

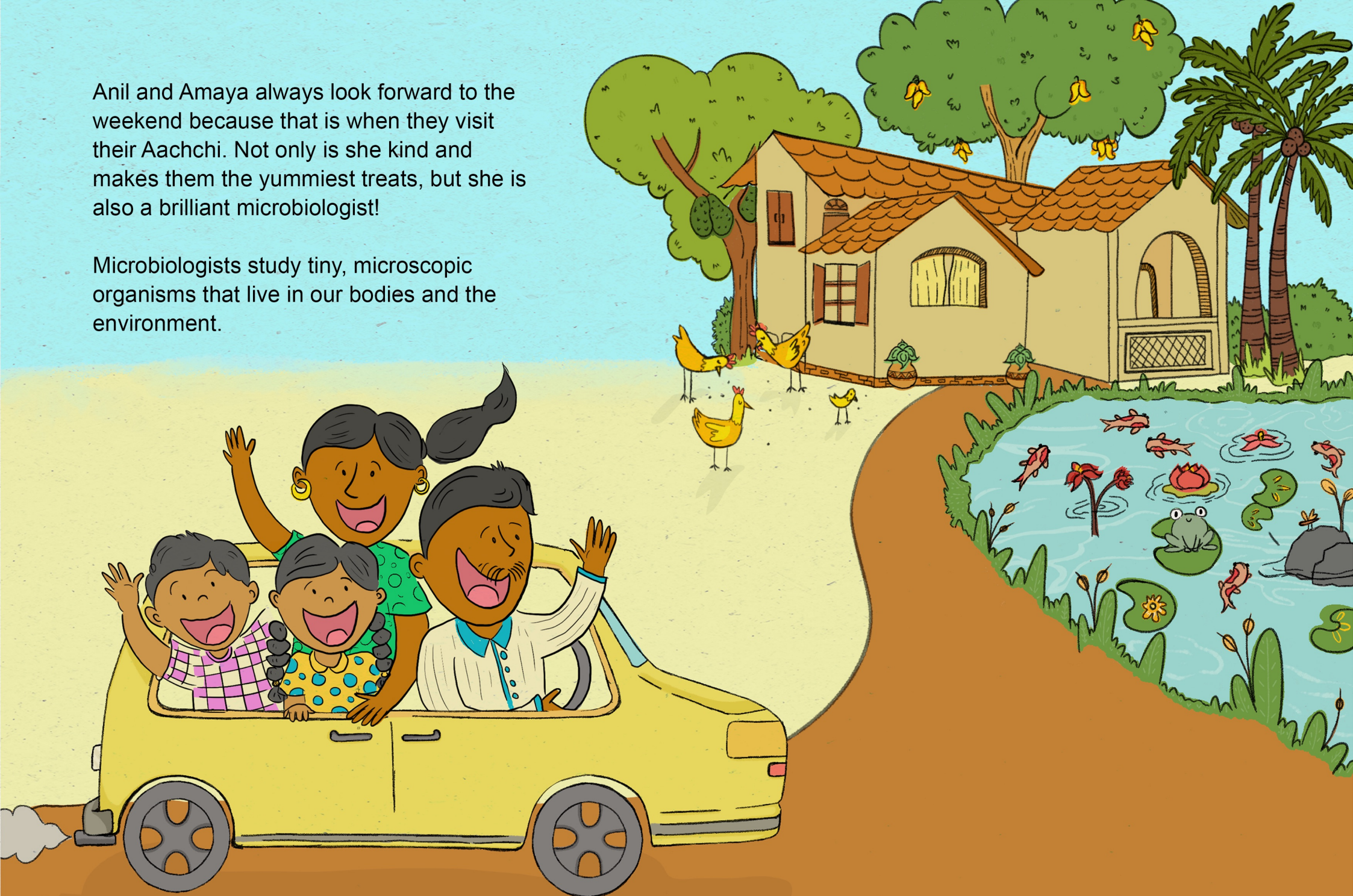
# THE ATTACK OF THE SUPER BACTERIA

ANIL AND AMAYA'S SCIENCE ADVENTURES WITH AACHCHI



Anil and Amaya always look forward to the weekend because that is when they visit their Aachchi. Not only is she kind and makes them the yummiest treats, but she is also a brilliant microbiologist!

