

《高中英语》(上外版)选择性必修三 第四单元 第1课时  
学案(教师版)

## I. Pre-reading

**Interactive Task 1: Answer the following questions based on the pictures below.**

Q1: What is the possible relationship between the two polar bears?

Parent and kid (Mother and kid).

Q2: What might have separated them from each other ?

They might have been separated from by the melting ice.



**Interactive Task 2: Predict the main idea of the passage from the title and guess the villain in the atmosphere.**

Q1: What can you see in the picture? Can you describe the picture briefly?

The sea level is rising and it is splashing against the windows along the skyscrapers.

Q2: Can you predict who is the “villain” in the atmosphere?

Carbon dioxide.

Q3: What do you expect to read in the passage from the title “The Villain in the Atmosphere”?

## The harmful effects of carbon dioxide and the causes of these consequences.



## II. While-reading

**Interactive Task 3: Skim the passage and find out the functions of Para.1, 4 and 7 and the organization of the passage.**

Q1: There are some short paragraphs (e.g. Para 1, 4 and 7) in the text. What functions do they serve?

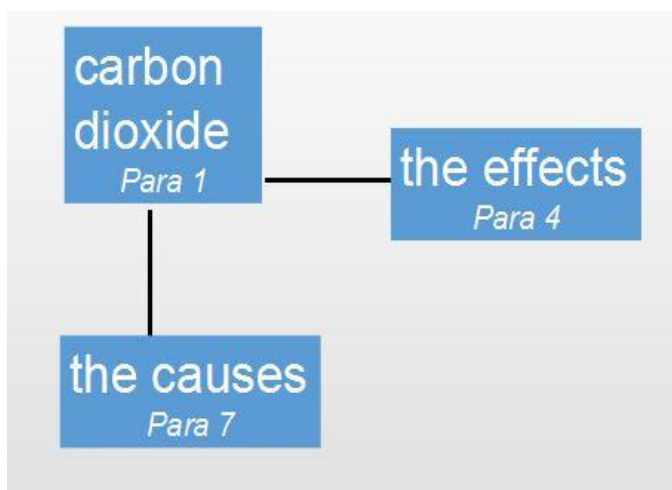
Making the structure of the text clear and easy to follow.

Para.1 is the thesis of the text.

Para. 4 tells the reader that what follows is the harmful effects of carbon dioxide.

Para.7 tells the reader that the next part is about the causes of these consequences.

Q2: What is the organization of the passage?



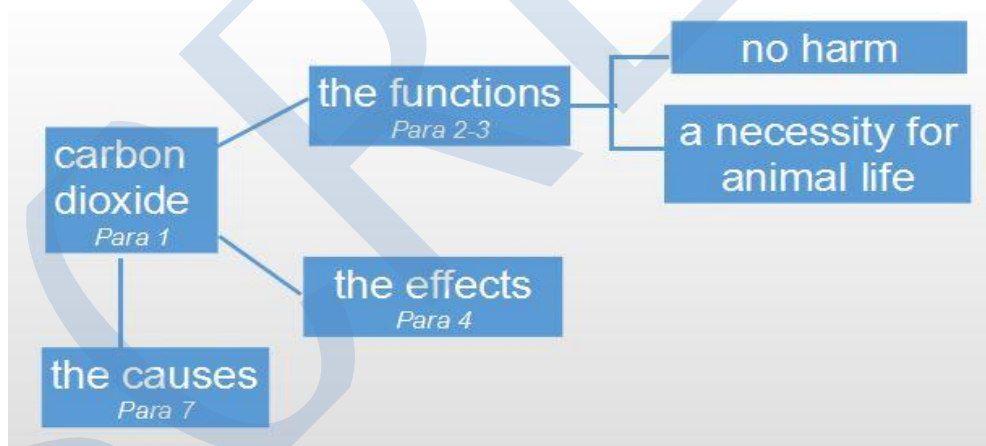
**Interactive Task 4: Read Para. 2-3 and learn the function of small quantity of carbon dioxide, and then complete the mind map.**

Q1: Is the small quantity of carbon dioxide a villain?

It does not seem to be a villain.

Q2: What functions does it serve?

The small quantity of carbon dioxide in the air is essential to life. Plants absorb it and convert it into a necessity for all animal life.



