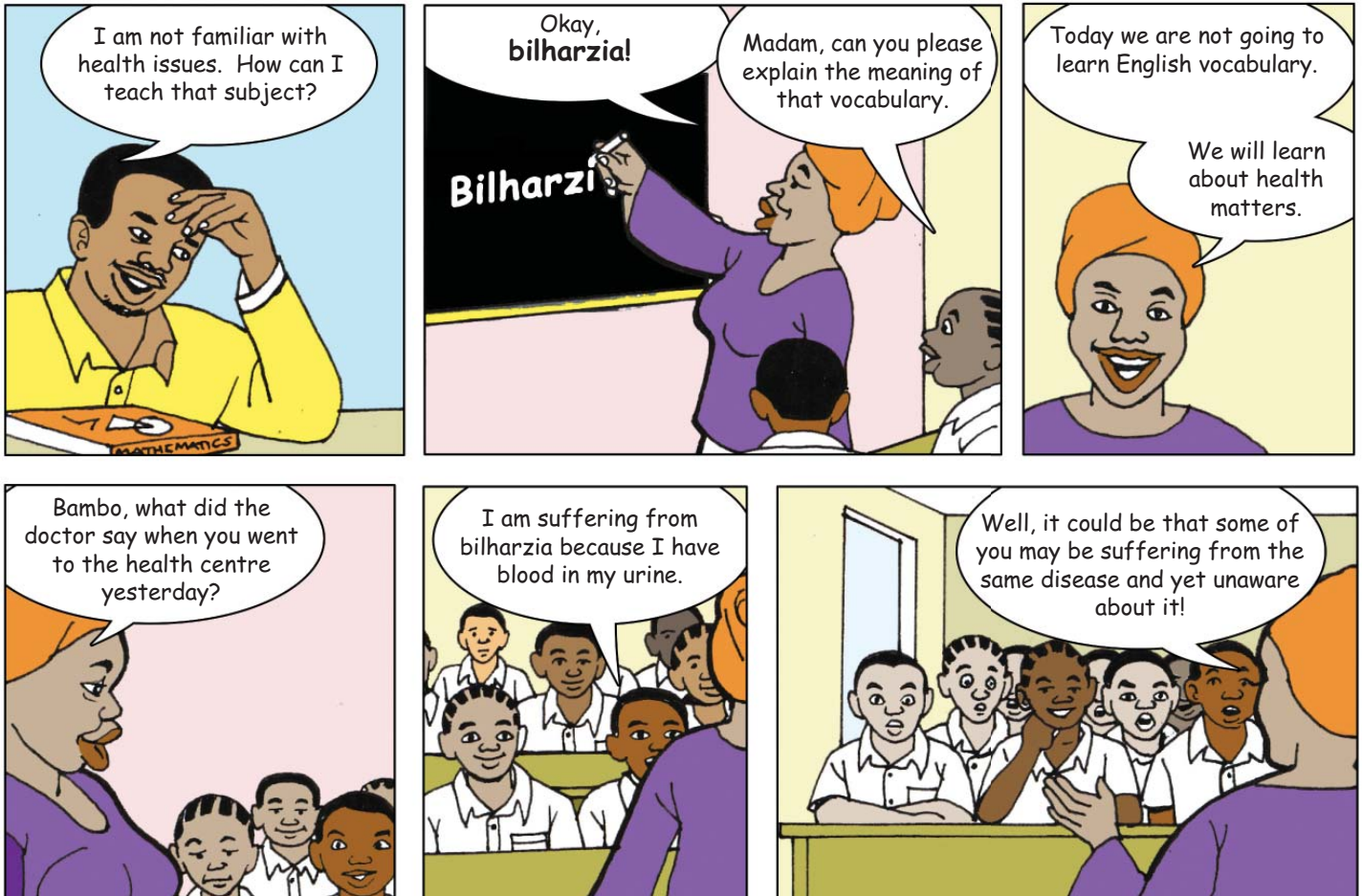

Oh, poor boy! Lets take him straight to the Doctor.
Ah, what is the problem young boy?
DOCTOR'S ROOM
He collapsed in class. He has very high fever.
Also, he complains that his urine is red.
Oh, don't worry, we'll investigate and see what's wrong.
Nurse, please take samples of urine and stool and send them to the laboratory.
Ah, yes... Oh, dear me!

