

M: Another inventor has designed a portable seat that you wear on a belt around your waist. In this picture it looks like a big plastic cushion.

W: Well, that is very unusual. But who would want to walk around with a portable plastic seat hanging from their waist all the time?

M: Another unusual invention is this one. Look, it's a car plate that indicates whether the driver is a man or a woman by using different colors on either side. There's one color for males and one for females.

W: What's the point of that invention?

M: The inventor says that other road users will change the way they behave. They will become more polite if they know a woman is driving, so there will be fewer car accidents.

W: Ha! Do you really think that will happen? That's completely unbelievable!

Unit 7 The White Noise Machine

W: And now ladies and gentlemen, the moment you have all been waiting for. Here's the winner of this year's science contest: Charles Moore! Charles, tell everyone about your invention.

M: Thank you! For the science contest this year, I've invented a white noise machine. Let me explain what that is. Have you ever been kept awake at night because of the sound of traffic, or people talking, or loud music? These types of noise are sometimes called dark noise. Dark noise is made up of sounds that bother you so much that you can't concentrate on what you are doing.

White noise is not exactly noise; in fact, white noise can't be heard at all. White noise is made up of invisible waves of sound that reduce the effects of dark noise by making sounds of the opposite frequency. It's like being in the ocean and seeing a large wave coming toward you. It might knock you down. But if you could send a wave, or many small waves, toward the big wave, it wouldn't be as powerful, because the small waves would hit it and reduce its size.

My machine does this with sound. As a sound enters the microphone, the machine determines the sound's frequency. Then it makes a sound in the opposite frequency that cancels out the first sound. I hope my machine will give some peace and quiet to people living in noisy places. Thank you.

Unit 8 Inches and Centimeters

B : Hi, Julie. I'm trying to figure out the dimensions of this MP4 player I want to buy, but I'm having trouble converting these English measurements. You're really good at mathematics, aren't you? It says that the MP4 player is 3.6 inches tall and two inches wide, but what does that mean in centimeters?

G : Well, according to my math book, one inch equals 2.54 centimeters, so to convert that, we need to multiply each English measurement by that number. Wait, I have a calculator in my pocket.

B : Great!

G : According to the calculator, that would make it 9.1 centimeters tall and, let's see, about five centimeters wide.

B : So, its height is about nine centimeters and its width is about five centimeters, but what about its weight? The website says that it weighs 3.6 ounces.

G : We multiply 3.6 by 28.3, which is the equivalent in grams, and that converts to about 102 grams.

B : All right then, the MP4 player is about nine centimeters tall and five centimeters wide, and weighs about 102 grams. I thought it would have to have larger dimensions to be able to hold 5,000 songs, but it's small and light! Do you think I should buy it, Julie?

G : It sounds like a good product, but it depends on the price.

B : Well, now I have the same sort of problem again. Could you help me figure out how to convert Chinese currency to our currency?

Unit 9 Communicating Online

M: Computers have transformed the way people communicate. In some ways this transformation is **good**, but in other ways it could be harmful. Statistics show that millions of people use the Internet every day. People shop online, play games, and search for information. Studies also show that people use the Internet **mainly** for communication.

The Internet has made communication fast and convenient. Email can travel anywhere within seconds. Chat rooms include people from

all over the world. People can even make Internet telephone calls.

However, this type of communication is very different from what people did in the past. People spend less time talking face to face. They might "chat" for days without being in the same room with a real person. They also might communicate with many people at the same time. Some researchers think this is unhealthy. One study on Internet use found that people who used the Internet a lot were lonely. Also, they did not communicate as much with members of their family.

Many people have criticized this study. They say it did not include enough people and that loneliness is hard to **measure**. In my opinion, all types of communication are good. It is great to email someone and get a fast **response**. It is also nice to talk face to face. We can do both. The Internet is a fantastic tool. We should use it wisely to benefit from it.

Unit 10 Science for Girls

G : Hi. My name is Sandy. Welcome to physics, my favorite class. Although there are 30 students in our class, only six of us are girls.

Most of my friends don't like science as much as I do. They are convinced that science and mathematics are "boys' subjects." They say that boys learn about science and mathematics by playing with toys like building blocks, racing cars, and simple machines, while girls play with toys like dolls and tea sets. They say their parents didn't do science experiments with them or encourage them to learn math.

Well, that wasn't the case with me! I played with dolls, too, but my parents also built up my confidence in science and math. They used long plastic rods, which are like sticks, to help me learn addition, subtraction, multiplication, and division. For my eighth birthday, they gave me a kids' chemistry set, which helped me do all sorts of cool experiments! Whenever we went to the park, my parents asked me different questions about the plants and animals that we saw. When we got home, we looked up the answers together.

In school, my teachers were surprised. They were used to boys giving all the answers in science class. They were impressed with my science exam scores. I have lots of confidence in myself. I know that boys are not smarter than girls in science and math classes. I just wish I could convince my friends!

Art and Culture

Unit 11 On Stage!

W : Love. Hate. Death. These things are at the heart of Shakespeare's famous tragedy, *Romeo and Juliet*. The St. Stephens High School drama club performed this play last weekend.

Romeo and Juliet is the story of two families, the Capulets and the Montagues, who are bitter enemies. Tragedy follows when the son of one falls in love with the daughter of the other. The play is set in Verona, Italy, in the late 16th century.

Allison Bourne played Juliet, Capulet's beautiful young daughter. She showed the mixed emotions Juliet felt after secretly marrying the son of her family's most hated enemy. At times, she was happy, and at times, she was afraid.

David Taylor played Romeo, Montague's son. He put on a good performance despite having a head cold. His lines were said with great feeling in a clear voice.

Eric Parker was the perfect Tybalt: dark and angry. Maggie Jones played the nurse. She acted the part of a gossipy old woman very well. She made everyone in the audience laugh at her jokes and her comic character.

The whole cast showed enthusiasm in every scene. The actors knew the meaning of their lines. They used body language to show this meaning well. The stage lights were sometimes too bright or too dim. But the sword fights looked very real, and the costumes were wonderful.

Overall, St. Stephens' production of *Romeo and Juliet* was a great night of high school theater.