Microbiologists study tiny, microscopic organisms that live in our bodies and the environment.



“Hello my little scientists!” Aachchi greets the children with a giant hug.

“What are you working on today, Aachchi?” Amaya asks.

“Come on inside, I’ll show you.”

The children follow Aachchi into her study room.



Aachchi's study is one of their favourite places in the world. It is always filled with fascinating experiments, weird plants from around the world, and books with wonderful facts and pictures.





Today, she has set up her microscope in the middle of her worktable. "This petri dish has some pond water. There's an amazing hidden world in each drop," Aachchi says.

The children take turns to get a closer look. They are amazed to see all the colourful plants and wriggling tiny animals that are usually invisible to the unaided eye.

Aachchi switches on her computer and points to a web page with pictures of the tiny living things, just like the ones they have seen in the microscope.

“Look,” she says. “Some of these are very small plants and animals, and some are even smaller bacteria.”

“Gross!” exclaims Anil. “Aren’t bacteria bad for you?”

“Don’t they make us sick?” Amaya adds.

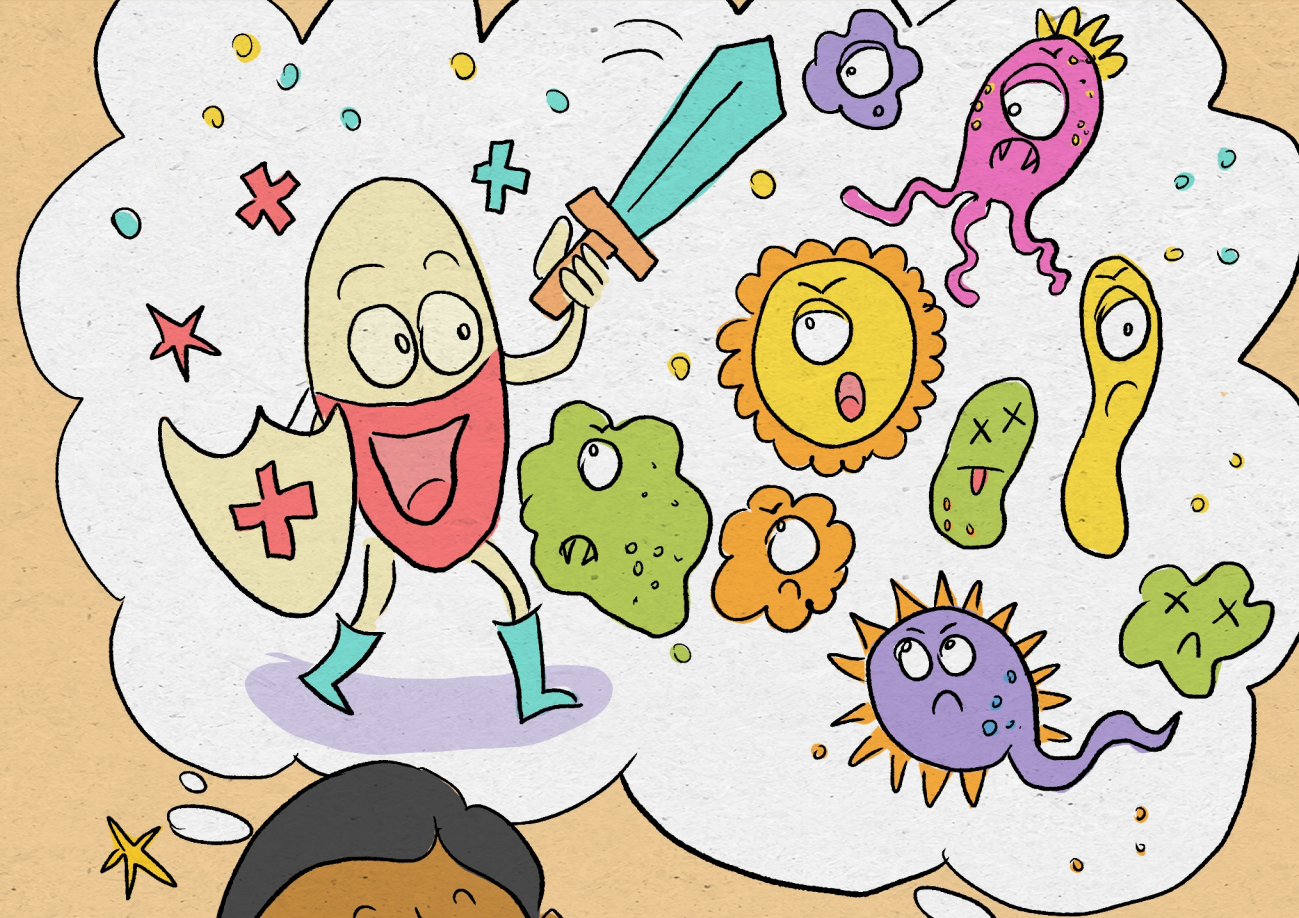
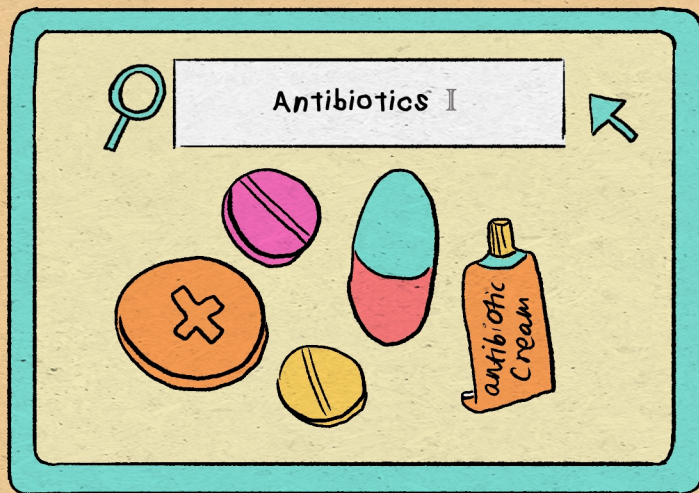