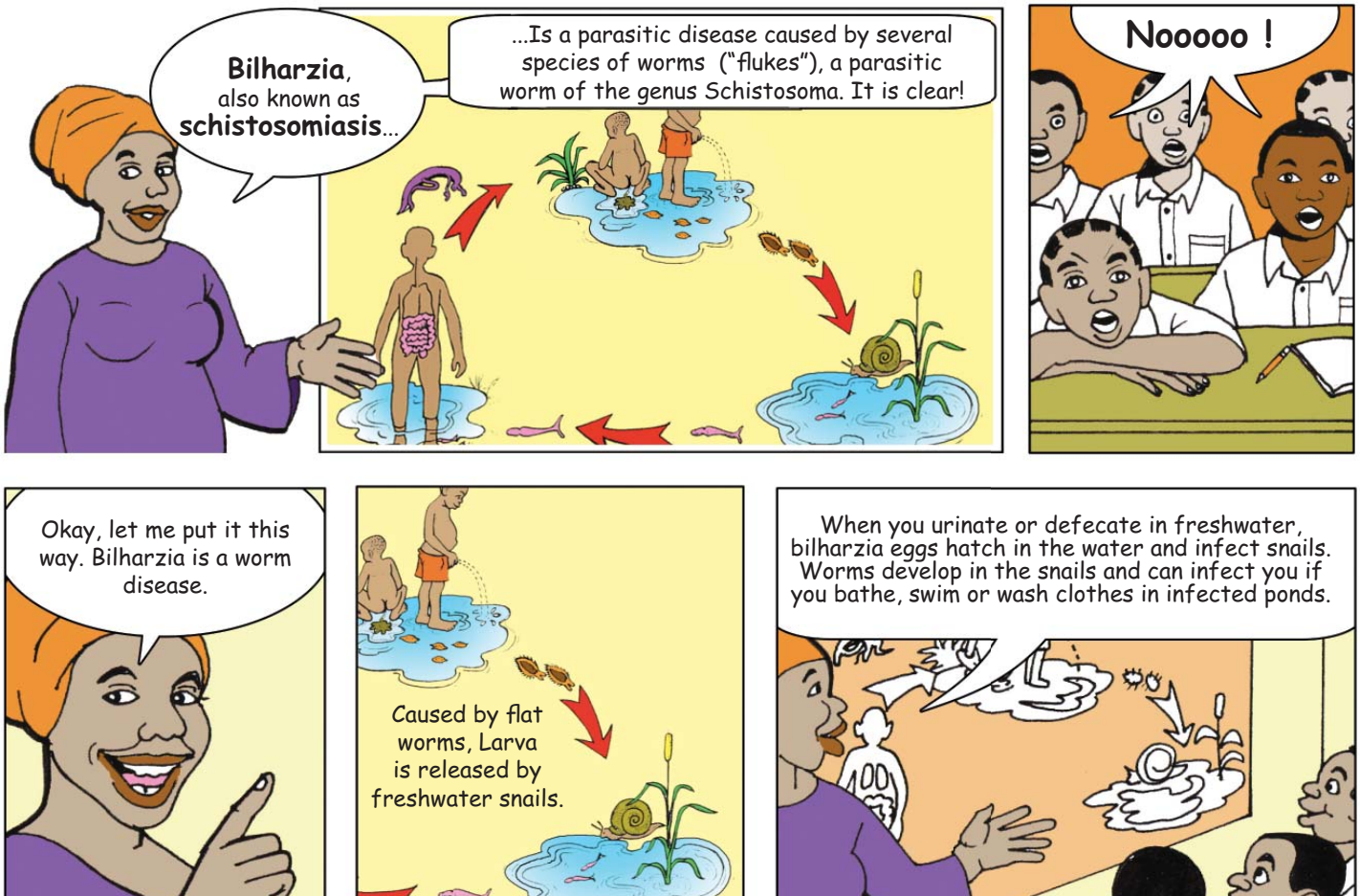

Bambo !
Yes Madam!
Sit down please.
Well, Bambo is suffering from **bilharzia**.
Bilharzia ? What kind of disease is this?
Yes, this is a dangerous disease, but it can easily be treated.
It is a water-borne disease, which you can easily contract while swimming in an infected dam or river. It affects you in so many ways.
It makes you feel tired all the time. You can urinate blood and sometimes have bloody stools.


