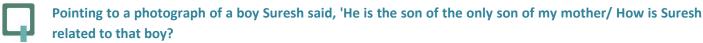# Inferring Information

TALENT & OLYMPIAD

◇ Introduction

This segment deals with understanding and reasoning using concepts framed in words. It aims at evaluating ability to think constructively, rather than at simple fluency or vocabulary recognition. This kind of reasoning test of intelligence provides an assessment of an individual's ability to think, reason. and solve problems in different ways.

Illustrative EXAMPLE ◇

Pointing to a photograph of a boy Suresh said, 'He is the son of the only son of my mother/ How is Suresh related to that boy?

(a) Brother   (b) Uncle

(c) Cousin   (d) Father

(e) None of these

Answer: (d)

Explanation: (d) The boy in the photograph is the only son of the son of Suresh's mother i.e., the son of Suresh. Hence, Suresh is the father of boy.

If A is the brother of B; B is the sister of C; and C is the father of D, how D is related to A?

(a) Brother   (b) Sister

(c) Nephew   (d) Cannot be determined

(e) None of these

Answer: (d)

Explanation: (d) If D is Male, the answer is Nephew. If D is Female, the answer Is Niece. As the sex of D is not known, hence, the relation between D and A cannot be determined. Note: Niece - A daughter of one's brother or sister, or of one's brother-in-law or sister-in-law. Nephew - A son of one's brother or sister, or of one's brother-in-law or sister-in-law.

If A + B means A is the mother of B; A - B means A is the brother B; A % B means A is the father of B and A x B means A is the sister of B, which of the following shows that P is the maternal uncle of Q.

(a) Q −N + M x P   (b) P + S x N − Q

(c) P −M + N x Q   (d) Q − S % P

(e) None of these

Answer: (c)

Explanation: (c) P - M → P is the brother of M M + N → M is the mother of N   N x Q → N is the sister of Q Therefore, P is the maternal uncle of Q.

If D is the brother of B, how B is related to C? To answer this question which of the statements is/are necessary?

1. The son of D is the grandson of C.

2 B is the sister of D.

(a) Only 1   (b) only 2

(c) Either 1 or2   (d) 1 and 2 both are required

(e) None of these

Answer. (d)

Explanation: **(d)** given D is the brother of B from statement I, we can detect that D is son of d is the grandson of C). from statement 2, we can detect that B is 'Female' (sister of D). Therefore, B ,s daughter of C.

A and B are children of D. Who is the father of A? To answer this q question which of the statements 1 and 2 is necessary?

1. C is the brother of A and the son of E.

2. F is the mother B.

(a) Only 1   (b) Only 2

(c) Eitherlor2   (d) 1 and 2 both

(e) None of these

Answer. (b)

Explanation: **(b)** A and B are children of D. From statement 1, C is the brother B and son of E. Since, the sex of D and E are not known. Hence, statement 1 is not sufficient to answer the question. From statement 2, F is the mother of B. Hence, F is also the mother of A. Hence, D is the father of A. Thus, statement 2 is sufficient to answer the question.

Which of the following means that K is the mother-in-law of M?

A3P means A is the mother of P

A4P means A is the brother of P

A9P means A is the husband of P

A5P means A is the daughter of P

(a) M9N3K4J   (b) M9N5K3J

(c) K5J9M3N   (d) K3J9N4M

(e) None of these

Answer: (b)

Explanation: (b)

M9N $\rightarrow$ M is the husband of N

N5K $\rightarrow$ N is the daughter of K

Hence, M is the son-in-law of K

K3J $\rightarrow$ K is the mother of J

Hence, K is a lady

Hence, K is the mother-in-law of M.

If A + B means A is the brother of B; A - B means A is the sister of B and A x B means A is the father of B. Which of the following means that C is the son of M?

