

## ***MODULE 6***

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### **INFORMATION RETRIEVAL SKILL**

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## **6**

## **INFORMATION RETRIEVAL SKILL**

### **6.1 LEARNING OBJECTIVES**

As you learn through this module, you will be able to use the following techniques to retrieve information:

- Acronym
- Abbreviation
- Acronymic sentence
- Peg words
- Keyword

### **6.2 INTRODUCTION**

In the previous chapter you learned some skills to retain information. But simply retaining information is not enough. We need to retrieve it as and when required. Retrieval skills come into picture when we need to give exams, give talks, participate in seminars or debate, solve problems, etc. Without gaining retrieval skills, what ever has been learnt has no value. In this chapter you learn a number of techniques to retrieve information. Do not try to learn all these techniques in one day. Learn one technique each day and practice using that technique the whole day.

### **6.3 ACRONYM**

Acronym is a strategy for remembering information in which you form a word using the first letter of each piece of information to be remembered. The acronym you form can be a real word or a non sense word you are able to pronounce. Acronym is a good strategy to use when the information to be remembered does not have to be remembered in a certain order. It is often difficult to form an acronym when you have to remember information in a certain order.

#### **How to use the technique?**

Here are the steps on how to form an acronym:

6. *Write each piece of information you need to remember.*
7. *Underline the first letter of each piece of information to be remembered. If there is more than one word in a piece of information, underline the first letter of only the first word.*
8. *Arrange the underlined letters to form an acronym that is a real word or a non sense word you can pronounce.*

**Example:**

“CAGED” is an example of an acronym that is a real word you can use to remember the names of the following five famous scientists in any order:

Einstein, Copernicus, Galileo, Archimedes and Darwin.

In CAGED, C is the first letter of Copernicus; A is the first letter of Archimedes, and so on.

“SCATE” is an acronym that can be used to remember the names of the following five inventions that have improved our quality of life in any order:

Computer, sewing machine, elevator, television, automobile.

SCATE is not a real word but you can easily pronounce it.

**Activity:**

Write an acronym for each of the following sets of information. The pieces of information in each set can be remembered in any order: (answers have been given at the end of the activity)

1. Elements: radium, aluminum, lithium, oxygen, phosphorus
2. Languages : English, Sanskrit, Gujarati, Malayalam
3. Birds: eagle, swift, parrot, peacock, owl
4. Countries: Hong Kong, America, Canada, Thailand
5. Now, locate in a textbook or your class notes some information for which acronym is a good remembering strategy. Write the pieces of information to be remembered here.
6. Write an acronym to remember this information.

Ans.1. POLAR, Ans.2. GEMS, Ans.3. POPES, Ans.4. CHAT (You may form any word of your choice) .

### (6-3) TEST YOURSELF

- Q.1. \_\_\_\_\_ is a strategy for remembering information in which you form a word using the first letter of each piece of information to be remembered.
- Q.2. The acronym you form can be a \_\_\_\_\_ word or a \_\_\_\_\_ word you are able to pronounce.
- Q.3. Acronym is a good strategy to use when the information has to be remembered in a certain order. (T/F)

## 6.4 ABBREVIATION

Abbreviation strategy can be used when you have to remember information in a certain order.

### How to use the technique?

Here are the steps on how to form an abbreviation:

1. *Write the pieces of information in the order in which you must remember them.*
2. *Underline the first letter of each piece of information; underline the first letter of only the first word.*
3. *Write the underlined letters in their order to form the abbreviation.*

### **Example:**

The abbreviation **KCA<sup>2</sup>SE** can be used to remember the taxonomy of educational objectives of the cognitive domain in the order of their difficulty level:

Knowledge, comprehension, application, analysis, synthesis, evaluation

Similarly, the abbreviation **VIBGYOR** can be used to remember the seven colours in sunlight or colours of rainbow and their order in the spectrum : Violet, Indigo, Blue, Green, Yellow, Orange and Red.

### **Activity:**

Write an abbreviation for each of the following sets of information. The pieces of information in each set should be remembered in order:

1. Here are the objectives of the psychomotor domain. Write an abbreviation to remember them in order from the most difficult to the least difficult objective to be achieved.

