#### Instructions

### Take a look at the focus words below. Think about what each word means and how it is used. Then answer the questions after each word.

**Remember:** You ***don’t*** have to understand every word in the example sentences.

**Focus words**: increase, define, approach, function, on the other hand

**I. increase**

1. At the crystalline melting point, there is an **increase** in volume of 25%, and the polymer becomes a weak translucent material.
2. There is also some indication of an **increase** in thyroid cancer among the heavily irradiated survivors.
3. This curve represents the effect of the **increase** of temperature from 105°C to 150°C.
4. The aim of both is to **increase** the surface hardness, or to reduce friction, or all of these.
5. For this path, we can **increase** the flow by as much as 6 without exceeding the capacity of any arc.
6. These computer systems help to **increase** the designer's inventive and creative abilities in solving engineering and scientific problems.

What do you think the word **increase** means? Use a dictionary to help.

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What part of speech is the word **increase** in examples 1-3? What part of speech is the word **increase** in examples 4-6?

Look at the sentences below. Do you think **increase** is being used correctly?

Circle your answer.

1. Most human activities tend to **increase** the rate of flow of water in ecosystems.

correct incorrect

1. There is an **increase** with volume of 15%.

correct incorrect

1. We can **increase** about flow by changing the water pressure.

correct incorrect

1. They exploit the **increase** in the hardness given by embedding foreign atoms in a thin surface layer.

correct incorrect

1. For small systems, this **increase** in temperature is usually not a big problem.

correct incorrect

1. One of the effects is that the more loosely packed atoms in the molten metal show an **increase** in volume.

correct incorrect

Write two sentences (one for each part of speech) that use the word **increase**. Use the examples above to guide you.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**II. define**

1. **Define** the member function sort following the model of Display 20.2.
2. To understand those meanings, we need first to **define** several new terms.
3. Our next goal in this section is to **define** a fundamental concept of physics known as flux.
4. We shall now **define** some terms to understand the results of the tension test.
5. When we **define** a class, we **define** not only data, but also the operations allowed on those data.
6. **Define** the term desalination.

What do you think the word **define** means? Use a dictionary to help.

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Look at the sentences below. Do you think **define** is being used correctly?

Circle your answer.

1. **Define** about the word polymer.

correct incorrect

1. You will need to **define** the first variable before you can solve the equation.

correct incorrect

1. When we **define** on this function, it allows us to perform the operation.

correct incorrect

1. Our approach is to **define** the Laplace transformation.

correct incorrect

1. The copy constructor is not inherited, but if you do not **define** a copy constructor in a derived class , C++ will automatically generate a copy constructor for you.

correct incorrect

1. To enforce the required uniqueness of the foreign key value, we **define** the foreign key column as unique.

correct incorrect

Write a sentence that uses the word **define.** Use the examples above to guide you.

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**III. approach**

1. Another **approach** is to keep the list in alphabetical order.
2. A more efficient **approach** is to use codewords of variable lengths.
3. This **approach** provides a fundamental basis for the study of fluid mechanics.
4. This **approach** is similar to the concept of fields discussed earlier in this chapter.
5. Fortunately, there is a much simpler **approach** to this problem that will eliminate the difficulties described above.
6. Newton needed a new mathematical **approach** to handle his investigations, and so he invented calculus.
7. We use the first **approach** in Section 24-2 and the second in Section 24-9.

What do you think the word **approach** means? Use a dictionary to help.

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Look at the sentences below. Do you think **approach** is being used correctly?

Circle your answer.

1. A better **approach** is to organize your work before you begin.

correct incorrect

1. The third **approach** to this problem is shown in Figure 4.12 on page 217.

correct incorrect

1. An **approach** with to solve this equation is shown in the diagram below.

correct incorrect

1. In this chapter we extend this **approach** in several different ways.

correct incorrect

1. The general **approach** for is to look first at S, then at the vertices adjacent to S.

correct incorrect

1. The reader should be aware of this **approach** to complex flow problems.

correct incorrect

Write a sentence that uses the word **approach**. Use the examples above to guide you.