(a) M – N x C + F   (b) F – C+ N x M

(c) N + M − F x C   (d) M x N − C+F

(e) None of these

Answer: (d)

Explanation: (d)

M x N → M is the father of N N-C →N is the sister of C and C + F → C is the brother of F.

Hence, M is the father of C or C is the son of M.

Introducing a boy, a girl said, 'He is the son of the daughter of the father of my uncle.' How is the boy related to the girl?

(a) Brother   (b) Nephew

(c) Uncle   (d) Son-in-law

Answer: (a)

Explanation: (a) The father of the boy's uncle → the grandfather of the boy and daughter of the grandfather →sister of father.

In each of the questions there are given two statements I and II. These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statements. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

Statements:

I. Ram's father was ill.

II. Ram brought medicine after consulting the doctor.

(a) If statement I is the cause and statement II is its effect.

(b) If statement II is the cause and statement I is its effect.

(c) If both the statements I and II are independent causes.

(d) If both the statements I and II are effects of independent causes.

(e) If both the statements I and II are effects of some common cause.

Answer: (b)

Explanation: (b) As Ram's father was ill, he brought medicine on the advice of doctor. Therefore, statement I is the cause while statement 2 is the effect.

Statements:

I. Standard of living among the middle class society is constantly going up since part of few years.

II. Indian Economy is observing remarkable growth.

(a) Statement I is the cause and statement II is its effect.

(b) Statement II is the cause and statement I is its effect.

(c) Both the statements I and II are independent causes.

(d) Both the statements I and II are effects of independent causes.

(e) Both the statements I and II are effects of some common cause.

Answer: (a)

Explanation: (a) Since the standard of living among the middle class society is constantly going up so Indian Economy is observing remarkable growth.

Statements:

I. The meteorological department has issued a statement mentioning deficient rainfall during monsoon in many parts of the country.

II. The government has lowered the revised estimated GDP growth from the level of earlier estimates.

(a) Statement I is the cause and statement II is its effect.

(b) Statement II is the cause and statement 1 is its effect.

(c) Both the statements I and II are independent causes.

(d) Both the statements I and II are effects of independent causes.

(e) Both the statements I and II are effects of some common cause.

Answer: (d)

Explanation: (d) Both the statements I and II are effects of independent causes.

Statements:

I. The staff of Airport Authorities called off the strike they were observing in protest against privatization.

II. The staff of Airport Authorities went on strike anticipating a threat to their jobs.

(a) Statement I is the cause and statement II is its effect.

(b) Statement II is the cause and statement l is its effect.

(c) Both the statements I and II are independent causes.

(d) Both the statements I and II are effects of independent causes.

(e) Both the statements l and II are effects of some common cause.

Answer: (d)

Explanation: (d) Both the statements I and II are effects of independent causes.

PRACTICE EXERCISE

In each of the questions two statements I and II are given. Out of these two statements one may be the cause and other the effect or either these two maybe independent causes of any effect or independent effects of any cause etc. Choose the correct option.

Statements:

I. The Central Government has recently declared to finish the rebate on farming.

II. The Central Government faces financial loss on account of giving rebate on farming for the last few years.

(a) Statement I is the cause and statement II is its effect.

(b) Statement II is the cause and statement I is its effect.

(c) Both the statements l and II are in dependent causes.

(d) Both the statements I and II are effects of independent causes.

(e) Both the statements I and, II are effects of some common cause.

Statements:

I. A huge truck overturned on the middle of the road last night.

II. The police had cordoned of entire area in the locality this morning for half of the day.

(a) Statement I is the cause and statement II is its effect.

(b) Statement II is the cause and statement I is its effect.

(c) Both the statements I and II are independent causes.

(d) Both the statements I and II are effects of independent causes.

(e) Both the statements I and II are effects of some common cause.

Statements:

I. Importance of Yoga and exercise is being realized by all sections of the society.

II. There is an increasing awareness about health in the society particularly among middle ages group of people.

(a) Statement I is the cause and statement II is its effect.

(b) Statement II is the cause and statement I is its effect.

