

4 The Scientific Revolution: a new way of knowing – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English

Write it 3 times (English)

Scientific Revolu-
tion

Recall

- You know an experiment can settle an argument a debate cannot.
- You have checked a claim by measuring rather than by asking.
- You know an instrument can show what the eye cannot.

New ideas

Read these first. Each idea has a short worked example. Then do the Practice below.

■ 1 A new method

The **Scientific Revolution** replaced deference to ancient authority with observation, experiment and mathematics. What changed was how a claim could be settled.

Worked example. An argument about the planets that a telescope can decide is a different kind of argument.

■ 2 Instruments

New instruments extended the senses, and mathematics described what they revealed. A claim could now be checked by anyone with the same instrument.

Worked example. Two observers in different countries could confirm the same measurement.

■ 3 Consequences beyond science

A method that settled natural questions invited application to political and social ones. Unit 4's philosophers ask whether human societies can be studied the same way.

Worked example. If nature has discoverable laws, a thinker may ask whether government does too.

Watch out: The Scientific Revolution did not disprove religion. It changed the method by which natural claims were settled, and many of its practitioners were devout.

Practice

2.1 State what the Scientific Revolution replaced and with what. [2]

2.2 Explain what instruments changed about a claim. [2]

2.3 Explain why two observers confirming a measurement matters. [2]

2.4 State how the new method reached political questions. [2]

2.5 State why the revolution is not a disproof of religion. [2]
