

Leader Supplements for Lesson 3

Supplement for Activity 3.3

Ways to Store Information

| Stored information or messages | Code, Symbols or Format | Medium |
|--------------------------------|--|--|
| Book or encyclopedia | English language with 26 symbols called letters -or- Spanish language with 30 symbols called letters -or- Chinese language with 8000 symbols called characters | Printed on paper or as computer file |
| Photograph | Layers of chemicals or computer pixels | Film, photographic paper or computer printer paper |
| Compact Disk (CD or CD-ROM) | Standard CDs have 33,000 sectors, each with 2,352 bytes – enough to hold over 1,000 books. Each letter in the book occupies 1 byte. | 1.2 mm thick, polycarbonate plastic |
| Flash drive | Holds up to 64 gigabytes or 64 billion bytes of information as binary code | Solid state storage device, with no moving parts; it is electronic not mechanical. |
| Genome | Genetic code with 4 symbols (G, C, A, T) | DNA |

Answers to Math Menu

1. 1×10^{13} to 1×10^{14}

2. 12