Sorting Information

Alphabetic Ordering

Placing names in alphabetic order requires sorting names according to the conventional order of letters in the alphabet. Each nth letter is compared with the nth letter of other words in a list starting at the first letter of each word and advancing to the second, third, etc.

The words dovetail, manager, apple, dragon, animal and music would be placed in the following order:

animal, apple, dovetail, dragon, manager and music

This is done because A comes before D which comes before M. After the first letter of each word is sorted out, the second letter is looked at. N comes before P, O comes before R and A comes before R.

Names

With names, alphabetic ordering is done based on the last name, or surname, of an individual. The following people are placed in the correct alphabetic order:

Sean Bean, Michael Fox, Jeffery Michaels and Andrew Yang.

The last names determine the order of the list (Bean, Fox, Michaels, and Yang).

When two people share the same last name, the order is then based upon the first name. Jeff Stevens, Steven McCaffery and Trevor Stevens would be placed in the following order:

Steven McCaffery, Jeff Stevens, Trevor Stevens.

The order of the two “Stevens” last names is based on the first names Jeff and Trevor.

Titles

Titles are not considered in sorting until after the names have been sorted. For example:

Richard Allan III would come before Victor Allan II and John Michael Jr. would come before Sean Michael.
Shorter Words

When attempting to alphabetize names which start with the same configuration of letters yet finish differently, the shorter word is placed first in the order.

John Smithers, Michael Smith and Andrew Smitherson would be placed in the following order:

Michael Smith, John Smithers and Andrew Smitherson.

Dates

Dates are sorted by year, followed by month, and finally by day. The following dates are placed in order from earliest to latest:

Sample 1:
2001, June 12
2004, April 16
2005, December 8

It is usually safe to assume that the order is day/month/year:

Sample 2:
03/03/1975
13/10/1977
01/11/1977

However, sometimes there is a signal that month is placed first, as in the following sample. There cannot be a 15th month so the order of day and month must be reversed in this example:

Sample 3:
05/15/1981
07/08/1981
09/09/1983

Numbers

When sorting numbers, it is important to understand the proper place value of digits. Review the teaching material in the math section if necessary:

100 > 10 > 1 > 0.1 > 0.01 > 0.001

Only compare digits that share the same place value as the other digits. For example:
32 > 9 (compare 3 and 0)
0.1 > 0.0999 (compare 1 and 0)
3.2 > 3.1 (because 3 and 3 are equal, compare 2 and 1)
6.3 > 6.09 (because 6 and 6 are equal compare 3 and 0)

# Coding & Decoding

## Coding

Dealing with coding tables requires replacing information with numbers and letters. Below is an example of a coding table:

**CODING TABLE**

<table>
<thead>
<tr>
<th>Province Code</th>
<th>Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>British Columbia</td>
</tr>
<tr>
<td>4</td>
<td>Manitoba</td>
</tr>
</tbody>
</table>

| Age (years) Code | | | |
|-----------------|--|---|
| 18-24 C         | | |
| 25-34 D         | | |

| Sex Code | | | |
|----------|---|---|
| Male 15  | | |
| Female 16| | |

| Years of Education Code | | |
|-------------------------|--|
| Less than 8 H           | |
| 9-12 J                  | |

The code for a 22 year old man from British Columbia with 7 years of education would be:

3 – C – 15 – H

3 replaces British Columbia  
C replaces 22-year-old  
15 replaces male and  
H replaces 7 years of education

## Decoding

For decoding, replace the existing code with the appropriate information from the table.
From the above example, the code 4 – D – 16 – H refers to a woman from Manitoba between 25 and 34 years of age who has less than 8 years of education.

**Analogies and Sequences**

Analogies and sequences are designed to measure a person’s ability to reason. They are important components of general ability tests. Analogies tend to take the following format:

**Telephone** is to **numbers** just as **keyboard** is to:

- Letters
- Monitor  
- Mouse
- Computer

**Hat** is to **uniform** just as **engine** is to:

- Steel
- Car  
- Fast
- Movement

**Dagger** is to **sheath** just as **pistol** is to:

- Rifle
- Bullet  
- Gun
- Holster

These questions test a person’s ability to find a relationship between two words or symbols and to apply this relationship to another set of words or symbols. What you have to do is determine a linking word between the first two words, then apply that word to the second two words. From the above examples (the linking words are highlighted below):

Telephone **uses** numbers to dial just as keyboard **uses** letters to type.

Hat is **part of** a uniform, just as engine is **part of** a car.

Dagger is **stored** in a sheath, just as a pistol is **stored** in a holster.

**Sample Questions**

Attempt to solve the following questions using the above methodology. Answers are posted below.

1) Roads are to asphalt just as windows are to:

   a) sun       b) curtains
   c) glass     d) wall
2) Waves are to shore just as knife is to:
   a) butter     b) sheath
   c) cut        d) blood

3) Oxygen is to fire just as water is to:
   a) land     b) fish
   c) earth    d) human

4) Read is to book just as ride is to:
   a) cat     b) stove
   c) television d) horse

5) Doctor is to medicine just as sun is to:
   a) leaves     b) ocean
   c) warmth    d) dark

Answers

1) Glass
   Roads are made of asphalt just as windows are made with glass.

2) Butter
   Waves cut into the shore just as a knife cuts into the butter.

3) Fish
   Oxygen is required for fire to live just as water is required for fish to live.

4) Horse
   Read is what you do to a book just as ride is what you do to a horse.

5) Warmth
   Doctor distributes medicine just as sun distributes warmth.