Imitation

Manipulation

Precision

Articulation

Naturalization

2. Here is the order of periodic properties of elements in the periodic table. Write an abbreviation to remember them in the following order.

Atomic radius

Ionization potential

Electron affinity

Electro negativity

Non-metallic

Metallic characters

3. Here are six important scientific discoveries. Write an abbreviation to remember these discoveries in descending order.

Oxygen 1774

Electric waves 1888

Penicillin 1928

Aspirin 1853

Radium 1898

Relativity theory 1905

4. Here are the educational policies in India after independence. Write an abbreviation to remember these discoveries in descending order.

University Education Commission 1949

Mudalier Secondary Education Commission 1952

Kothari Commission 1965

National Education Policy 1986

5. Now, locate in a textbook or your class notes some information for which abbreviation is a good remembering strategy. Write the pieces of information to be remembered here.

6. Write an abbreviation to remember this information.

Ans.1. IMPAN, Ans.2. AIEENM, Ans.3. PR<sup>2</sup>EAO, Ans.4. NKMU

**(6-4) TEST YOURSELF**

- Q.1. Abbreviation strategy can be used when you have to remember information in a certain order. (T/F)
- Q.2. The abbreviation which can be used to remember the colours of rainbow is \_\_\_\_\_.
- Q.3. The standard abbreviation UNO stands for \_\_\_\_\_.

## **6.5 ACRONYMIC SENTENCE**

Acronymic sentence is a strategy that is equally useful for remembering information in any order or remembering information in a certain order. It is similar to the acronym strategy. The difference is that the first letter of each piece of information to be remembered is used to form a sentence rather than a word.

### **How to use the technique?**

Here are the steps on how to form an acronymic sentence:

- 1. Write each piece of information you need to remember. Write these in any order or in a certain order if required.*
- 2. Underline the first letter of each piece of information.*
- 3. Write a sentence using words that begin with the underlined letters.*

Note: Try to form a sentence that is funny or is personal to you. You will find it easier to remember the sentence if you do this.

### **Example:**

Here is an example of an acronymic sentence to remember the five categories of Nobel Prize awards in any order: physics, chemistry, medicine, literature, peace.

Prashant met Prakash last Christmas.

Here is an example of an acronymic sentence to remember information in a certain order. In this example the information to be remembered is about history of primary education in pre-independent India.

1. Woods Dispatch of 1854
2. Lord Stanley's Dispatch of 1859
3. Hunter Commission
4. Curzon's Resolution of 1904

- 5. Gopal Krishna Gokhle’s Efforts
- 6. Hartog Committee Report (1929)
- 7. Sargent Plan (1945)

In this example, the order cannot be changed from that shown. An acronymic sentence you could write to remember this information is:

Want Long Hair Cosmetic Get. Hair Shampoo.

Since two of the commissions to be remembered each begin with the letter “h” you will have to later recall that the first “Hair” stands for Hunter Commission and second for Hartog committee.

For recalling the pairing of nuclear bases in DNA, “At the Girls Club” which refers to Adenine pairs Thymine, and Guanine pairs Cytosine.

**Activity:**

Write an acronymic sentence for each of the following sets of information.

- 1. Five Indian states in any order : Chennai, Delhi, West Bengal, Madhya Pradesh, Gujarat  
.....
- 2. Five methods of acquiring Indian citizenship:  
Birth  
Descent  
Registration  
Naturalisation  
Incorporation of territory  
.....
- 3. Biological classification of organisms in the order:  
Kingdom  
Phylum  
Class  
Order  
Family  
Genus  
Species  
.....

4. Six types of psychological tests used in educational research:

Achievement Test

Intelligence Test

Aptitude Test

Interest Inventories

Attitude Scales

Personality Inventories

5. Now, locate in your textbook or your class notes some information that can be remembered in an order and for which acronymic sentence is a good remembering strategy. Write the pieces of information here.

6. Write an acronymic sentence to remember this information.

7. Now, locate in your textbook or your class notes some information that must be remembered in a certain order and for which acronymic sentence is a good remembering strategy. Write the pieces of information here.

8. Write an acronymic sentence to remember this information.

Ans.1. We met Gandhiji duplicate currently, Ans.2. Delhi boy ran near Iceland, Ans.3. King prince Chandragupta offers fresh grass soup, Ans.4. Partying in America is always awesome. (you may form sentences of your choice.)

