

The secret world

Angela was worried. It was already Wednesday, and she had no ideas for the "show and tell" on Friday. They were each supposed to present some fantastic world. All her friends already knew what they were doing! Becky was talking about fairies, Mark about dinosaurs, and Laura about dragons. There was nothing interesting left!

This put Angela in a bad mood. She didn't want to be in a bad mood because it was "bring-your-kid-to-work" day, and Angela was skipping school to go to work with her mom. She sat on her bed hoping the grumpiness would go away.

"Are you ready?" said mom sticking her head into Angela's room.

"I don't want to go," answered Angela, crossing her arms. Mom raised her eyebrows.

"But you were so excited yesterday! What happened?"

"Nothing, just everything interesting is already taken for "show and tell", and I can't think of anything!"

"Hm, this is a tough one! But I think I might be able to help you out," said mom with a wink.

"No way," thought Angela to herself. Mom was a scientist, not some sort of a magician. Sure, she wore long white coats and always told interesting stories, but a secret world?! It was worth exploring though! Angela quickly packed her bag. She took her magnifying glass, a notebook, binoculars, and some colorful pens. Who knew what she might need? Her bag was so heavy that she barely climbed out of mom's car when they arrived.

To Angela's surprise, they have stopped right by a forest. Was the promised secret world hidden somewhere here? Angela dug through her bag and got out her binoculars. All she could see were trees and a few squirrels. They slowly made their way through tall trees, some branches grabbed on Angela's shirt and tried to keep her back. But as a true adventuress, Angela untangled herself and got to the heart of the forest.

There stood a grey building. It was big. In fact, it was very very big and confusing. Through the windows Angela saw rooms full of tools, glasses and other fancy trinkets. They stopped in front of locked gates. Mom dug into her purse, which contained everything one might possibly need! She got out a card and pressed it to the door. It went "Ping", the red light blinked and turned green.

Inside, the building smelled weird. The walls were tall, grey and had many windows. Behind the windows, Angela saw people in white coats just like mom's. Some of them were mixing things, others operating huge machines. They walked from corridor to corridor for what seemed like forever.

"When are we gonna get there already?" wailed Angela like a great white whale.

"Honey, we are almost there!"

"But I'm tired! Can we go inside of one of those rooms behind the windows?"

"That's exactly where we're going!"

Angela was sure that the secret world was in one of those rooms! Maybe there was a door somewhere in the back? Or maybe she had to mix stuff in the glasses to make a potion like Alice in Wonderland?

"Here we are!" said mom, opening a heavy door, "Everyone, meet my daughter, Angela!"

Bunch of people in white coats waved to her. Some of them were sticking their hands inside huge glass boxes, like the aquarium of Angela's fish, Captain Nemo. Except, these boxes didn't have water in them. Maybe she had to climb inside one of those boxes, and then it took her to the fantastic world like an elevator?

"So where is this magical world?" asked Angela, eager to climb inside one of the boxes.

"Here it is," said mom, leading Angela to one of the tables. She held out a little glass plate. Angela was confused. Even worse, she was disappointed. No one will want to see this!

"This is it?" Angela crossed her arms and frowned. Everyone will make fun of her!

"Look inside," said mom.

Inside, there were little yellow and green dots. Angela could draw those dots with a magic marker! There is nothing interesting about dots.

"I can't see anything here!"

"Of course not! All the magical worlds need to be concealed, don't they?"

That was true. Angela couldn't usually see fairies either and magical castles were often hidden from humans with spells.

"To see them, we will need to look through this instrument called a microscope!"

"Is it like a portal?"

"Hmmm, not really. Remember you looked at ants with a magnifying glass when we were at grandma's?"

"Yes! They were tiny, and when I looked at them through the glass, they became huge!"

"Well, this is a super big magnifying glass."

It did look big. Mom put the glass plate under the machine. She pressed and twisted some buttons and peeked inside.

"Alright, Angela, here you go, come and see."

Angela had to get up on a chair to reach the microscope. She looked in and exclaimed. Inside were many tiny animals. They swam from side to side and bumped into each other. They were all different shapes! Some sat in groups like second-graders in the cafeteria, others chased each other around like during the break!

