

5A English Short Talk on 30/11/2015

Topic: Investigation of the radiation emitted by mobile phone.

Actors and actresses:

Tiffany (student)

Jerry (student, friend of Tiffany)

Crystal (Dr. Ng)

Jackie (Professor of an independent research team)

Sean (Professor of a research term subsidized by mobile manufacturer)

Scripts

Tiffany (being quite anxious looking at her mobile phone)

Jerry: Hi, Tiffany, what makes you look so anxious?

Tiffany: I am worried about using my mobile phone. Some people say that the radiation emitted by mobile phones is harmful to us.

Jerry: This is a good topic for investigation. Let's ask for advice from Dr. Ng (Crystal). Hi, Dr. Ng, Is the radiation emitted by mobile phones harmful to us?

Crystal: It is hard to say yet. But we can do experiments on the radiation of mobile phones.

Tiffany, Jerry: Do experiments, good!

Crystal: Here is a radio. I turn it on and adjust it to a certain channel. The reception is good. We can hear the radio broadcast clearly. Tiffany, hold your mobile phone near the radio and dial a number.

Tiffany: Yes, Dr. Ng.

Jerry: Dr. Ng. I hear some noise from the radio.

Crystal: So what conclusion can we draw from this experiment?

Tiffany and Jerry: The radiation emitted by the mobile phone will interfere with the reception of radio.

Crystal: Right. Now, I have a device which is used to measure the amount of radiation emitted by a mobile phone. If the red LEDs blink, the radiation is strong. If only the

green LEDs blink, then the radiation is weak. Jerry, hold the mobile about half a metre from the device and dial a number.

Jerry: Yes, Dr. Ng.

Jerry: Dr. Ng, the red LEDs are all blinking, this means that the radiation emitted by this mobile phone is strong!

Crystal: Jerry, you are right!

Tiffany: Dr. Ng, so can we say that the radiation from this mobile phone is harmful to us?

Crystal: em... not yet. There are different kinds of radiations with different frequencies. The radiation emitted by mobile phones is classified as microwaves. Microwaves may not have energy high enough to cause harmful effect to us. How about this, let us ask the opinion of two experts in this field. One is Professor Yeung (Jackie). She is the group leader of an independent research team. The other is Professor Lee (Sean). He is the chairman of a research team sponsored by ABC mobile phone company. Professor Yeung and Professor Lee, please.

Jackie: I am Professor Yeung. Microwaves can heat up food. Therefore, the microwaves from mobile phones can heat up and damage our cells.

Sean: I am Professor Lee. According to some experiments, the microwaves from mobile phones are not strong enough to damage cells in humans.

Jackie: According to experiment results, exposure to microwaves from mobile phones can cause cancer in mice.

Sean: But there is not enough evidence to prove that the microwaves from mobile phones can cause cancer in humans.

Jackie: Some people have headaches and tiredness after using mobile phones for a long time.

Sean: The headaches and tiredness may be caused by other factors, such as stress.

Jackie: It is dangerous to use mobile phones!

Sean: It is safe to use mobile phones!

(Jackie and Sean pretend quarrelling about the matter)

Crystal: Thank you Professor Yeung and Professor Lee for your valuable advice. You two may now leave.

Jerry and Tiffany: Dr. Ng. So what should we do?

Crystal: em... Let's listen to Miss Lee and Mr. Ng 's advice.

Miss Lee: A big thank to students from 5A.

Mr. Ng: Yes, They have done a good job.

Miss Lee: Mr. Ng, what is your opinion about the use of mobile phones from the point of view of Physics?

Mr. Ng: It is really not known if the radiation emitted by mobile phones is harmful to us or not. To be wise, we should take some preventive measures before it is too late. E.g. from experiment, we find that the radiation emitted by mobile phone is the strongest when it is dialing a number, so we should not put our mobile phones close to our ears when it is making a phone call. Miss Lee, how about you, do you have any suggestion regarding to the use of mobile phones?

Miss Lee: I think we should not use a mobile phone continuously for too long. The reason is that prolonged use of mobile phone will keep us in a particular gesture for a long time. This will cause inflammation in our muscles and tendons, which may eventually lead to neck pain or back pain. Moreover, using a mobile phone to play video games or surf the web will definitely worsen our vision because we usually have to put the mobile phone close to our eyes. It is evident that the sharp blue light emitted from mobile phone screens can strain our eyes and affect our eyesight negatively. So, for the sake of health, is it worth doing it?

Mr. Ng and Miss Lee: So WYY students, be wise users of mobile phones. Make good use of it and don't use it for too long. Thank you.