

A name for the study of life in the Universe

COMPREHENSION • VOCABULARY • DISCUSSION

INTERACTIVE ONLINE TEST

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Reading Passage

Read the passage carefully. Each paragraph is labelled with a letter for easy reference.

A An argument for introducing the word ‘cosmobiology’, and accounts of the human side of science, in our weekly dip into Nature’s archive. *50 years ago* The term ‘exobiology’ excludes life on Earth. It is, of course, impossible at present to study exobiology without reference to life on Earth. Even if several extraterrestrial life forms were discovered tomorrow, nobody would study them without comparing them with terrestrial life. Thus there is a need for a word which includes all life forms in the universe. The term cosmochemistry is already well established and has been defined as “the branch of science which treats the chemical composition of the universe and its origin and evaluation”. It would thus seem to be appropriate to use the term cosmobiology for the study of life in the Universe. I believe that such matters of terminology are not trivial, for the manner in which a science is divided into branches has a significant effect on the development of that science. *100 years ago* Masters of Science and Invention. By Floyd L. Darrow — In recent years progressive science teachers have been pondering the problem of “humanising” scientific instruction, of introducing the breath of life into the “valley of dry bones” of experiment, observation, and inference, and thus in a measure treading on the ground hitherto monopolised by the humanists. The work under notice represents an attempt in this direction. The author has set himself the difficult task of giving, in simple biographical form, an account of the development of scientific achievement, and he states that “no knowledge of the laws of science and their manifold applications is even approximately complete without acquaintance with the outstanding figures who have made possible the age in which we live.” In the twenty-eight chapters, each of which is more or less complete in itself, we are given an excellent bird’s-eye view of the march of discovery and invention, which will especially appeal to the young — in years or knowledge.

Vocabulary Glossary

Key words and phrases from the passage. Study them before attempting the exercise below.

WORD / PHRASE	DEFINITION	EXAMPLE SENTENCE
extraterrestrial	related to things that are not from Earth	<i>Scientists are searching for extraterrestrial life on other planets.</i>
terrestrial	related to Earth or land	<i>Birds are terrestrial animals, living on land.</i>
terminology	the set of special words used in a particular field	<i>Doctors use difficult terminology that patients often do not understand.</i>
archive	a collection of historical documents or records	<i>The library has an archive of old newspapers.</i>
inference	a conclusion reached based on evidence and reasoning	<i>From the clues, the detective made an inference about who was guilty.</i>
biographical	related to the story of a person's life	<i>She wrote a biographical book about a famous artist.</i>
manifold	many and various	<i>The city offers manifold attractions for tourists.</i>
monopolised	controlled completely by one group or person	<i>The big company monopolised the market for phones.</i>

Vocabulary Exercise — Fill in the Blank

Use one word or phrase from the glossary above to complete each sentence. Each item is used only once. Answers are on the final page.

1. The scientists are excited about finding _____ life on Mars.
2. The _____ animals include those living in forests and deserts.
3. In science, knowing the correct _____ is important to understand discussions.
4. The historian spent hours reading through the _____ for research.
5. She made an _____ about the weather based on the dark clouds.
6. His _____ account of the leader's life was very inspiring.

Comprehension Questions

These questions are different from the online practice test. Choose the best answer (A, B, C, or D). Answers and explanations are on the final page.

Question 1

Why does the passage suggest the term 'cosmobiology' is needed?

- A. To include all life forms in the universe.
- B. To focus only on Earth-based life forms.
- C. To replace the term cosmochemistry.
- D. To eliminate comparison with terrestrial life.

Question 2

What is implied about the term 'exobiology' in the passage?

- A. It is sufficient for studying all life.
- B. It excludes life on other planets.
- C. It does not consider life on Earth.
- D. It is a well-established term for universal life study.

Question 3

What is the author's purpose in discussing the division of science into branches?

- A. To show how it slows down scientific progress.
- B. To illustrate its impact on scientific development.
- C. To argue for abolishing branches in science.
- D. To highlight the confusion it creates among scientists.