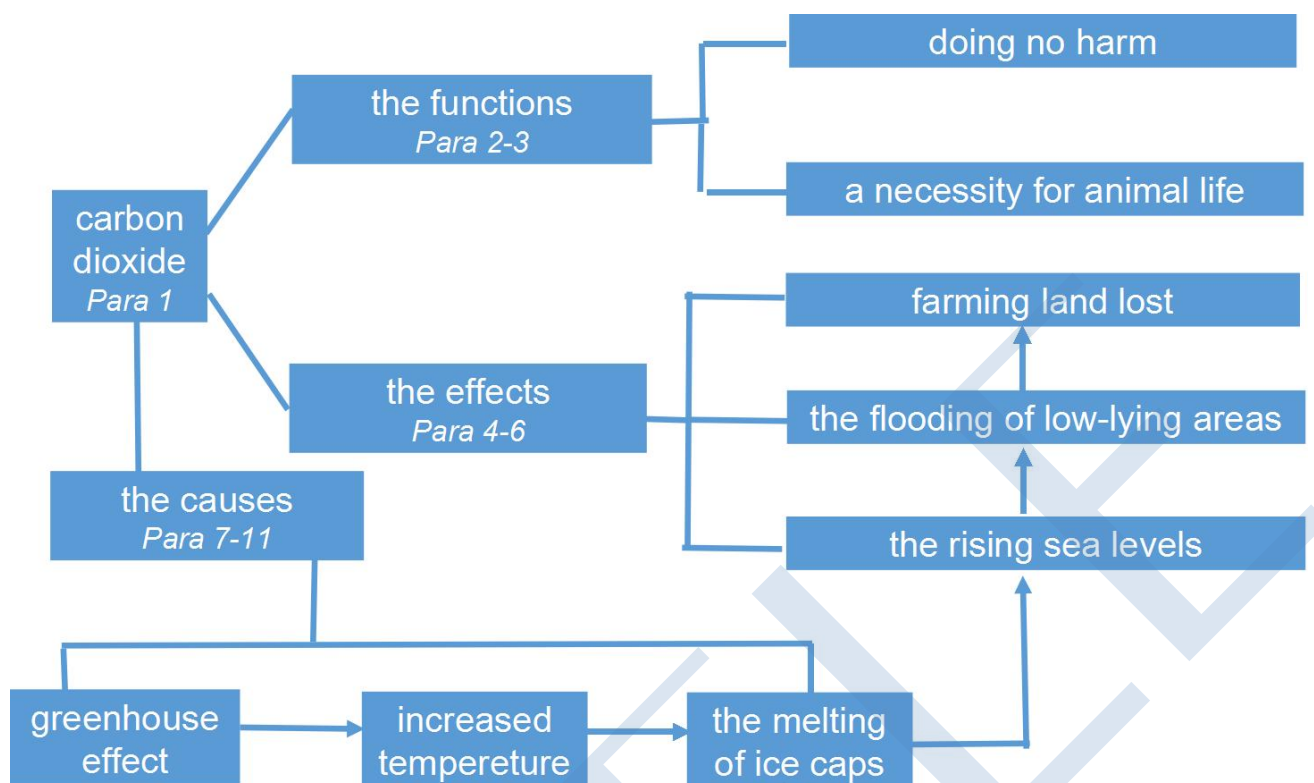
**Interactive Task 5: Read Para.4-6 , answer the teacher's questions based on the passage and complete the the mind map.**

Q1: Why will Manhattan streets eventually be deep under water according to the author?

Because the sea level is rising very slowly from year to year.

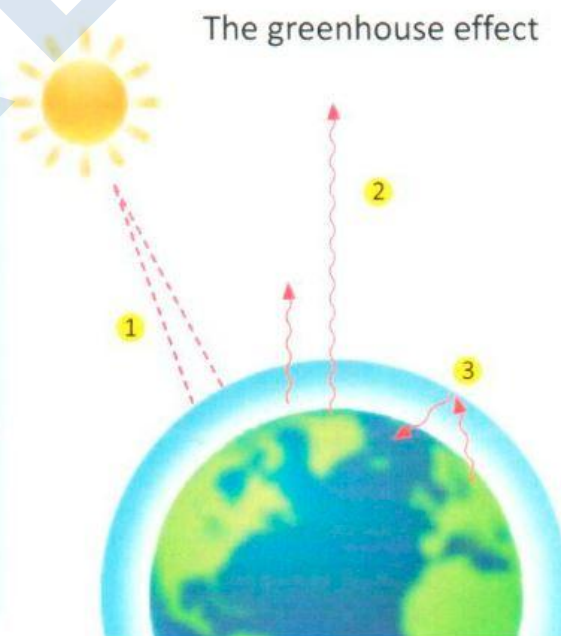
Q2: What's the result after many cities are drowned according to the passage?

