

Le sujet comporte 4 pages

## I- READING COMPREHENSION

### A- THE TEXT

1. It is the first day of school in a classroom in South Korea. The door swings open as children scurry to their seats. But rather than a human teacher waiting at the chalkboard, a robot greets the class. A white and yellow tower on wheels, the robot has a screen face, moveable arms and has the capability to make gestures. Robosem is a telepresence-focused robot that teaches English - in a country where certified English teachers are scarce. South Korea is a leader in implementing classroom robotics in every kindergarten program, and the phenomenon is quickly spreading.

2. But will robots one day replace teachers? "No. Never. Ever. Ever," said Brian Johnson, Intel futurist. "Education is about people. However, robots can be excellent extensions of parents and teachers at home and in the classroom." Johnson sees that for children with different learning styles or learning disabilities, robots can be excellent teachers and learning companions. "Unlike computers or tablets, robots are social and can connect with children," he said.

3. In the United Kingdom, the newly-developed Kaspar helps autistic children. Specially designed with a human-like face and the tacit complexities therein, Kaspar helps teach facial expressions and appropriate physical contact, creating a safer learning environment for special-need children.

4. Rubi, in the USA, runs through repeated exercises to teach foreign languages to pre-schoolers and has proven quite successful at teaching language cooperation. Johnson, however, believes robots can be excellent assistants, but are still just machines, lacking in human emotional intelligence and spontaneity. "All technology is a tool—just different types of hammers," he says.

*Adapted from <http://iq.intel.com/>*

*October 30, 2014*



Section : ..... N° d'inscription : ..... Série : .....  
 Nom et prénom : .....  
 Date et lieu de naissance : .....



Signatures des surveillants



ANGLAIS (SECTION: Sciences Techniques)

**B- Comprehension questions (12marks)**

1) Read the text and tick (✓) the right option. (1mark)

The text is mainly about:

- a) learning languages without robots
- b) using robot teachers in the classroom
- c) replacing all teachers with robots.

2) For each of the following statements, find one detail showing that it is false. (2 marks)

- a. South Korea is far behind other countries in using robots in the classroom. (parag. 1)  
 .....
- b. English-teaching robots are not able to communicate with children (parag.2)  
 .....

3) Complete the following table with the right information from paragraphs three and four. (3 marks)

Country	Robot	Target Learners
The United Kingdom		
The USA	Rubi	

4) Complete the following summary about robots' capabilities with three words from paragraphs three and four (3marks)

Robotics has been used in many schools in both the UK and the USA. Robots are capable of doing multi-functional activities in order to establish a secure learning-----  
 for pupils. Children can learn some facial expressions as well as some -----  
 physical activities. They also find it easy to learn some ----- languages.

5) Find a word in paragraph one meaning nearly the same as : (1mark)

move quickly with small short steps: .....

6) What does the underlined word in the text refer to? (1mark)

country (parag.1) refers to: .....

7) Would you prefer to be taught by a human or a robot teacher? Why? Why not? (1mark)

I would prefer to be taught by.....  
 .....

NE RIEN ECRIRE ICI

**II- WRITING (12marks)**

**1) Use the notes below to write a biography of Alexander Fleming. (4 marks)**

Name	Alexander Fleming
Date and place of birth	Scotland/ August 1881
Education	study/ medicine/ University/ London
Achievement	discover penicillin: 1928
Award	Nobel Prize/ medicine
Death	March 1955

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**2) As tourism in Tunisia is going through hard times, you have decided to write a **ten-line advertisement**, to post on your Facebook page, in which you **encourage** tourists to visit your country. ( 8 marks)**

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NE RIEN ECRIRE ICI

### III- LANGUAGE (6 marks)

#### 1) Fill in the blanks with 6 words from the list below. (3marks)

fit - weight - estimated - diet - obese - over - unless - cure

The problem of childhood obesity in the United States has grown considerably in recent years. Between 16 and 33 % of children and adolescents are ..... Obesity is among the easiest medical conditions to recognize but most difficult to ..... Unhealthy ..... gain due to poor diet and lack of exercise is responsible for ..... 300,000 deaths each year. The annual cost to society for obesity is ..... at nearly \$100 billion. Overweight children are much more likely to become overweight adults ..... they adopt and maintain healthier patterns of eating and exercise.

#### 2) Put the bracketed words in the right tense or form. (3marks)

While most people realize that saving energy is something they should be (to push) ..... toward, not everyone understands the reasons why it is important. The energy we use today (derive) ..... from fossil fuels. Converting fossil fuels into usable energy, such as gasoline or electricity, (emit) ..... carbon dioxide into the air. These emissions contribute to global (warm) ..... and air pollution, both of which can cause cancer and other (ill) ..... in human beings. Conserving energy reduces the amount of carbon dioxide being released into the atmosphere and can lead to a (good) ..... quality of health for people.