Question 4

What challenge does the author of 'Masters of Science and Invention' face?

- A. Introducing complex terminology.
- B. Simplifying scientific laws.
- C. Humanizing scientific instruction.
- D. Competing with humanist subjects.

Question 5

How does the passage view the human aspect in science education?

- A. As unnecessary for scientific achievement.
- B. As vital for understanding science.
- C. As a distraction from scientific facts.
- D. As an outdated approach.

Discussion & Writing Prompts

Each prompt references a specific detail from the passage above. Use for classroom discussion or a short written response (150–200 words).

1. The passage mentions that 'cosmochemistry' is a well-established term. How important do you think it is to have established terminology in science, and can you think of any fields where the terminology might be confusing?

2. According to the passage, 'Masters of Science and Invention' tries to humanize science education. How do you think the inclusion of biographical information about scientists can enhance learning in your country?

3. The passage suggests that the way science is divided into branches affects its development. Can you think of any examples where the division of a subject into different fields has positively or negatively impacted its progress?

Answer Key

COMPREHENSION QUESTIONS

Q1 A

Q2 C

Q3 B

Q4 C

Q5 B

VOCABULARY EXERCISE

FIB1 extraterrestrial

FIB2 terrestrial

FIB3 terminology

FIB4 archive

FIB5 inference

FIB6 biographical

Comprehension Question Explanations

Why the correct answer is right — and why each wrong option is incorrect.

1. Why does the passage suggest the term 'cosmobiology' is needed?

✓ A — To include all life forms in the universe.

The passage states that cosmobiology includes all life forms in the universe.

✗ B — To focus only on Earth-based life forms.

This is incorrect as 'cosmobiology' aims to include life beyond Earth.

✗ C — To replace the term cosmochemistry.

Cosmochemistry is mentioned as a comparison, not a replacement.

✗ D — To eliminate comparison with terrestrial life.

The passage suggests comparison is necessary, not to eliminate it.

2. What is implied about the term 'exobiology' in the passage?

✓ C — It does not consider life on Earth.

The passage mentions that 'exobiology' excludes life on Earth.

✗ A — It is sufficient for studying all life.

The passage argues that it is not sufficient for all life.

✗ B — It excludes life on other planets.

It actually excludes life on Earth, not other planets.

✗ D — It is a well-established term for universal life study.

Exobiology is not described as well-established for universal life study.

3. What is the author's purpose in discussing the division of science into branches?

✓ B — To illustrate its impact on scientific development.

The passage indicates that how science is divided affects its development.

✗ A — To show how it slows down scientific progress.

The passage does not suggest it slows progress.

✗ C — To argue for abolishing branches in science.

The author does not argue for abolishing branches.

✗ D — To highlight the confusion it creates among scientists.

The passage does not mention confusion among scientists.

4. What challenge does the author of 'Masters of Science and Invention' face?

✓ C — Humanizing scientific instruction.

The passage states the author attempts to humanize scientific instruction.

✗ A — Introducing complex terminology.

The focus is on simplifying, not introducing complex terms.

✗ B — Simplifying scientific laws.

The passage does not mention simplifying laws.

✗ D — Competing with humanist subjects.

While it mentions humanists, the focus is on humanizing science.

5. How does the passage view the human aspect in science education?

✓ **B — As vital for understanding science.**

The passage emphasizes that knowing about scientists is important for understanding science.

✗ **A — As unnecessary for scientific achievement.**

The passage stresses its importance, not its irrelevance.

✗ **C — As a distraction from scientific facts.**

It is seen as important, not a distraction.

✗ **D — As an outdated approach.**

The passage suggests it is a modern approach.

MORE B2 LEVEL READING PRACTICE

Letters Refugee Camp Family Story Hope — <https://www.esl-tests.com/reading/b2/letters-refugee-camp-family-story-hope>

Global Health Preparedness Lessons Recent Pandemics — <https://www.esl-tests.com/reading/b2/global-health-preparedness-lessons-recent-pandemics>

Climate Migration Communities Move — <https://www.esl-tests.com/reading/b2/climate-migration-communities-move>