Ideas in Motion

How Renaissance tools changed what people could know

SS24.8.9b "Summarize major scientific and technological advancements in the Renaissance, including the printing press, and evaluate their effects on society."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline three advances or methods in the passage. Number one effect of each 1, 2, and 3, then circle one limit or concern for each.

New Tools, New Questions

(1) In a crowded workshop in Mainz around 1450, Johannes Gutenberg helped develop a press using reusable metal letters and ink suited to printing. Workers could arrange letters for a page, print many copies, and rearrange them for another page. Earlier books were often copied by hand. Printing made books and pamphlets faster to produce and helped new ideas travel across Europe. Yet many people could not read, and printed claims could spread errors as easily as useful knowledge.

(2) In 1609, Galileo Galilei improved a telescope, an instrument first developed in the Netherlands. Through it, he saw moons orbiting Jupiter and later observed the changing appearance of Venus. These sights raised doubts about the old claim that every heavenly body circles Earth. Galileo published his observations so other readers could discuss them, especially as printed copies traveled. Some religious leaders and scholars resisted his conclusions, while others investigated the evidence. A telescope did not settle every question, but it gave observers new ways to test explanations.

(3) In 1543, Andreas Vesalius published a book about the human body based on dissections of human corpses. Careful drawings and descriptions showed that some older accounts, often based on animal bodies, were wrong about human anatomy. Printing let more medical students compare the same images with what they saw in dissections. This changed how some students learned: they could question an authority by checking a body for themselves. Better descriptions did not immediately cure disease, and dissections remained difficult and controversial in some places.

2 ANSWER WITH EVIDENCE

Use the passage

1. How did the printing press change the spread of ideas? Explain why its effect was limited for some people.

2. How did Galileo's telescope observations change the way some people evaluated claims about the sky?

3. How did Vesalius's work change medical learning? Why did that change not immediately solve health problems?

4. How did printing help people examine ideas in both astronomy and anatomy? Give one effect in each field.

3 YOUR TURN

Your own words

Imagine a Renaissance town school wants students to investigate conflicting claims about the night sky. In four sentences, propose a plan using two advances from the passage, predict a benefit for the school community, and explain one limitation.

ANSWER KEY

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GRADE 8 · SS24.8.9b

PART 1 · READ AND MARK

Underline three advances or methods in the passage. Number one effect of each 1, 2, and 3, then circle one limit or concern for each. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How did the printing press change the spread of ideas? Explain why its effect was limited for some people.	**It made books and pamphlets faster to produce, helping ideas travel across Europe. People who could not read could not use those printed texts directly.**
2	How did Galileo's telescope observations change the way some people evaluated claims about the sky?	**His observations raised doubts about the claim that every heavenly body circles Earth and gave people evidence they could investigate.**
3	How did Vesalius's work change medical learning? Why did that change not immediately solve health problems?	**Students could compare descriptions with human bodies instead of relying only on older authorities. Better descriptions did not immediately cure disease.**
4	How did printing help people examine ideas in both astronomy and anatomy? Give one effect in each field.	**Printed copies helped readers discuss Galileo's observations. Printed anatomy images let medical students compare the same descriptions with what they saw in dissections.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would give the school a telescope and use a printing press to make copies of students' observation reports. Students could look for Jupiter's moons, then compare their notes before making claims about what moves around Earth. Printed reports would let families discuss the evidence even if they could not use the telescope themselves. The reports would leave out families who could not read, so students could also discuss their findings aloud.

Accept other accurate effects and limits supported by the passage. For Part 3, look for a workable use of two advances, a predicted social benefit, and a plausible limitation.