

The first term English exam

Part One: Reading Comprehension (07 pts)

The Text:

Have you ever wondered why your kitchen tools are manufactured from such a variety of materials? The answer lies in a fundamental physical property known as Thermal Conductivity. This refers to the rate at which heat energy passes through a specific substance. In the culinary world, choosing the right material is essential for both efficiency and safety. Metals, such as stainless steel, aluminum, and copper, are typically used for the base and body of pots and pans. These materials are classified as conductors. At a microscopic level, metals have atoms packed tightly together and contain "free electrons" that move easily. When heat is applied, these particles vibrate and collide, allowing energy to move rapidly from the stove to your food. This ensures that the heat is distributed evenly, preventing "hot spots" that could burn your meal.

On the other hand, if the entire utensil were made of metal, it would be extremely hazardous to handle. To prevent burns, manufacturers attach handles made of insulators, such as wood, specialized plastics, or silicone. Insulators are materials that resist the flow of thermal energy because their molecular structure does not allow heat to move freely. Therefore, while the base of the pot reaches temperatures exceeding 100°C, the handle remains at a temperature that is safe for human skin. This practical application of physics not only improves our cooking but also protects us from domestic accidents every day.

Questions:

1. Choose the most appropriate title for the text: (01 pt)

- a) The Molecular Structure of Steel.
- b) The Science of Heat Transfer in Cookware.
- c) Modern Inventions in the Kitchen.

2. Answer the following questions based on the text: (02 pts)

How does the microscopic structure of metals contribute to heat transfer?

.....

Why is it dangerous to use a pot with a metal handle without protection?

.....

3. Determine if these statements are "True" or "False" based on the text: (02 pts)

Heat moves slowly through materials with "free electrons". [.....]

Insulators are used to keep certain parts of a tool cool. [.....]

Stainless steel and silicone have the same conductivity rate. [.....]
Science helps prevent injuries during everyday chores. [.....]

4. Lexicon: (02 pts)

Find in the text words that are closest in meaning to:

Produced/Constructed =

Dangerous =

Find in the text words that are opposite in meaning to:

Slowly ≠

Accept/Allow ≠

Part Two: Mastery of Language (07 pts)

1. Correct the grammatical errors in the following sentences: (2.5 pts)

She walk to school every day. → _____

We did saw a movie last night. → _____

I will calling you later. → _____

Does he likes pizza? → _____

They was late for the meeting yesterday. → _____

2. Transcribe the following sentences into IPA: (1 pt)

“I like to read books.”

3. Classify these words according to the pronunciation of the final "s": (1.5 pts)

(Pots - Handles - Materials - Cooks - Houses - Tools)

/s/	/z/	/iz/

4. Logical Connectors: Complete with (Therefore / Because / Although): (2 pts)

Copper is an excellent conductor; _____, it is used in high-quality pans.

The chef used a cloth _____ the handle of the old cast-iron skillet was hot.

_____ the stove was on, the wooden spoon remained cool to the touch.

Part Three: Written Expression (06 pts)

Topic: Physics is the study of how everything around us works. Write a paragraph (8-10 lines) explaining the importance of physics in our daily lives.

Give examples (Electricity, Cars, Communication).

Use the Present Simple and clear transition words (First, Second, Finally).

.....
.....
.....

GOOD LUCK!

The model correction for the first term English exam

Part One: Reading Comprehension (07 pts)

1. Choose the most appropriate title: (01 pt)

b) The Science of Heat Transfer in Cookware.

2. Answer the questions based on the text: (02 pts)

How does the microscopic structure of metals contribute to heat transfer?

Metals have atoms packed tightly together and contain "free electrons" that move easily, allowing energy to move rapidly through vibrations and collisions.

Why is it dangerous to use a pot with a metal handle without protection?

It is dangerous because metal is a conductor; it would become extremely hot and cause burns to the skin.

3. True or False: (02 pts)

Heat moves slowly through materials with "free electrons". [False]

Insulators are used to keep certain parts of a tool cool. [True]

Stainless steel and silicone have the same conductivity rate. [False]

Science helps prevent injuries during everyday chores. [True]

4. Lexicon: (02 pts)

Produced/Constructed = Manufactured

Dangerous = Hazardous

Slowly≠Rapidly (or Easily)

Accept/Allow ≠Resist

Part Two: Mastery of Language (07 pts)

1. Correct the grammatical errors: (2.5 pts)

She walks to school every day.

We saw a movie last night.

I will call you later.

Does he like pizza?

They were late for the meeting yesterday.

2. Transcribe the following sentence into IPA: (1 pt)

/aɪ laɪk tu: ri:d bʊks/

3. Pronunciation of final "s": (1.5 pts)

/s/	/z/	/ɪz/
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Pots Cooks	Handles Materials Tools	Houses
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4. Logical Connectors: (2 pts)

- Copper is an excellent conductor; therefore, it is used in high-quality pans.
- The chef used a cloth because the handle of the old cast-iron skillet was hot.
- Although the stove was on, the wooden spoon remained cool to the touch.

Part Three: Written Expression (06 pts)

Topic: The Importance of Physics in Our Daily Lives