

1<sup>st</sup> exam of English  
8 November 2015  
2<sup>nd</sup> year

Name:

Group:

Glass is a bit of a riddle. It's hard enough to protect us, but it shatters with incredible ease. It's made from opaque sand, yet it's completely transparent. And, perhaps most surprisingly of all, it behaves like a solid material... but it's also a sort of weird liquid in disguise! You can find glass wherever you look: most rooms in your home will have a glass window and, if not that, perhaps a glass mirror... or a glass light bulb. Glass is one of the world's oldest and most versatile human-created materials.

In a commercial glass plant, sand is mixed with waste glass (from recycling collections), soda ash (sodium carbonate), and limestone (calcium carbonate) and heated in a furnace. The soda reduces the sand's melting point, which helps to save energy during manufacture, but it has an unfortunate drawback: it produces a kind of glass that would dissolve in water! The limestone is added to stop that happening. The end-product is called soda-lime-silica glass. It's the ordinary glass we can see all around us.

Once the sand is melted, it is either poured into molds to make bottles, glasses, and other containers, or "floated" (poured on top of a big vat of molten tin metal) to make perfectly flat sheets of glass for windows. Unusual glass containers are still sometimes made by "blowing" them. A "gob" (lump) of molten glass is wrapped around an open pipe, which is slowly rotated. Air is blown through the pipe's open end, causing the glass to blow up like a balloon. With skillful blowing and turning, all kinds of amazing shapes can be made.

Glass makers use a slightly different process depending on the type of glass they want to make. Usually, other chemicals are added to change the appearance or properties of the finished glass. For example, iron and chromium based chemicals are added to the molten sand to make green-tinted glass. Oven-proof borosilicate glass (widely sold under the trademark PYREX®) is made by adding boron oxide to the molten mixture. Adding lead oxide makes a fine crystal glass that can be cut more easily; highly prized cut lead crystal sparkles with color as it refracts (bends) the light passing through it. Some special types of glass are made by a different manufacturing process. Bulletproof glass is made from a sandwich or laminate of multiple layers of glass and plastic bonded together. Toughened glass used in car windshields is made by



**Section II Grammar** (8points)

**Put the sentences into the passive/active voice** (04points)

- 1-The Amazon rainforest is extremely important to the ecology of the earth. 40% of the world's oxygen (produce) there.
- 2-The game (win) by the other team. They are a lot better than we are.
- 3-My friend is in the hospital. She (treat) for a bad burn on her hand and arm.
- 4-Today a bank robber (catch) by the police.
- 5-Frostbite may occur when the skin (expose) to extreme cold.
- 6-The government used to support the school. Today the school (support) by private funds as well as by the tuition the students pay.
- 7-In some countries, certain prices are controlled by the government, such as the prices of medical supplies. However, other (determine) by how much people are willing to pay for a product.
- 8- The student (inform) by his teacher that he gets the exam.

**Put the verbs between brackets in the right tense** (4points)

- 1- You (to work) hard today, yes I have a lot to do.
- 2- It (get) dark. Shall I turn the light?
- 3- A liar is someone who (not/tell) the truth
- 4- It is a nice day, I (to suggest) we go out for a walk

**Writing:** choose one topic (05points)

- 1- Write a paragraph where you can describe a process by using sequencers/connectors.
  - 2- What are the steps of sugar production (either beet sugar/cane sugar)
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## **Correction**

### **Section I: Reading comprehension (07 points)**

**Activity1:** answer the following questions according to the text

1-What is glass?

Glass is a bit of a riddle. It's hard enough to protect us, but it shatters with incredible ease. Glass is one of the world's oldest and most versatile human-created materials.

2-Explain the process of making glass

Sand is mixed with waste glass, once the sand is melted; it is either poured into molds to make bottles, glasses, and other containers. A "gob" (lump) of molten glass is wrapped around an open pipe, which is slowly rotated. Air is blown through the pipe's open end, causing the glass to blow up like a balloon. Other chemicals are added to change the appearance or properties of the finished glass.

Eg., iron and chromium based chemicals are added to the molten sand to make green-tinted glass. PYREX®) is made by adding boron oxide to the molten mixture.

3- How stained glass is produced?

. Stained (colored) glass is made by adding metallic compounds to glass while it is molten; different metals give the separate segments of glass their different colors.

4-Give titles to each paragraph

- Description/introduction of glass
- Commercial glass
- The process of making glass
- Production of different kinds of glass

Find the synonyms and opposites of the following words

Changeable = versatile

slice = cut

Economise = save

Advantage ≠ drawback                      modern ≠ oldest

Single ≠ multiple

**Section II Grammar** (8points)

**Put the sentences into the passive/active voice** (04points)

1-The Amazon rainforest is extremely important to the ecology of the earth.

40% of the world's oxygen (produce) there. **Is produced**

.....**the nature produces 40% of the world's oxygen there.**(active)

2-The game (win) by the other team. They are a lot better than we are. **Is won**

**The other team wins the game;**.....(active)

3-My friend is in the hospital. She (treat) for a bad burn on her hand and arm. **treats**

.....**she is treated for a bad burn on her hand and arm**

4-Today a bank robber (catch) by the police. **(Is caught)**

**Today the police catch a bank robber (active)**

5-Frostbite may occur when the skin (expose) to extreme cold. **(Is exposed)**

**Frostbite may occur when we expose the skin to extreme cold.**

6-The government used to support the school. Today the school (support) by private funds as well as by the tuition the students pay. **(Is supported)**

.....**today private funds as well as the tuition pay by the students support the school**

7-In some countries, certain prices are controlled by the government, such as the prices of medical supplies. However, others (determine) by how much people are willing to pay for a product. **(Are determined)**

.....**the government control certain prices .....however, people it determines how much people are willing to pay for a product**

8- The student (inform) by his teacher that he gets the exam. **(Is informed)**

**The teacher informs his students that he gets the exam active**

**Put the verbs between brackets in the right tense** (4points)

- 5- You (to work) hard today, yes I have a lot to do. /**You are working hard today**
- 6- It (get) dark. Shall I turn the light? /**It is getting dark**
- 7- A liar is someone who (not/tell) the truth /**doesn't tell**
- 8- It is a nice day, I (to suggest) we go out for a walk/ **suggest**

**Writing:** choose one topic (05points)

- 3- Write a paragraph where you can describe a process
- 4- What are the steps of sugar production (either beet sugar/cane sugar)