Aachchi explains with a big smile on her face, "Bacteria is found all around us. Most of them are harmless. Some bacteria like the ones used to make yoghurt help to keep us healthy!"

"Yummy! Yoghurt!" Anil says, and hopes that Aachchi has some for dessert today.

Aachchi laughs and adds, "Only a few bacteria cause serious illnesses. We use medicines known as antibiotics to fight infections caused by these bad bacteria."

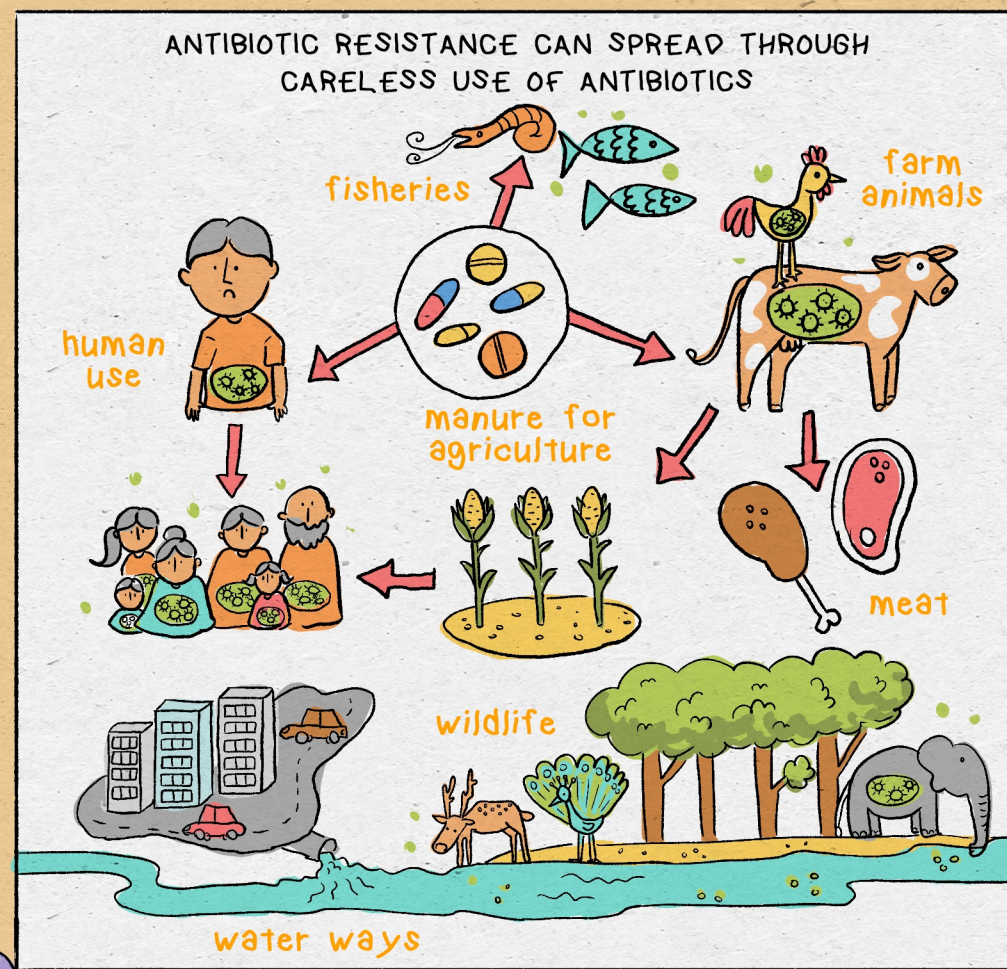
The children go into their world of imagination to a battle scene where the antibiotic heroes fight courageously to get rid of the harmful bacteria in the body.