It can seriously affect your health. You'll also not be able to concentrate and get good results at school.
Eventually it can kill you.
But Bambo, don't worry. **Bilharzia** can be easily treated and prevented when detected early. We'll give you a medicine called **Praziquantel** and you will be okay.
Now you can go to the nurse and she will give you the medicine right away.
Thanks Doctor.
Er, Teacher.
Yes, Doctor.
We know that many schoolchildren have bilharzia. Next week **Praziquantel** will be available to all schools and every child will be given a dose.
Oh, that's good news.

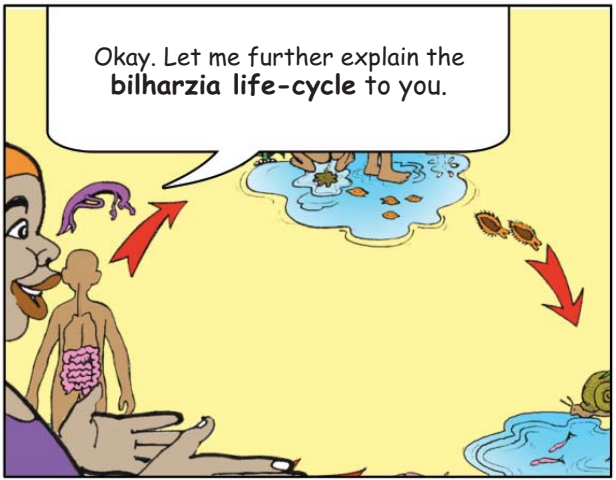

Okay. Place the pill on your tongue and swallow it with water.
JUST LIKE BAMBO DID, IT IS IMPORTANT TO EAT BEFORE SWALLOWING THE PILL.
Okay Bambo, you can go home and take rest.
Thank you Nurse
Thank you Nurse.
My pleasure. Have a nice day.
NEXT DAY...HEADMISTRESS GOES TO THE STAFFROOM.

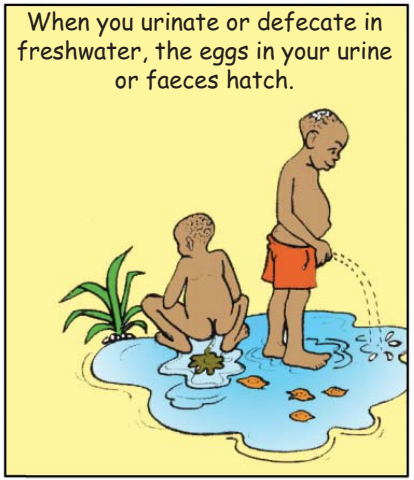

Good morning teachers!
Good morning Madam!
Mr. Bantu, what was the problem with Bambo?
Bilharzia!
Bilharzia!
Oh, let me see. I think we have a book about Schistosomiasis in our library.
Well, Well, Mmh!
BILH
Now we will have to introduce this subject as a supplementary. I will start with Bambo's class.
BILHARZIA
Ok, I will take other classes.
By the way, the doctor said that **Praziquantel** will be available to all schools next week.
let us tell all the children to inform their parents.

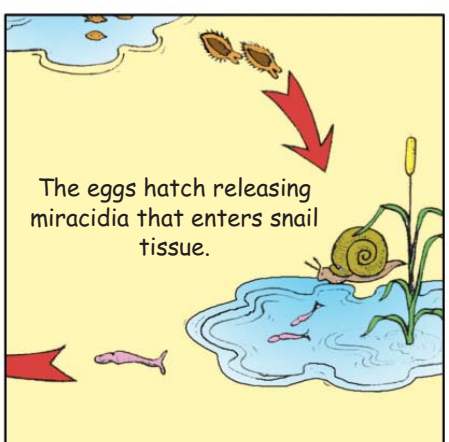

I am not familiar with health issues. How can I teach that subject?
MATHEMATICS
Okay, bilharzia!
Madam, can you please explain the meaning of that vocabulary.
Bilharzia
Today we are not going to learn English vocabulary.
We will learn about health matters.
Bambo, what did the doctor say when you went to the health centre yesterday?
I am suffering from bilharzia because I have blood in my urine.
Well, it could be that some of you may be suffering from the same disease and yet unaware about it!