#### (6-5) TEST YOURSELF

- Q.1. \_\_\_\_\_ is a strategy that is equally useful for remembering information in any order or remembering information in a certain order.
- Q.2. The difference between acronym and acronymic sentence strategy is that the first letter of each piece of information to be remembered is used to form a \_\_\_\_\_ rather than a word.
- Q.3. For recalling the pairing of nuclear bases in DNA, the acronymic sentence \_\_\_\_\_ can be used.

## 6.6 KEYWORD

Keyword is a strategy in which you learn a new word or concept by linking it with a word that sounds like it and whose meaning you already know. You may also connect the keyword with a visual cue by either using a picture or just visualizing an image.

### How to use the technique?

Here are the steps on how to form a keyword:

1. *Change the word whose meaning you need to remember into a keyword. Your keyword should be a word whose meaning you know and that sounds like the entire word or a major part of the word whose meaning you must remember.*
2. *Create a picture in your mind that relates your keyword to the meaning of the word whose meaning you must remember.*
3. *Think of your keyword for the word whose meaning you must remember and then recall the picture you created in your mind.*

### Example:

Here is an example of how the keyword strategy is used to remember the concept of artery and vein.

First, change the word “vein” and “artery” into the Keyword “in” and “A” respectively.

Secondly, create a picture in your mind of impure blood (blue colour) flowing into the heart through vein and pure blood (red colour) flowing ‘away’ from the heart through the artery.

<i>Word</i>	<i>keyword</i>	<i>Strategy</i>
Vein	In	The blood flow <u>into</u> the heart
Artery	A	The blood flows <u>away</u> from the Heart

Use the keyword strategy to remember the meaning of each of the following words.  
The meaning for each word is provided.

### Activity

For each word, write your keyword and describe the picture you would create in your mind.

- Centurion : a commander in the army of ancient Rome.  
Keyword: .....  
Picture: .....  
.....
- Heuristic : A commonsense rule (or set of rules) intended to increase the probability of solving some problem  
Keyword: .....  
Picture: .....  
.....
- Matrix : a rectangular array of quantities or expressions set out by rows and columns  
Keyword: .....  
Picture: .....  
.....
- Taxonomy: A classification of organisms into groups based on similarities of structure or origin etc  
Keyword: .....  
Picture: .....  
.....
- Now, locate in a textbook or your class notes a word whose meaning you have to remember. Write the word here.  
Keyword: .....  
Picture: .....

6. Write the meaning of the word.
- .....
- .....
- .....
7. Write the keyword you would use to remember the meaning of the word.
- .....
- .....
- .....
8. Describe the picture you would create in your mind.
- .....
- .....
- .....

Ans.1. keyword : century ,commander

Picture: You may visualize the commander in Roman army hitting a century.

Ans.2. Keyword: hero, problem

Picture: You may visualize your hero telling you the set of rules for solving your maths problems.

Ans.3. Keyword: mat, rows and columns

Picture: You may visualize yourself sitting on a rectangular mat containing infinite number of rows and columns.

Ans.4. Keywords: Tax, classify

Picture: You may visualize a Tax collector collecting tax by classifying organisms according to their structure and origin.

(6-6)

TEST YOURSELF

Q.1.

\_\_\_\_\_ is a strategy in which you learn a new word or concept by linking it with a word that sounds like it and whose meaning you already know.

Q.2.

The first step in the keyword strategy is to change the word whose meaning you want to remember into a keyword. (T/F)

### 6.7 PEG WORD

Peg word is a strategy that is useful for remembering numbered information or information in a particular order. Pegwords refer to a set of rhyming words that are used to represent numbers. Each pegword is substituted for a number word and is then associated with the information to be remembered.

For most purposes, ten pegwords are sufficient. The suggested pegwords for the numbers one to ten are as follows. You can substitute your own pegword if you wish.

