

4.1 Contextualizing the Scientific Revolution and the Enlightenment

Name: _____ Class: _____ Date: _____

Total: 13 marks

KEY WORDS enlightenment 启蒙运动 • scientific revolution 科学革命 • newton 牛顿

Objective

Build the skills to write the **context** for the Scientific Revolution and Enlightenment.

You must be able to:

- name the conditions that made a new natural philosophy possible
- explain the role of instruments, mathematics and communication
- state what the Enlightenment applied and to what
- avoid narrating discoveries instead of naming conditions

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ Conditions

Recovered classical texts and the habit of checking them; instruments extending the senses; mathematics able to express regularities; printing and correspondence networks carrying results between investigators.

■ What each supplied

Instruments made observation exceed unaided sight. Mathematics made results comparable and predictions testable. Communication made findings cumulative rather than isolated.

■ What the Enlightenment applied

It took the method that had worked on nature — observation, reason, scepticism toward inherited authority — and applied it to government, religion, law and society.

2 Practice

2.1 Name three conditions for the Scientific Revolution. [3]

2.2 Explain what communication networks contributed. [2]

2.3 A student writes: “In 1687 Newton published his laws.”

(a) State why this is not context. [1]

(b) Rewrite it as a condition. [2]

3 Exam-style questions

3.1 Mathematics contributed by making results [1]

- | | |
|---|---|
| A | B |
| C | D |
- A** decorative
B comparable and predictions testable
C secret
D unnecessary

3.2 The Enlightenment applied a method developed on nature to [1]

- | | |
|---|---|
| A | B |
| C | D |
- A** astronomy only
B government, religion, law and society
C navigation only
D painting

3.3 A correspondence network circulates results between investigators.

(a) State the effect on the pace of discovery. [1]

(b) Explain why isolated work is slower. [2]