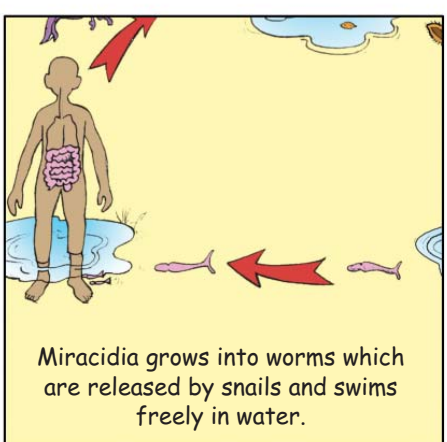

Bilharzia, also known as schistosomiasis...
...Is a parasitic disease caused by several species of worms ("flukes"), a parasitic worm of the genus Schistosoma. It is clear!
Nooooo !
Okay, let me put it this way. Bilharzia is a worm disease.
Caused by flat worms, Larva is released by freshwater snails.
When you urinate or defecate in freshwater, bilharzia eggs hatch in the water and infect snails. Worms develop in the snails and can infect you if you bathe, swim or wash clothes in infected ponds.


But I still don't understand. Can you explain further?

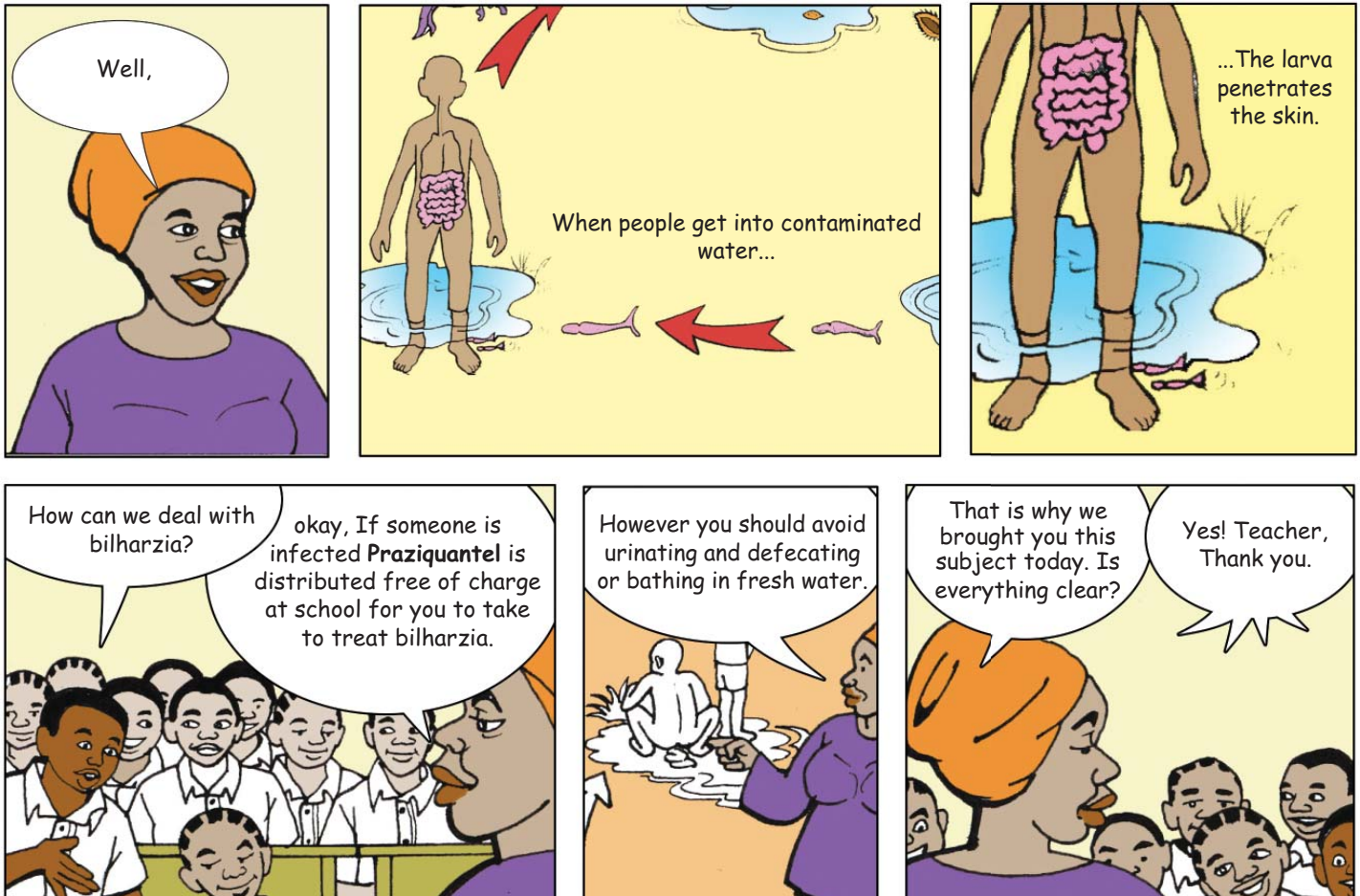

Okay. Let me further explain the **bilharzia life-cycle** to you.


When you urinate or defecate in freshwater, the eggs in your urine or faeces hatch.

