

# **Medical Advances**

### We will be able to have an operation to increase our intelligence. 2018

Scientists have already developed **brain implants** that improve vision <u>or</u> allow disabled people to use <u>their</u> thoughts in order to control prosthetic limbs like arms, legs or hands, <u>or</u> operate a wheel chair. In 2012 CE, research on monkeys <u>showed</u> that a brain implant improved their decision-making abilities. How will humans benefit from this research? Scientists hope to develop a similar device to help people who have been affected by brain damage, which could be caused by <u>dementia</u>, <u>a stroke</u> or other <u>brain injuries</u>.

1. There are two benefits for developing brain implants. Mention them . (their = disabled people)

a. improve visionb. allow disabled people to use their thoughts.

- 2. Brain implants helps disabled people to use their thoughts in two ways :
  a. To control prosthetic limbs like arms, legs or hands
  b. To operate a wheel chair
- **3. What was the result of research on monkeys in 2012 ?** In 2012 CE, research on monkeys showed that a brain implant improved their decision-making abilities.
- 4. There are many reasons (factors) for brain damage. Mention two of them.
  a. dementia b. a stroke c. other brain injuries.
- 5. How will humans benefit from brain implants in the future ? What do scientists hope to do ? a. Scientists hope to develop a similar device to help people who have been affected by brain damage.
- **6. Mention two examples from the text about prosthetic limbs.** Arms, legs or hands, or operate a wheel chair.

## Doctors will be able to communicate with people in a coma.

In 2010 CE, neuroscientists confirmed that it was possible to communicate with some patients in a coma, by using a special brain scanner called an MRI. They suggested that, in the future, more meaningful dialogue with patients in a coma would be possible. Two years later, it has finally happened. The scanner, used on a man who has been in a coma for more than twelve years, proves that he has a conscious, thinking mind – a fact that had previously been disputed by many. Doctors plan to use similar brain-scanning techniques in the future to find out whether patients are in pain, or what they would like to be done in order to improve their quality of life.

- **1.** How did neuroscientists confirm that it was possible to communicate with some patients in a coma in 2010 ? By using a special brain scanner called an MRI.
- 2. What was the result of using the scanner on a man who has been in a coma for more than twelve years in 2012 ? The scanner proves that he has a conscious, thinking mind

The scanner proves that he has a conscious, thinking mind.

- 3. Doctors plan to use similar brain-scanning techniques in the future. Mention two reasons.a. To find out whether patients are in pain.b. To find out what they would like to be done in order to improve their quality of life.
- 4. Quote the sentence which indicates that it is possible to communicate with patients in a coma in the future .

"They suggested that, in the future, more meaningful dialogue with patients in a coma would be possible."

#### A new drug will help to treat certain types of cancer almost instantly.

A new cancer drug is being trialed in Plymouth, UK, which doctors hope will extend the lives of cancer patients and reduce their symptoms overnight. It is taken as a single pill every morning, and so far patients have shown none of the usual **side effects** such as the sickness and hair loss that are experienced when undergoing other forms of cancer treatment. The new treatment **works by** blocking a protein which causes cancerous cells to grow. It will improve patients' life expectancy and quality of life much more quickly than any other treatment. The patients were interviewed a year after starting the treatment and are fit and well, saying that they are definitely going to continue the trial. They have every reason to believe the new drug is going to work. Doctors at Plymouth Hospital hope that it will help patients from all over the world.

#### 1. Mention two benefits for the new cancer drug for patients . What do doctors hope the new drug will do ?

- a. It will extend the lives of cancer patients
- **b.** It will reduce patients' symptoms overnight.
- c. It will improve patients' life expectancy.
- d. It will improve patients' quality of life much more quickly than any other treatment.

e. It will help patients from all over the world.

## 2. Mention two side effects that are experienced when undergoing other forms of cancer treatment.

- a. sickness
- **b.** hair loss

#### **3.** Quote the sentence which shows the way in which the new cancer drug work. "The new treatment works by blocking a protein which causes cancerous cells to grow."

4. Find a word in the text that means ' tablet''.

## 3. Mention three medical advances doctors hope to be in the future.

**a.** An operation to increase our intelligence. (brain implants)

- **b.** A new drug will help to treat certain types of cancer almost instantly.
- **c.** A new cancer drug

Key Word	Meaning in English	Arabic
coma	an unconsciousness state	غيبوبة
dementia	a mental illness with memory- personality changes and problems with reasoning	جنون ـ خرف
drug	a medicine or a substance used for making medicines	دواء _ عقار
Implant	a piece of tissue, prosthetic device, or other object implanted in the body.	زراعة عضو
medical trial	Trial to evaluate the effectiveness and safety of medications – special test	تجريبي
pill	a small round piece of medicine to be swallowed – tablet	قرص
scanner	a medical instrument that uses radiography to produce images of the inside body	جهاز تخطيط
side effects	Effects of medicine on your body	اثار جانبية
Stroke	an illness when a blood tube in your brain burst or blocked resulting in the brain being unable to function.	سكتة دماغية
symptoms	signs of illness	اعراض

MRI: (Magnetic Resonance Imaging)