

## MID-TERM EXAM- 6<sup>TH</sup> ADOLESCENTS

### READING

#### Medical Innovations

There have been some amazing advances in healthcare and medicine in recent years. We've asked four medical students to tell us about the innovations which they think are going to change the future of medicine.

##### A Aminah

We often use computers and videos to learn more about the body and practise emergency procedures and operations. Recently, we've started using VR - virtual reality - headsets as well and it's completely changed the experience. It makes you feel like you're actually in an operating room. You can move around the room, check out the medical notes and choose the medical instruments that you're going to use. The bodies that we work on are also really convincing, unlike the plastic dummies that we sometimes work with. The only problem is that it's so realistic that you worry about what will happen if you do something wrong. Once you get over that fear, though, you can keep practising a procedure until you feel completely comfortable with it. Virtual reality is already revolutionising medical training and it will also change the way doctors prepare for operations, increasing the chances of success for medical procedures.

##### B Hector

Although I study medicine, I've always been interested in fashion so one area of innovation that I find really interesting is wearable technology. Although wearable devices like smart glasses and watches have been around for a while now, the most recent innovations are clothes which have microcomputers built into them. Some brands are currently working on a project to create textiles which can communicate with other devices like smartphones and computers. This means that you can call someone or get directions just by touching a specific part of your clothing. What's really exciting about this for me, though, is that patients may soon be wearing special clothes in the operating theatre which monitor body functions like breathing or heart rate. This means that they won't need to be connected to lots of machines like they are now, so the operating theatre will be much easier to work in.

##### C Chuntao

I'm a radiology student, which means that in the future I'll specialise in using medical equipment like x-rays to diagnose illnesses. Some of this technology is actually quite old now - x-rays were discovered in the nineteenth century - but they have always depended on radiologists to interpret the information. This can involve carefully studying lots of medical information in order to make a diagnosis. However, it looks like recent technological advances may change all that. For example, IBM have been working on a project using supercomputers to figure out medical problems. Rather than radiologists having to analyse all the information, these supercomputers can do the job for them, saving an awful lot of time. You might think that's bad news for someone like me but it doesn't necessarily mean the end of radiologists. Instead, we'll be able to spend more time dealing with serious illnesses and injuries.

### D Martina

An aspect of health that particularly interests me is diet and nutrition. I strongly believe that the key to good health is healthy eating and there are some exciting innovations in that area, such as food scanners. They've been around for a few years now but they've only just been made available to the general public in the last year or two. Food scanners are basically small sensors which you can use to scan your food for important nutritional information. You just need to connect the device to your smartphone to find out how much fat or sugar your food contains, as well as the number of calories. In my opinion, this could really help promote the prevention of illnesses. Another thing I like about them is that they're not limited to telling you about the properties of your food because you can also use them to find out how healthy your plants are or measure how clean the water is.

#### 1 Read the text and decide if the sentences are true (T) or false (F).

- |   |       |
|---|-------|
| 1 Aminah discusses how she feels about using virtual reality.                     | T / F |
| 2 Hector believes that there are some disadvantages to using wearable technology. | T / F |
| 3 Chuntao thinks supercomputers might mean the end of her profession.             | T / F |
| 4 Martina mentions when food scanners first became publicly available.            | T / F |

Score: / 8

#### 2 Read the text. For each question, choose from the people (A–D). The people may be chosen more than once.

Which person ...

- |  |                          |
|--|--------------------------|
| 1 says this innovation is the result of a collaboration between two companies? | <input type="checkbox"/> |
| 2 thinks patients will be more comfortable because of this innovation?         | <input type="checkbox"/> |
| 3 says this innovation was only used by professionals until recently?          | <input type="checkbox"/> |
| 4 will be able to spend their time more usefully because of this innovation?   | <input type="checkbox"/> |
| 5 thinks this innovation provides a more believable experience for students?   | <input type="checkbox"/> |
| 6 believes this innovation may help people lead healthier lives?               | <input type="checkbox"/> |

Score: / 12