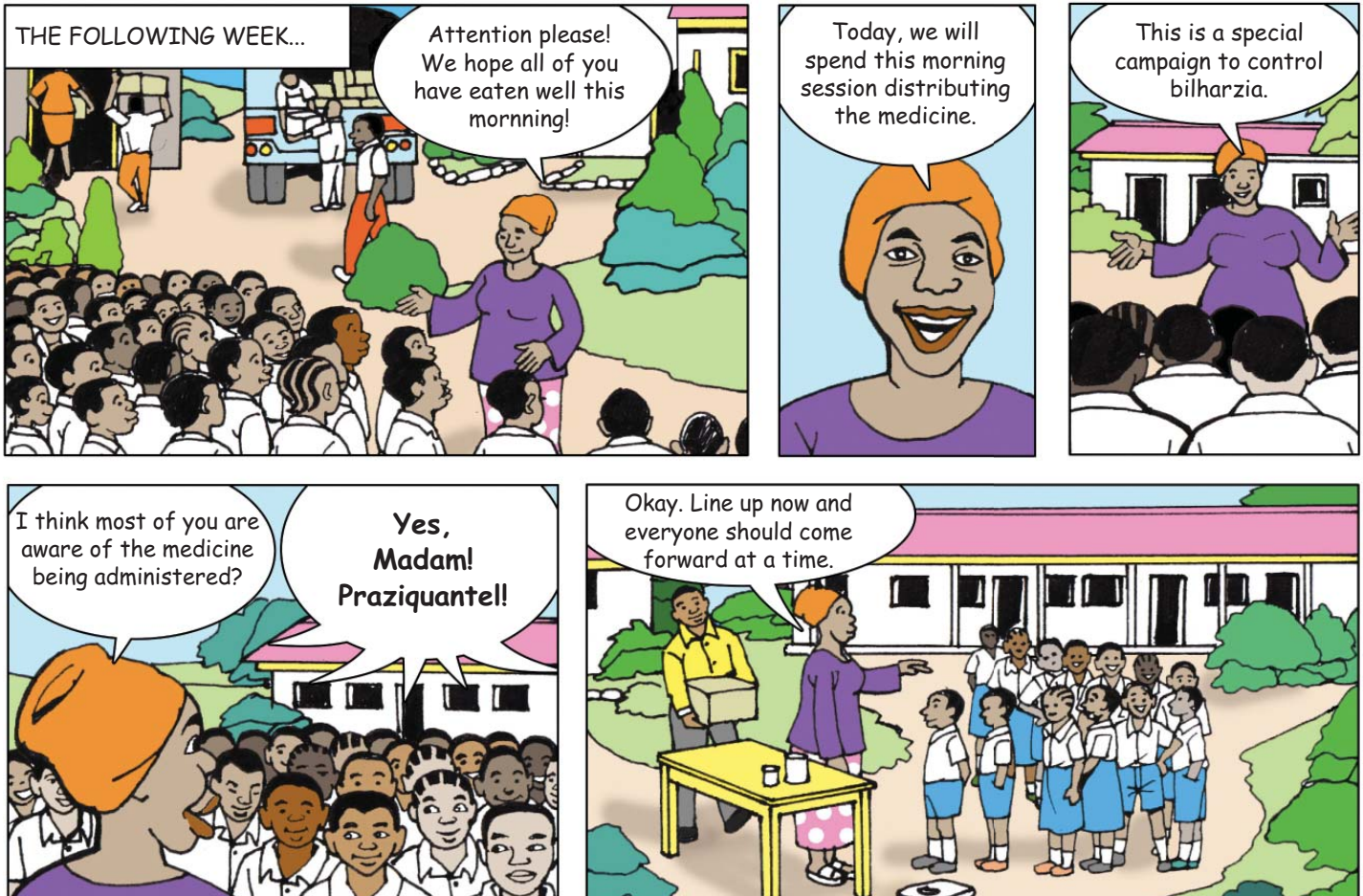

The eggs hatch releasing miracidia that enters snail tissue.


Miracidia grows into worms which are released by snails and swims freely in water.