(c) Both the statements I and II are independent causes.

(d) Both the statements I and II are effects of independent causes.

(e) Both the statements I and II are effects of some common cause.
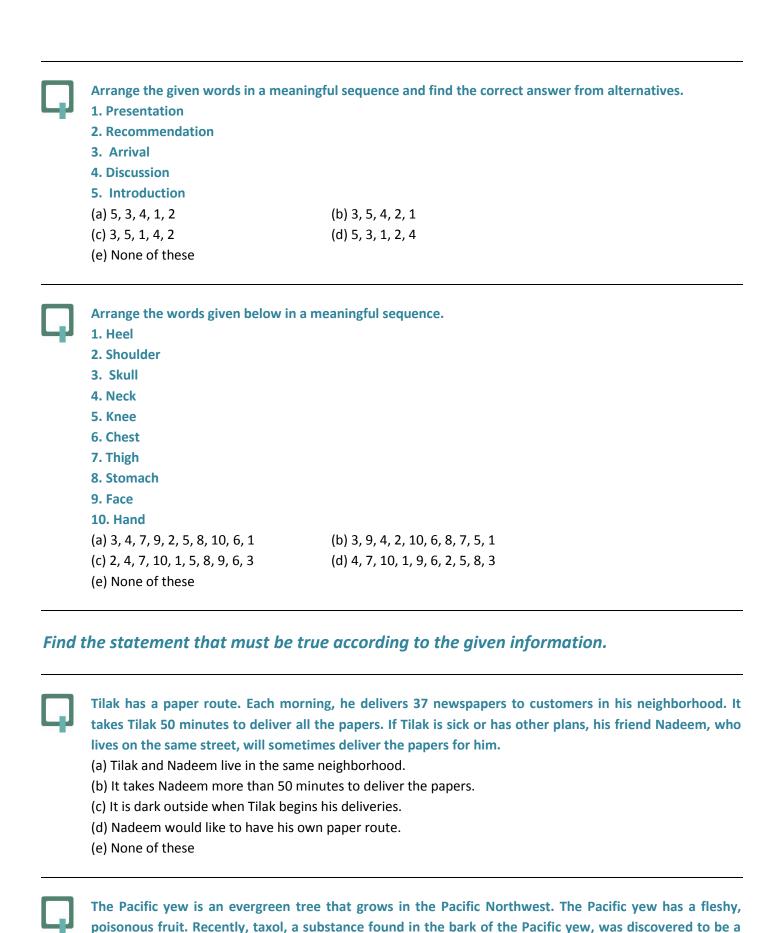

Statements:

I. The prices of petrol and diesel in the domestic market have remained unchanged for the past few months.

II. The crude oil prices in the international market have gone up substantially in the last few months.

(a) Statement I is the cause and statement II is its effect

(b) Statement II is the cause and statement I is its effect

(c) Both the statements I and II are independent causes

(d) Both the statements I and II are effects of independent causes

(e) Both the statements I and II are effects of some common cause

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Statements:

I. India has surpassed the value of tea exports this year over all the earlier years due to an increase in demand for quality tea in the European market.

II. There is an increase in demand of coffee in the domestic market during the last two years.

(a) Statement I is the cause and statement II is its effect

(b) Statement II is the cause and statement I is its effect

(c) Both the statements I and II are independent causes

(d) Both the statements I and II are effects of independent causes

(e) Both the statements I and II are effects of some common cause

Pointing to a photograph Lata says, 'He is the son of the only son of my grandfather; How is the man in the photograph related to Lata?

(a) Brother
(b) Uncle
(c) Cousin
(d) Data is inadequate
(e) None of these

Pointing to a photograph. Kiran said, 'He is the son of the only daughter of the father of my brother/ How Kiran is related to the man in the photograph?

(a) Nephew
(b) Brother
(c) Father
(d) Maternal uncle
(e) None of these

A is the son of C; C and Q are sisters; Z is the mother of Q and P is the son of Z. Which of the following statements is true?