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**IV. function**

1. We next design a **function** to insert a node at a specified place in a linked list.
2. If you want a **function** to change the value of a variable, then you must use a call-by-reference parameter.
3. This step can be difficult since many parts are designed to include multiple **functions**.
4. This voltage is a linear **function** of the pressure and could be digitized for storage or processing on a computer.
5. The primary **function** is that of storing elastic energy.
6. Thus, a **function** that returns a value may do any other action as well as return a value.
7. The **function** may call itself, and that recursive call may call the **function** again.

What do you think the word **function** means? Use a dictionary to help.

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Look at the sentences below. Do you think **function** is being used correctly?

Circle your answer.

1. The **function** is important and the program cannot work without it.

correct incorrect

1. The main **function** is to coordinate the integers in the Table 1 with the customer names in Table 2.

correct incorrect

1. You design **function** for inserting this information.

correct incorrect

1. This result is a linear **function** at the temperature of the material.

correct incorrect

1. The computer writes a second copy of the **function**.

correct incorrect

1. You are telling the compiler, "I do not know how this **function** is implemented.

correct incorrect

Write a sentence that uses the word **function**. Use the examples above to guide you.

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**V. on the other hand**

1. Polystyrene (PS), **on the other hand,** burns rapidly, has a strong gas odor, and produces tremendous amounts of soot.
2. It is possible for our lungs to get oxygen from the atmosphere easily. Nitrogen, **on the** **other hand**, is not readily available.
3. Plants make carbohydrates through photosynthesis. Animals, **on the other hand,** obtain carbohydrates by eating plants or other animals.
4. Gas is mostly empty space, so the molecules are free to move about the entire volume of their container. Molecules in a liquid, **on the other hand**, are packed closely together but can still move past one another.
5. This first solution is easy to use; **on the other hand**, the second solution is much more difficult to work with in this equation.
6. These wavelengths of light are easily visible to the human; **on the other hand**, infra-red wavelengths are not normally visible to the human eye.

What do you think **on the other hand** means? Use a dictionary to help.

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Look at the sentences below. Do you think **on the other hand** is being used correctly?

Circle your answer.

1. It is a good idea; **on the other hand**, it will work well, too.

correct incorrect

1. The temperature will decrease; **on the other hand**, the pressure inside the vessel will increase.

correct incorrect

1. Fortunately, in this case one can be found by a little bit of trial and error. **On the other** **hand**, the graph with five vertices in Figure 4.24(b) does not have a Hamiltonian cycle.

correct incorrect

1. A few plastics are biodegradable. **On the other hand,** most plastics don’t biodegrade.

correct incorrect

1. It is easy to use and understand. **On the other hand,** this process is helpful.

correct incorrect

1. **On the other hand**, splay trees are much simpler to program than AVL trees, since there are fewer cases to consider and no balance information.

correct incorrect

Write a sentence that uses on the other hand. Use the examples above to guide you.

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**VI.** Choose **three** of the focus words and use them in a short paragraph.

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**VII.** Look at the example sentences. What words come before and after each of the focus words?Put each word in a suitable category.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| before the focus word | on the other hand | increase | increase | approach | function | define |
| noun |  |  |  |  |  |  |
| verb |  |  |  |  |  |  |
| preposition |  |  |  |  |  |  |
| article |  |  |  |  | **the** |  |
| other word types |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| after the focus word | on the other hand | increase | increase | approach | function | define |
| noun |  |  |  |  |  |  |
| verb |  |  |  |  |  |  |
| preposition |  |  |  |  | **is** |  |
| other word types |  |  |  |  |  |  |

**Are there any patterns that you notice?** *Click here to see more examples of the focus words in use.*

**What does the pattern tell you about how the focus word is used?**

**VIII.** Do the focus words have any other parts of speech? Complete the table. Not all focus words have all parts of speech that are shown in the table.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | increase | increase | approach | define |
| noun | **increase** |  |  |  |
| verb |  | **increase** |  |  |
| adjective |  |  |  |  |
| adverb |  |  |  |  |

How do we classify **on the other hand?**