<u>Number word</u>	<u>Peg word</u>
One	bun
Two	shoe
Three	tree
Four	door
Five	hive
Six	sticks
Seven	heaven
Eight	gate
Nine	sign
Ten	pen

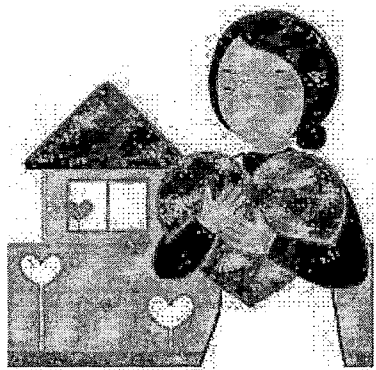
#### How to use the technique?

Here are the steps on how to use the peg word strategy:

1. *Think of the first piece of information you must remember.*
2. *Think of the pegword for the number word one. The peg word for one is bun.*
3. *Form an association in your mind between the peg word run and the first piece of information you must remember. Create a picture in your mind of this association.*
4. *Repeat steps 1-3 for each additional piece of information you must remember. Substitute the peg word shoe for the second piece of information, tree for the third piece of information, and so on.*

**Example**

Here is an example of how the peg words strategy is used to remember the number one cause of death in women, which is heart disease. To remember this, associate heart disease with the peg word bun. For example, create a picture in your mind of a woman eating a bun with a symbol of heart enlarged over her chest.



PICTURE -----

**Example**

To remember that insects have six legs, first associate insects with peg word sticks. Then create a picture in your mind of an insect sitting on your ice cream stick.

**Activity**

The three major acts that led to the American Revolutionary War : The Sugar Act of 1764, the Stamp Act of 1765, and the Boston Tea Party 1767.

Now, describe the pictures you would create in your mind using the peg word strategy to remember the above information : (Answer has been given below. However, you may use your own imagination to remember the following information)

- 1

First Cause: The Sugar Act

.....

.....

.....
2.

Second Cause : The Stamp Act

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.....

.....

3. Third Cause : Boston Tea Party

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.....

4. Now locate in a textbook or your class notes some information for which peg words is a good remembering. Write the information here.

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5. Describe the picture you would create in your mind to remember this information.

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Ans.1. to remember the first cause i.e. sugar act associate pegword for one which is a bun to sugar. You may picture a bun sprinkled with crystals of sugar.

Ans.2. to remember the second cause i.e. stamp act associate pegword for two which is a shoe to stamp. You may picture your shoes covered with stamps from various countries.

Ans.3. to remember the third cause i.e. Boston tea party associate pegword for three which is a tree to a tea party. You may picture yourself having a tea party on a tree with your friends.

(6-7) TEST YOURSELF

Q.1. Peg word is a strategy that is useful for remembering \_\_\_\_\_ information.

Q.2. \_\_\_\_\_ refer to a set of rhyming words that are used to represent numbers.

Q.3. Write down the peg words for the numbers one to ten.

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6.8 SUMMING UP

Information retrieval skills come into picture when we need to give exams, give talks, participate in seminars or debate, solve problems, etc. The following techniques may be used to improve your information retrieval skill:

- *Acronym*

Acronym is a strategy for remembering information in which you form a word using the first letter of each piece of information to be remembered.

- *Abbreviation*

Abbreviation strategy can be used when you have to remember information in a certain order.

- *Acronymic sentence*

In this strategy the first letter of each piece of information to be remembered is used to form a sentence rather than a word.

- *Peg words*

Peg words is a strategy that is useful for remembering numbered information or information in a particular order. Peg words refer to a set of rhyming words that are used to represent numbers. Each peg word is substituted for a number word and is then associated with the information to be remembered.

- *Keyword*

Keyword is a strategy in which you learn a new word or concept by linking it with a word that sounds like it and whose meaning you already know. You may also connect the keyword with a visual cue by either using a picture or just visualizing an image.

6.9 REFLECTIONS

1. Think about what you have learned in this unit. Write about it here.

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2. How will this make you a better student?

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3. How will this make you a better teacher ?

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#### ANSWER KEY

##### 6-3.

Ans.1. Acronym

Ans.2. real, non sense

Ans.3. False

##### 6-4.

Ans.1. True

Ans.2. VIBGYOR

Ans.3. United Nation Organisation

##### 6-5

Ans.1. Acronymic sentence

Ans.2. sentence

Ans.3. At the girls club

**6-6.**

Ans.1.Keyword

Ans.2. True

**6-7**

Ans.1. numbered

Ans.2. peg words

Ans.3. refer pg.13

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