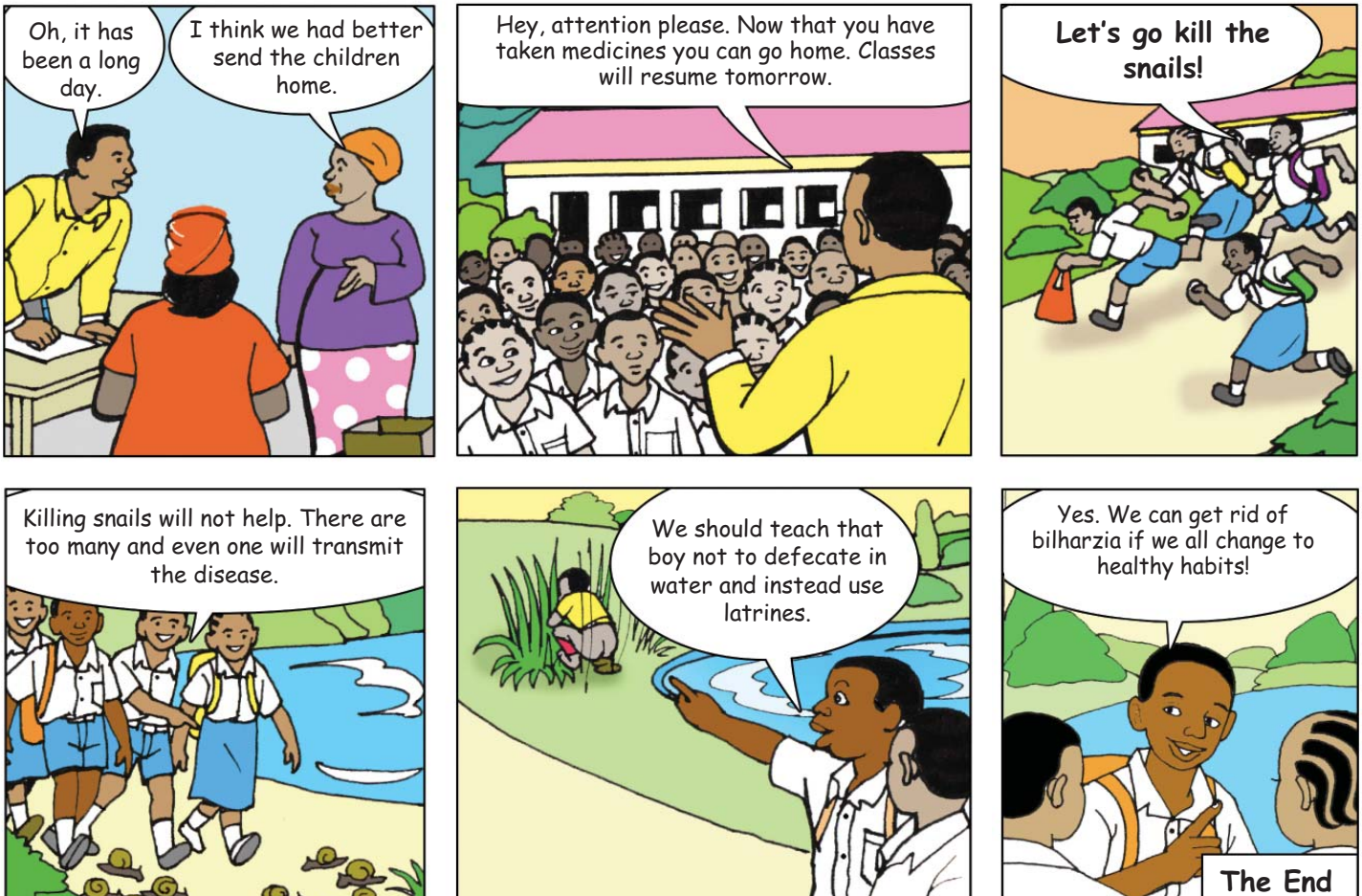

Any questions?
Yes, how does this worm enter the body of a human being?


Well,
When people get into contaminated water...
...The larva penetrates the skin.
How can we deal with bilharzia?
okay, If someone is infected **Praziquantel** is distributed free of charge at school for you to take to treat bilharzia.
However you should avoid urinating and defecating or bathing in fresh water.
That is why we brought you this subject today. Is everything clear?
Yes! Teacher, Thank you.


As many children at school and in this area are affected by bilharzia, everyone will be given a treatment dose. you should inform your parents or guardians about this.
We assume that all of you might be infected. That is why all of you should take the medicine.
Are you ready?
Yes!
And... do not forget to eat well before taking the medicine!
Well, this is very good.
Oh, how was the class?
Really motivating!


THE FOLLOWING WEEK...
Attention please! We hope all of you have eaten well this mornning!
Today, we will spend this morning session distributing the medicine.
This is a special campaign to control bilharzia.
I think most of you are aware of the medicine being administered?
Yes, Madam! Praziquantel!
Okay. Line up now and everyone should come forward at a time.


So,
how tall is he?
Your name,
please?
Ok, make sure you
swallow the tablet.
I have already taken
the medicine at the
health centre.
Excellent, Bambo.
Remember that you have
to repeat it next year.


Oh, it has been a long day.
I think we had better send the children home.
Hey, attention please. Now that you have taken medicines you can go home. Classes will resume tomorrow.
Let's go kill the snails!
Killing snails will not help. There are too many and even one will transmit the disease.
We should teach that boy not to defecate in water and instead use latrines.
Yes. We can get rid of bilharzia if we all change to healthy habits!
The End

BILHARZIA (SCHISTOSOMIASIS) LIFE-CYCLE

When infected people urinate or defecate in freshwater, the eggs in the urine or faeces hatch.

