San Marcos School
English Department
Arica - Chile

**Level:** Cuarto Medio
**Teacher:** Christopher Mondaca

# Quiz: Reading Comprehension

Objective: Get specific information from written texts.

## Text 1: The Carbon Planet

**How much do you know about the planets in our solar system? Read on to find out the latest in scientific research in this area.**

A planet the size of Jupiter has been discovered and it is one of the hottest ones known to us. This has made scientists think about how planets are formed.

### Heat signature

Planets such as Earth have more oxygen than carbon, but what if the composition was reversed? This is a question opened up by a recent discovery of a 'diamond planet' by US and UK scientists, led by Nikku Madhusudhan of the Massachusetts Institute of Technology, and including researchers from Belfast's Queens University and the University of Warwick. The planet is 1200 light years away from Earth and was observed using NASA's Spitzer Space Telescope. Dr Marek Kukula of the Royal Greenwich Observatory in London, whose role is to interpret and comment on astronomical discoveries made by British scientists, explained that researchers initially used the SuperWASP (Wide Angle Search for Planets) robotic observatories operating continuously, all year around. They detected the planet, then it was observed with the Spitzer Space telescope, which according to Dr Kukula 'detected the heat coming from the planet, and from that heat signature they can tell what this planet is made from'.

### Giant planet

The planet is very different to Earth. 'It's a giant planet,' explains Dr Kukula, 'a gas planet, a bit like Jupiter in our solar system. But the interesting thing that they've discovered is that it has a very different composition to the planets in our solar system. So where our planets have a half fraction of oxygen then carbon, this planet has it the other way around, it has more carbon than oxygen.' This suggests that there is more than one way to make a solar system and the range of planets in the universe could be much wider than previously thought.

### Diamonds and graphite

Dr Kukula says that if there are smaller planets in the same solar system with a similar composition, rich in carbon, their rocks could be rich in minerals such as carbon and diamonds, unlike Earth which has silica, the sand that rocks on Earth are made from. 'This is where this diamond planet idea comes from; they haven't actually detected a diamond planet yet,' explains Dr Kukula. It's hypothetical, 'but you can imagine strange landscapes with black graphite rocks lying around and the surface could be covered with sticky liquids instead of water.'

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**Item I: Match the vocabulary with the correct definition and write a–f next to the numbers 1–6.**

| | |
|---|---|
| 1…….. **NASA** | a.a very important element for life on Earth. It is present in our bodies, plants and in diamonds. |
| 2…….. **heat signature** | b. turned the other way round |
| 3…….. **carbon** | c. the National Aeronautics and Space Administration of the USA which is responsible for space research |
| 4…….. **solar system** | d. the unique amount of heat which comes from something |
| 5…….. **graphite** | e. the Sun, the eight planets and their moons |
| 6…….. **reversed** | f. the black substance in a pencil which you write with |

**Item II: Write True or False for these sentences.**

1. The planet Earth has the same amount of oxygen as carbon. _____
2. Scientists studied the amount of heat coming from the 'diamond planet'. _____
3. The new planet has a very different composition from the planets in our solar system. _____
4. The discovery of the new planet has led scientists to think that there may be more kinds of planets in the universe than they thought. _____
5. The rocks on Earth are rich in carbon and diamonds. _____
6. Scientists have observed a strange planet with black rocks and a sticky liquid instead of water. _____

**Item III: Read the text and write the correct form of the word in brackets to complete the gaps. Look at the example at the beginning of the text.**

Scientists have recently made a very interesting **DISCOVERY** (DISCOVER). They have found a new planet which is extremely hot. The first _____ (OBSERVE) of the planet was made using NASA's Spitzer Space Telescope. Scientists have the _____ (ABLE) to detect the amount of heat coming from a planet and from this they can know what the planet is made of. The new planet has some _____ (SIMILAR) to the planet Jupiter, but it also has a _____ (COMPLETE) different composition from planets in our solar system. The new planet has more carbon than oxygen which is _____ (LIKE) any of the planets near Earth. This has led scientists to use their _____ (IMAGINE) and to think that there is a _____ (POSSIBLE) of a diamond planet existing. This diamond planet could have a very strange _____ (APPEAR).

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# Text 2: Flexible Screen Technology

**Can you imagine having flexible computer screens and mobile phones which change shape to tell you when you have a new message? It sounds like a crazy idea, but in fact it's already been invented!**

## As thin as paper

In the future, the mobile phone will be our flexible friend. It will be able to change shape to tell us when we receive a message. A model called MorePhone has been created by scientists at the Human Media Lab in Canada. It's based on flexible plastic technology developed in Cambridge in the UK by an organisation called Plastic Logic. Rachel Lichten, who works at Plastic Logic, describes how the scientists there have developed a process for manufacturing flexible plastic displays which are as thin as paper. They copy the appearance of writing on paper and use a type of plastic to create layers of electronic transistors.

## Screens you can jump on

The flexible screens can be any size, and are easy to read in direct sunlight. They can be black and white or colour and are very thin and light – Lichten says you can even jump on them. They use very little power, so there is no need for large batteries, and this makes them easy to carry around. Lichten says this technology could be used for heart monitoring, smart-watches, second screens for mobile phones – because the image does not disappear, your phone can keep your boarding card details for a flight for example even when your phone's battery is dying. Plastic Logic is also working with a Japanese company who make giant electronic signs.

## Next generation of electronic gadgets

Plastic Logic have spent 13 years developing this new technology. Their challenge now is to help customers to think of new ways to use it. Lichten says it is always the same with new technologies. She says 'bringing new technology to the market is a challenge, especially because it is revolutionary. However, for the next generation of products, you have to know what the next generation of products will be.' Working with mobile phones or laptops that can roll up like a piece of paper could turn hardware into 'flexi-ware'.

**Item I: Match the vocabulary with the correct definition and write a – h next to the number 1 – 8.**

| | |
|---|---|
| 1…….. the screen | a. completely different (to what has gone before) |
| 2…….. a laptop | b. a card you need to have to get on a plane |
| 3…….. hardware | c. a difficult but stimulating thing |
| 4…….. a boarding card | d. a portable computer small enough to use on your knee |
| 5…….. a challenge | e. easy to bend |
| 6…….. manufacturing | f. the part of a TV, computer, etc. where the image is shown |
| 7…….. flexible | g. making a large amount of something using machinery |
| 8…….. revolutionary | h. the physical parts of a computer system |

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**Item II: Write the letter of the correct option to complete the sentences.**

1. In the next ten years, mobile phones will _____.
   a. be very similar to what they are like now
   b. be much more expensive than they are now
   c. have a different way of telling you when a message arrives

2. The MorePhone is based on technology invented in _____.
   a. the UK
   b. Canada
   c. the USA

3. The flexible plastic displays _____.
   a. are made of paper
   b. look like writing on paper
   c. are thicker than paper

4. The flexible plastic displays are _____.
   a. always very small
   b. not easy to break
   c. quite heavy

5. This new technology _____.
   a. could only be used at an airport
   b. could have many uses
   c. cannot be used with big signs

6. This new technology _____.
   a. was developed quite quickly
   b. is not really so different
   c. could make mobile phones very different

**Item III: Write True or False for these sentences.**

1. The MorePhone was created by scientists who work in the UK. _____
2. The flexible screens are not heavy and they are very thin as well. _____
3. The flexible screens will need quite big batteries. _____
4. This technology could be used in the field of medicine. _____

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5. This technology could be useful at an airport. _____

6. People already know all the ways this new technology can be used. _____

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