"Are they playing tag?"

"Kind of, yes, they like chasing each other."

"Oh, I'm that one, the one who is faster than all of them!"

"Of course you are!" laughed mom.

"What are these even?"

"They are called microbes!"

"And do they live on this plate?"

"Well, actually, they live everywhere."

"Everywhere?" shrieked Angela looking around.

"Yup, all around us!" nodded mom.

"Wait, right here too?" said Angela pointing at her hand.

"Yes, in fact, there are a lot of them on your hands!"

"Are they good or bad?"

"Hm, this is a hard one! Some are good and some are bad like fairies and witches. The bad ones can make us sick!"

Angela immediately leaned back.

"Can these make me sick?"

"No, don't worry! These are pretty harmless. Just don't touch the inside of the plate."

Not that Angela was going to. It looked yucky.

"Which ones can make me sick then?"

"Well, for example, some can crawl under your skin, when you get a scratch. That's why I always wash and disinfect it and cover it with a band-aid!"

Angela got a lot of scratches because she loved climbing trees.

"What about the good ones?" Angela finally decided to ask.

"Oh, they are also all around us! Some even live in your tummy."

"Did I eat them?!"

Angela was sure that if she did eat them, it was with broccoli because it also looked yucky.

"No," mom laughed, "They come from all around, some of them you were even born with! They help you eat, actually. You know what, why don't you ask Doctor Roberts about it? She studies microbes from the tummy. Don't you, Doctor Roberts?"

Doctor Roberts looked up from across the room and smiled.

"Yup! They are my besties! Did you know that they can make you moody or happy?"

"What?! I thought only school and my stupid little brother make me moody!"

"I know, right?! I was also pretty surprised when I read about that!"

"Microbes also fight with each other. Some are stronger and get more tasty food!" chimed in someone from across the room.

Angela was on top of the world. A whole secret world around her that she can actually see! She always wanted to see fairies and wizards, but they seemed to hide very well. Angela looked into the microscope and tried to pick her favorite one. It was squiggly, pink and danced around a lot. She decided to name it Caroline because it was a real princess name, and princesses like to dance. Suddenly, she saw a swarm of long

stick-like purple microbes swimming towards Caroline! They looked like knights trying to capture her. But she was fast and swam away to other pink squiggles.

The next day after school. Angela worked hard. She drew and cut and glued and used a lot of glitter.

Friday morning the second grade was buzzing. Everyone was so excited that Ms. Penn could not quiet them down! Finally, it was Angela's turn.

"Ladies and gentlemen! I am going to show you a big mystery!" Angela pulled out her cut-outs and showed them to everyone.

"These are microbes!" said Angela proudly, "And they live all around you!"

The whole class peeked around. Angela smiled and continued. She tricked everyone! "But you can't see them because they are very very tiny! That is why I brought these cut-outs. Sometimes they fight each other!" Angela showed a swarm of microbes attacking the poor little squiggly. "Other times, they help each other out to get food! And sometimes, they crawl under your skin and make you sick!" The whole class gasped!

"That is also why you need to wash your hands after playing outside. Microbes from dirt can get into the body and make us very sick," added Ms. Penn.

"And these microbes are my favorite," Angela pulled out a long microbe cut-out covered in glitter. "They live in your stomach and help you eat! Sometimes, when we only eat unhealthy food, they die and cannot help us anymore, so we become sad because our body is not healthy!"

"Are they our friends then?"

"Some of them are! My mom, actually, studies friendly microbes! Any other questions?" Almost all the hands shot up in the air.

"How do we see them if they are so tiny?"

"Can we play with them?"

"Which is the strongest microbe?"

"Class, class, quiet, please!" said Ms. Penn, "That is a lot of questions! We are out of time now, but I am sure Angela can ask her mom to be a guest and answer all of them?"

"Yes! She loves telling stories!"

"Very well then! We will learn more about microbes! Nicely done, Angela!"

Angela went back to her seat grinning. She also had so many questions and couldn't wait to get home to tell mom all about her presentation.