Aachchi interrupts their wild stories with a plate of yummy biscuits and some milk tea. She tells them that antibiotics are not always heroic.

“When people overuse them or use them too frequently, some bacteria develop resistance against antibiotics and turn into *super bacteria*. These super bacteria can spread in our bodies, in our homes, and in the natural world and wildlife too.



Super bacteria can cause serious bacterial infections. To cure these infections and to destroy the super bacteria, our bodies require stronger antibiotics. This can become a scary cycle with the super bacteria becoming more and more resistant to strong antibiotics. This is known as Antibiotic Resistance” Aachchi says.

She points out that antibiotic resistance is a huge problem in the world today.



Anil notes down some important facts from Aachchi's computer and stands on a chair and reads them out loud, like a radio announcer –

- \* “We must have a healthy and balanced diet to strengthen our immune system against bacterial infections.
- \* We must practice good hygiene practices like handwashing to prevent illness and be updated on our vaccines.
- \* We must take antibiotics as prescribed by a doctor and use the complete dose.
- \* We must not share leftover antibiotics with others or to give them to pets.
- \* We should properly dispose of leftover medication!”

The children wonder how they can tell more people about this important lesson that Aachchi has taught them.



“I have an idea!” Amaya shouts. “We both love to draw. Why don’t we create a huge poster about antibiotic resistance?”

Aachchi tells her that is a brilliant idea. They make some room and lay out a giant sheet of paper and bring out coloured markers, crayons and paints and begin drawing.



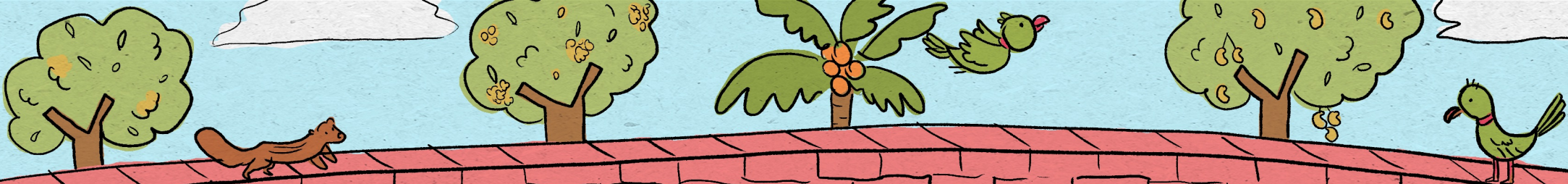


Practice good hygiene

After several hours of hard work, fuelled by Aachchi's yummy snacks, the children step back and look at their masterpiece. Aachchi admires the poster and tells them that they have included all the important information about antibiotics; that it is used for bacterial infections, how antibiotics can sometimes create super bacteria, and how using antibiotics correctly and practising good hygiene can prevent antibiotic resistance.