Much of the most productive farming land of the world will be lost and starvation will be widespread.



**Interactive Task 6:** Read Para. 8 and complete the sentences corresponding to the diagram with one word for each blank.

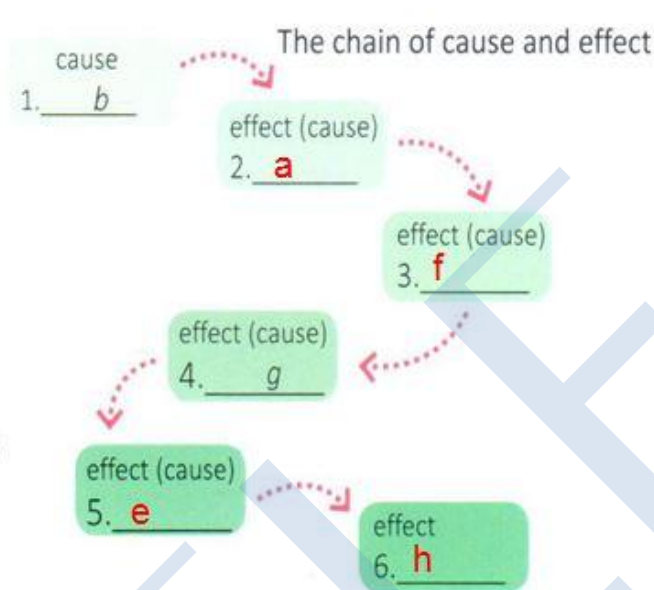
1. In the daytime, \_\_\_\_\_ travels through miles of the \_\_\_\_\_ to warm the \_\_\_\_\_.
2. At night, \_\_\_\_\_ is sent into space, which cools the earth.
3. Because of the existing carbon dioxide in the atmosphere, the \_\_\_\_\_ tends to be blocked, and \_\_\_\_\_ is lost at night.



1. sunlight / atmosphere / Earth's surface
2. infrared radiation
3. radiation / less heat

**Interactive Task 7: Read Para.7-11, and tick what has been mentioned and then complete the chain of cause and effect.**

- ☒ a. greenhouse effect
- ☒ b. carbon dioxide
- ☐ c. oxygen
- ☐ d. urban heat island effect
- ☒ e. the rising sea level
- ☒ f. increased temperature
- ☒ g. the melting of ice caps
- ☒ h. the flooding of low-lying areas
- ☐ i. changeable weather
- ☐ j. hydrogen



### III. Post-reading

**Interactive Task 8: Summarize the passage according to the mind map of the text.**

#### Checklist

- ☐ Do you begin with a topic sentence that states the writer's opinion clearly?
- ☐ Do you cover the writer's main points?
- ☐ Do you use your own words?
- ☐ Do you use proper transitional words?
- ☐ Do you stick to original opinions?
- ☐ Do you limit the summary to 100 words?

**Interactive Task 9: Work in pairs and discuss the aim of the passage and the writer's attitude to the villain in the atmosphere.**

1. What is the writer's attitude to the villain in the atmosphere? Is he indifferent/ concerned/ delighted/ frightened?

By referring to harmful effects on people's daily life, the writer shows his deep concern about the condition of atmosphere.

2. What is the writer's purpose in writing this passage? To entertain/warn/complain/inform...?

Has the writer achieved his/her purpose?

The aim of the passage is to make the public of the serious consequences of global warming..

Yes.

**IV. Homework**

1. Read aloud the passage three times. Pay attention to your intonation, pronunciation and stress.
2. Build up a word bank related to the functions, the harmful effects and the causes of these consequences about CO<sub>2</sub>.