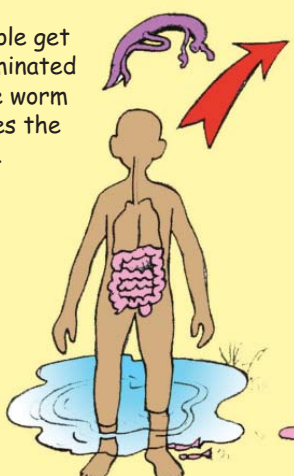


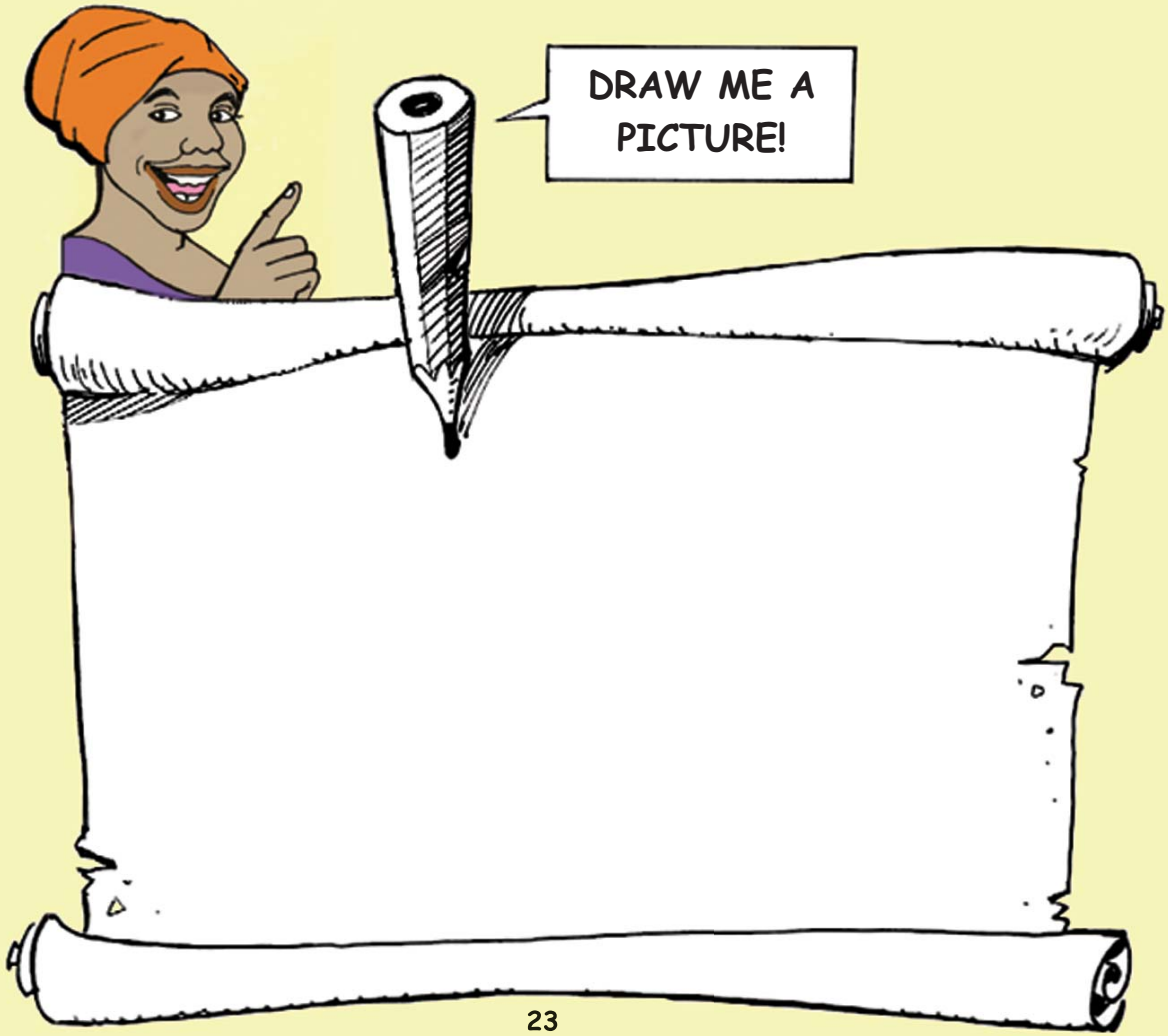
The eggs hatch releasing miracidia that enter snail tissue.



Miracidia grows into worms which are released by snails and swim freely in water.

When people get into contaminated water, the worm penetrates the skin.




DRAW ME A PICTURE!

1. What is bilharzia?

2. How do you get infected with bilharzia?

3. What are the symptoms?

4. What should you do when you see blood in your urine?

5. What is praziquantel?

6. Who gives you praziquantel?

7. What health advice would you give to your friends?

ACKNOWLEDGEMENT

This document was made possible through a financial grant from Merck, Germany.

In 2007, Merck entered into a partnership with the World Health Organization (WHO) to combat schistosomiasis in school children on the African continent.

In the medium term, Merck will donate 250 million tablets of Cesol 600 containing the active ingredient praziquantel.

Merck will maintain its efforts until the disease has been eliminated in Africa.

Bambo and his friends enjoy swimming.

Little do they know about the risks they take every time they swim in a dam near their school, until Bambo's health deteriorates.

This results in his inability to study.

Like Bambo, there are millions of children who should be aware of the risks posed by poor sanitation and unhealthy habits.

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