Voices on File

Weigh the benefits and risks of a digital archive

PS.PS4.2 "Evaluate questions about the advantages and disadvantages of using a digital transmission and storage of information.*"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two advantages of digital files and circle two disadvantages or risks. Then put a star beside the planning question that best considers both benefits and risks.

Saving the Flood Interviews

1. At the Harbor Library, volunteers are saving recorded interviews about the town's biggest flood. Some interviews exist only on cassette tapes, which play sound from a changing magnetic pattern. A tape can be damaged by heat or repeated handling, and copying it to another tape can add hiss. Volunteers can convert the recordings into digital files, which represent sound with numbers. They can send those files through the internet to a partner library instead of mailing tapes. If the received bits match the originals, the partner can make copies without adding tape hiss.

2. Digital storage does not make an archive automatically safe. The library can keep copies on separate drives so one failed drive does not erase every interview. A file check can reveal that bits changed during transfer, but it cannot rebuild missing sound unless another intact copy exists. To save space, volunteers might use lossy compression, which permanently removes some sound details. The library also needs working devices and power to play the files. If it stores interviews online, unauthorized people could reach private stories unless access is controlled. An internet outage could delay transfers, though locally saved files may remain available.

3. At a planning meeting, someone asks, “How fast can we send each file?” That question examines one advantage but ignores storage and privacy. Another volunteer asks, “How much space can compressed files save?” That question matters, yet space savings alone cannot show whether lost sound details are acceptable. A third person asks, “Can we share accurate recordings quickly while keeping them accessible and protecting private stories?” This question links several benefits to possible costs. The librarians still need evidence: a test transfer, a sound comparison, backup plans, and rules for who can open each interview. No single question proves the system is best.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which planning question best helps the library weigh digital transmission and storage? Explain using one benefit and one risk from the passage.

2. The first volunteer asks only how fast files can be sent. What important question about access should the library also ask?

3. Why is asking only how much space compression saves not enough? Write a question that would help the library judge the tradeoff.

4. A volunteer asks, “If a file check finds changed bits, are the recordings protected?” What follow-up question would help the library evaluate its storage plan?

3 YOUR TURN

Your own words

A student club wants to replace its paper sign-in binder with a shared digital sign-in file. Write two questions the club should investigate to weigh advantages and disadvantages of sharing and storing the information digitally. Explain which question it should investigate first and why.

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PART 1 · READ AND MARK

Underline two advantages of digital files and circle two disadvantages or risks. Then put a star beside the planning question that best considers both benefits and risks. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which planning question best helps the library weigh digital transmission and storage? Explain using one benefit and one risk from the passage.	**The third question is best because it considers quick sharing alongside risks such as losing access to files or exposing private stories.**
2	The first volunteer asks only how fast files can be sent. What important question about access should the library also ask?	**The library should ask how people will access the recordings if the internet is down or the devices lack power.**
3	Why is asking only how much space compression saves not enough? Write a question that would help the library judge the tradeoff.	**Lossy compression permanently removes sound details. An appropriate question is, "How much space can we save without losing sound details that matter to the interviews?"**
4	A volunteer asks, "If a file check finds changed bits, are the recordings protected?" What follow-up question would help the library evaluate its storage plan?	**The library should ask whether an intact copy is stored on another drive, since a file check can reveal changed bits but cannot rebuild missing sound by itself.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

How quickly could club leaders share the sign-in file, and who would be allowed to open it? If the internet or a device fails, how would leaders reach the list? I would investigate the first question before choosing a system because quick sharing is useful only if members' information is protected.

Accept other questions that investigate a relevant digital benefit and drawback, such as backup copies, access during an outage, or privacy. For Part 3, the reason for investigating one question first should connect to the club's decision.