

Photo Data Through a Computer System

KS3 / Year 8 - Computing

Trace a captured photo through input, memory, processing, storage, network and output. Find four clues showing that hardware and software must work together.

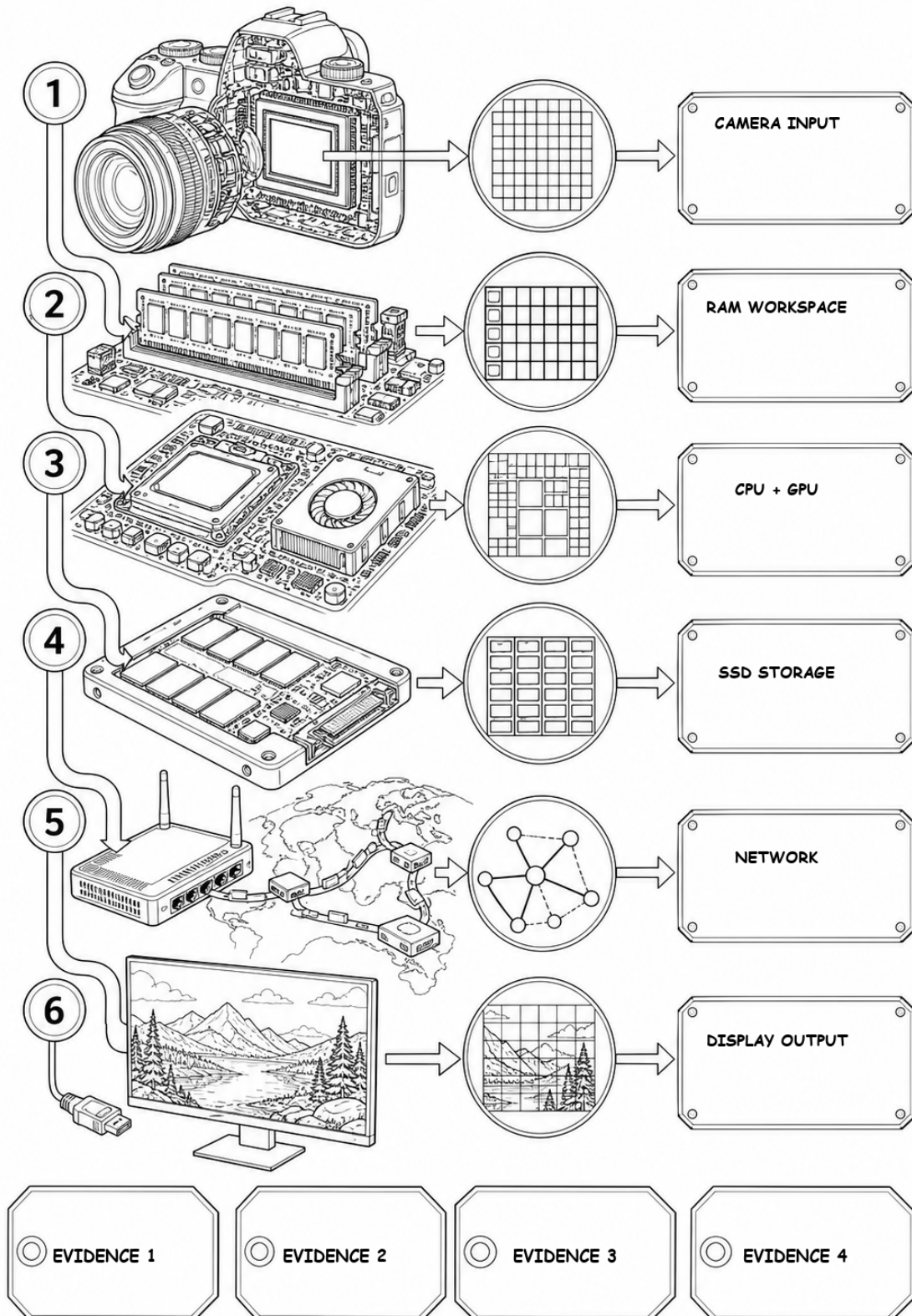


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Parent & Teacher Guidance

Curriculum focus

Topic: Computer systems. Develop accurate observation, subject vocabulary and evidence-based explanation. Mapped scope: KS3 Computing: components of computer systems and communication, stored/executed instructions, data representation and creative use of digital systems..

Before you begin

Review the picture together and ask the learner what they already notice about Computer systems. Read the activity aloud, explain unfamiliar vocabulary, and agree which details need special attention.

Solo activity

The learner can complete the colouring independently, then use the finished page to explain three details linked to Computer systems. Encourage accurate colour choices where they carry meaning, but allow creative choices elsewhere.

Group activity

Give pairs or small groups different areas to inspect. Ask them to agree on evidence before colouring, compare their findings, and present one curriculum fact to the class. Finish with a whole-group check against the guidance below.

Questions to guide discussion

What evidence can you see? Which feature is most important and why? How does one part connect to another? What new fact about Computer systems can you explain using the picture?

Answers and checking

One valid route: camera sensor captures input; device driver/application instructions coordinate capture; data is held in memory while CPU/GPU processes it; file is written to storage; network hardware and protocols can transmit it; display software and hardware produce output. Evidence pairs include sensor plus driver, CPU plus program instructions, storage device plus file system, display plus graphics software. Exact implementations vary.

Learning record and next steps

☐ Completed the colouring

☐ Explained key vocabulary

☐ Completed the activity

☐ Used visible evidence

Evidence noticed / vocabulary used

Next step:
