

Stars & Stripes ECCE – Test – Units 3-4

Name: _____ Class: _____ Date: _____

A. Choose to complete:

/20

- | | | | | |
|---------------|---------------|------------|-------------|---------------|
| bacteria, | dermabrasion, | lessen, | prescribe, | artificial, |
| authentic, | revive, | refund, | gradually, | energy boost, |
| steam, | cell, | sedentary, | overheated, | dietary, |
| discontinued, | elegant, | rotten, | strained, | puberty |
- Michael was surprised to see that his voice became deeper during _____.
 - The dermatologist performed _____ to remove the woman's acne scars.
 - A neighbor tried to _____ the girl who fainted in the street.
 - People have millions of brain _____ that perform many different functions.
 - The car company _____ this model when sales dropped.
 - A healthy diet and exercise can _____ the risk of heart disease.
 - The _____ meal was covered with flies.
 - The car engine _____ and came to a halt.
 - Carl was _____ his money because the TV was faulty.
 - _____ the vegetables instead of boiling them.
 - This strawberry spread contains _____ sweeteners.
 - She never wore anything but the most _____ clothes.
 - This study focuses on the _____ habits of the ancient Greeks.
 - I'm sure the doctor will _____ some syrup for that nasty cough.
 - Rosie _____ improved her marks at school.
 - The athlete _____ a muscle during practice and couldn't compete in the race.
 - Long distance runners drink glucose drinks for a(n) _____ during races.
 - Kitchen counters have _____ that can make people sick if the counters are not often clean.
 - Jerry has a _____ job; he sits in front of a computer all day.
 - He bought a(n) _____ Chinese vase from the antique shop.

B. Read and then answer the questions:**/15**

Little did chemist Paul Lauterbur know back in the early 70's that his research would lead to the development of the most important medical diagnostic tool since the X-ray. Lauterbur was working with a technique discovered in the 1930s called nuclear magnetic resonance (NMR) in which strong magnetic fields cause parts of a material's atoms to act as tiny magnets. When a radio wave strikes the material, it absorbs energy. Lauterbur realized that this energy could be used to form images. The result was magnetic resonance imaging (MRI) the basic method used in today's MRI scanners.

Before this type of imaging doctors were limited in the tests they had available to see inside the human body without operating. These tests, however, only gave basic images and required the patient to be exposed to a small dose of harmful radiation. Also, the lack of detail in these images meant there was little chance of spotting many diseases in their earliest stages. Lauterbur's discovery along with later work by physicist Peter Mansfield on improving the imaging method, allowed for images of the body's organs and tissue resulting in the ability to better identify disease easy on. For this vital contribution, both were awarded the Nobel Prize in Medicine in 2003.

The work of Lauterbur was put into practical use in the late 1970s when medical doctor Raymond Damadian started using MRI as a tool for medical diagnosis. Frustrated by the inability to indentify cancer in the body, Damadian inverted a machine in 1977 that used MRI to scan the human body. Today MRI scanners are used world-wide to not only detect but monitor a variety of pathologies more accurately, safely, and efficiently than any other medical tool.

1. What is the passage mainly about?
 - A. how MRI technology works
 - B. the inventor of the MRI
 - C. the effect of MRI on the field of medicine
 - D. the history behind the MRI
2. What contribution did Lauterbur make to the area of MRI?
 - A. He utilized NMR to create pictures.
 - B. He developed the NMR technique.
 - C. He invented the MRI scanner.
 - D. He discovered NMR signals.
3. Why was MRI technology considered a medical breakthrough?
 - A. It enabled doctors to see inside the body without an operation.
 - B. It didn't use harmful radiation on patients.
 - C. It dramatically improved the detection of diseases.
 - D. It identified all diseases in the body immediately.
4. What does the author imply is the reason behind Damadian's use of MRI?
 - A. He was inspired by Lauterbur's work.
 - B. He was unhappy with current disease detection tools.
 - C. He wanted to see inside the whole body of patients.
 - D. He found Lauterbur's work impractical.
5. In the last sentence of the paragraph 3, what does the word **monitor** mean?
 - A. supervise
 - B. guide
 - C. observe
 - D. advise