Do not give leftover antibiotics to pets

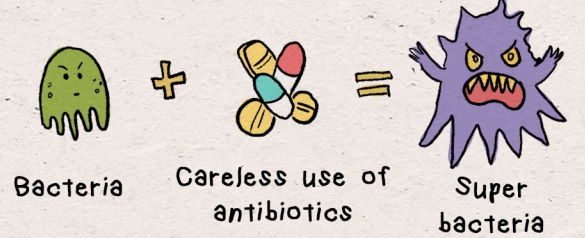
Achi's Book About Antibiotics



① Antibiotics are useful medicines. They can save lives by killing harmful bacteria.



② Bacteria can become resistant if you overuse or misuse antibiotics.



③ Follow these steps to prevent antibiotic resistance



Have a nutritious and balanced diet to boost immunity and fight bacterial infections



Always follow your doctor's advice and complete your antibiotic dose



Practice hand washing and good hygiene to prevent the spread of infections



Do not share leftover antibiotics with family members or pets & dispose of antibiotics in the correct way



Be updated on your vaccinations

We must use antibiotics responsibly to prevent the spread of super bacteria!

The next day, Anil and Amaya pin up their giant poster near the school grounds. When the interval bell rings, many of the teachers and school friends gather around the poster to take a closer look.

They are all surprised that antibiotics that seem harmless can do so much damage to people and the environment if not used properly.

They start talking about the steps they can take to prevent antibiotic resistance.

Anil and Amaya beam with pride because their small and thoughtful action has made a big difference in the world.

# LET'S MAKE A POSTER ABOUT ANTIBIOTIC RESISTANCE!

Posters are like **BIG** notes. They can be used to share important ideas and messages.



Let's learn how to make your own poster!



## Before you begin:

Ask your teacher and learn more about antibiotic resistance.

(Search in websites like the World Health Organisation for reliable information)

Use some rough paper and a pencil to plan your ideas.



## Here are some ideas:

What are good bacteria and how can they keep us healthy?

What are antibiotics and when do we need them?

What is antibiotic resistance and how does it happen?

Why is antibiotic resistance a problem?

How can we prevent antibiotic resistance.?



## You will need:

Poster board  
or large paper

Markers, crayons,  
or coloured pencils

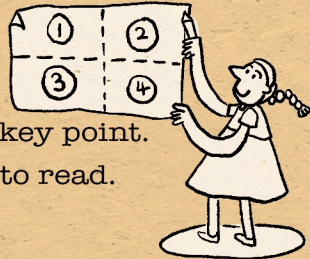
Scissors, a ruler,  
glue or tape



## Organise your poster:

Divide your poster into sections for each key point.

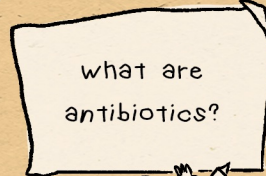
Use titles and subtitles to make it easy to read.



## Add text:

Write clear and simple sentences.

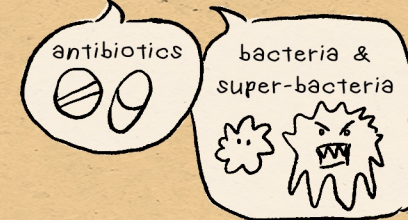
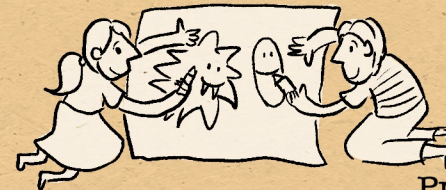
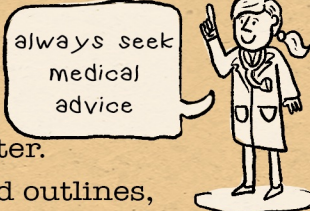
Use large letters for titles and subtitles.



## Add pictures:

Draw out your pictures on the poster.

You can use a black marker for letters and outlines,  
and use bright colours to highlight the important information.



## Present it!

Practice explaining your poster to others.

Be ready to answer questions about antibiotic resistance.

Present your poster to your classmates, teachers,  
family and friends.

