

Peripherals

STARTER

A. Link the inputs on the left and the outputs on the right with the appropriate peripherals in the centre.



Figure 1: Peripheral

Let's read

B. Read the text and understand the vocabulary contextually then fill the meanings of vocabularies in the box.

Ready for Bazillion Bite-Drive?

Thinking about writing your memoirs - putting your life story down on paper for all eternity? Why not skip the repetitive strain injury and just capture your whole life on full-motion video, putting it all in a device the size of a sugar cube? It might not be as far off as you think.

Currie Munce, director of IBM's Advanced HDD Technology Storage Systems Division, has one avowed goal: Build bigger storage. Recently Munce and his fellow Ph. Ds restored Big Blue's lead in the disk space race with a new world record for areal (bit) density: 35.3 gigabits per square inch - roughly three times as dense as any drive shipping at press time.

During the 1990s, areal density doubled every 18 months, keeping pace with the transistor density gains predicted by Moore's Law. But increasingly daunting technical challenges face those who would push the storage envelope further. 'I think magnetic recording technology has another good 5 to 10 years,' says Munce. 'After that, we'll see substantial difficulties with further advances at the pace people are accustomed to.'

From here on, a phenomenon called super paramagnetism threatens to make densely-packed bits unstable. Provided that new developments continue to thwart super paramagnetic corruption, scientists speculate that the theoretical limit for discrete bit recording is 10 terabits per square inch (1 terabit = 1,000 gigabits).

Approaching this limit will require new technologies. Two possible contenders are atomic force microscopy (AFM) and holographic storage.

GLOSSARY

Memoirs :	Avowed :	Daunting :
Eternity :	Fellow :	Accustomed :
Repetitive:	roughly :	Thwart :
Strain :	Dense :	Discrete :
Injury :	Gains :	

C. Find the answers to these questions from the text.

1. What is Currie Munce's main aim?
2. How quickly did the possible areal density of hard disks increase in the 1990s?
3. How long does Munce think magnetic recording technology will continue to make rapid advances in capacity?
4. What problem does he predict for magnetic storage?
5. What is the predicted limit for discrete bit magnetic storage capacity?

D. Mark the following statements as True (T) or False (F):

- a. The development of AFM is more advanced than holographic storage.
- b. The predicted maximum storage density of AFM is 400 gigabits per square inch.
- c. Holography works in 3D.
- d. Univac I was the first computer to use tape storage devices.
- e. Users want higher capacity storage devices than technology can provide.

Let's speak

E. Choose one of the following cameras then try to discuss why you choose that camera



LANGUAGE WORK

Comparison and Contrast

Study this comparison of digital and conventional cameras.

FEATURE	DIGITAL	CONVENTIONAL
lens	✓	✓
viewfinder	✓	✓
requires chemical processing	X	✓
film	X	✓
transfer images directly to PC	✓	X
can delete unsatisfactory images	✓	X

1. Both cameras have lenses.
2. Like the conventional camera, the digital camera has a view finder.

Contrasting features which are different:

3. The conventional camera requires chemical processing *whereas* the digital camera does not.
4. The conventional camera uses film *unlike* the digital camera.
5. With a digital camera you can transfer images directly to a PC *but* with a conventional camera you need to use a scanner.
6. With digital cameras you can delete unsatisfactory images; however with conventional cameras you cannot.

Note how we can compare and contrast these types of cameras.

Comparing features which are similar:

F. Study this data about storage devices. Then complete the blanks in the following sentences comparing and contrasting the different types.

Device	Read/Write	Speed	Media Capacity	Media Removable	Cost
Floppy disk	Read and write	Slow	Very low	Yes	Low
Fixed hard disk	Read and write	Fast	Very high	No	Medium
Removable hard disk	Read and write	Medium to fast	High	Yes	Medium
CD-ROM	Read only	Medium	High	Yes	Low
CD-R	Recordable	Slow	High	Yes	Medium
CD-RW	Read and write	Medium	High	Yes	Medium
CD-MO	Read and write	Medium	High	Yes	High
DVD-ROM	Read only	Medium	High	Yes	Medium
DVD-RAM	Read and write	Medium	Very high	Yes	High
Magnetic Tape	Read and write	Very slow	High	Yes	Medium

1. You can write to hard disks optical disks.
2. Floppy disks have a capacity other devices.
3. CD-ROMs and floppy disks are low priced.
4. DVD-RAM has a capacity other optical disks.
5. CD-ROMs cannot be re-recorded disks can be.
6. hard disks, you can read from and write to CD-MO drives.
7. CD-ROMs, CD-Rs are recordable.
8. Magnetic tape is much other devices.
9. DVD-RAM and fixed hard disks have very high media capacity.
10. Floppy disks are cheap DVD-RAM is expensive.

Let's write

G. Try to compare and contrast your own chosen camera with your friend's camera

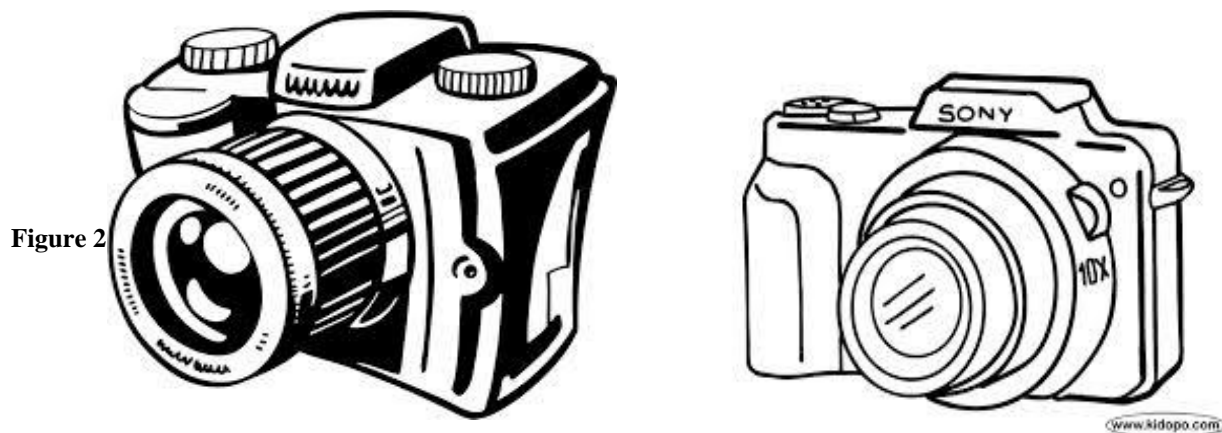


Figure 2

Let's have fun

Classification

Put the words in the categories.

Arm basketball
Bank beautiful coat cheese
Coach cookie doctor egg eye face
Football friendly funny
Hand hat hockey hospital
Intelligence lawyer
Lazy leg sales clerk lemon
Library office pants pilot quite restaurant
Tennis sandwich school shirt waiter short
Shy skiing small soccer suit
t-shirt tall thin ugly

Clothing

1.
2.
3.
4.
5.
6.

Food

1.
2.
3.
4.
5.
6.

Job

1.
2.
3.
4.
5.
6.

Sports

1.
2.
3.
4.
5.
6.

Workplace

1.
2.
3.
4.
5.
6.

Body

1.
2.
3.
4.
5.
6.

Adj. for personality

1.
2.
3.
4.
5.
6.

Adj. for appearance

1.
2.
3.
4.
5.
6.