(a) P and A are cousins
(b) P is the maternal uncle of A
(c) Q is the maternal grandfather of A
(d) C and P are sisters
(e) None of these

M is the father of N who is the son of V. In order to know the relation of M to P, which of the statement/statements is/are necessary?

1. P is the brother of V.
2. The daughter of N is the granddaughter of V.

(a) Only (1)
(b) Only (2)
(c) Either (1) or (2)
(d) (1) and (2) both
(e) None of these

Which of the following means F is the mother of K?

1. B5D means B is the father of D.
2. B9D means B is the sister of D.
3. B4D means B is the brother of D.
4. B3D means B is the wife of D.

(a) F3M5K
(b) F5M3K
(c) F9M4N3K
(d) F3M5N3K
(e) None of these

Arrange the given words in a meaningful sequence and find the correct answer from alternatives.
1. Presentation
2. Recommendation
3. Arrival
4. Discussion
5. Introduction

(a) 5, 3, 4, 1, 2   (b) 3, 5, 4, 2, 1
(c) 3, 5, 1, 4, 2   (d) 5, 3, 1, 2, 4
(e) None of these

Arrange the words given below in a meaningful sequence.
1. Heel
2. Shoulder
3. Skull
4. Neck
5. Knee
6. Chest
7. Thigh
8. Stomach
9. Face
10. Hand

(a) 3, 4, 7, 9, 2, 5, 8, 10, 6, 1   (b) 3, 9, 4, 2, 10, 6, 8, 7, 5, 1
(c) 2, 4, 7, 10, 1, 5, 8, 9, 6, 3   (d) 4, 7, 10, 1, 9, 6, 2, 5, 8, 3
(e) None of these

Find the statement that must be true according to the given information.

Tilak has a paper route. Each morning, he delivers 37 newspapers to customers in his neighborhood. It takes Tilak 50 minutes to deliver all the papers. If Tilak is sick or has other plans, his friend Nadeem, who lives on the same street, will sometimes deliver the papers for him.
(a) Tilak and Nadeem live in the same neighborhood.
(b) It takes Nadeem more than 50 minutes to deliver the papers.
(c) It is dark outside when Tilak begins his deliveries.
(d) Nadeem would like to have his own paper route.
(e) None of these

The Pacific yew is an evergreen tree that grows in the Pacific Northwest. The Pacific yew has a fleshy, poisonous fruit. Recently, taxol, a substance found in the bark of the Pacific yew, was discovered to be a promising new anticancer drug.

(a) Taxol is poisonous when taken by healthy people.

(b) Taxol has cured people from various diseases.

(c) People should not eat the fruit of the Pacific yew.

(d) The Pacific yew was considered worthless until taxol was discovered.

(e) None of these

Shruti is twelve years old. For three years, she has been asking her parents for a dog. Her parents have told her that they believe a dog would not be happy in an apartment, but they have given her permission to have a bird. Shruti has not yet decided what kind of bird she would like to have.

(a) Shruti' parents like birds better than they like dogs.

(b) Shruti does not like birds.

(c) Shruti and her parents live in an apartment.

(d) Shruti and her parents would like to move.

(e) None of these

When they heard news of the hurricane, Maya and Alok decided to change their vacation plans. Instead of traveling to the island beach resort, they booked a room at a fancy new spa in the mountains. Their plans were a bit more expensive, but they'd heard wonderful things about the spa and they were relieved to find availability on such short notice.

(a) Maya and Alok take beach vacations every year.

(b) The spa is overpriced.

(c) It is usually necessary to book at least six months in advance at the spa.

(d) Maya and Alok decided to change their vacation plans because of the hurricane.

(e) None of these

Sara lives in a large city on the East Coast. Her younger cousin Kajal lives in the Mid-west in a small town with fewer than 1,000 residents. Kajal has visited Sara several times during the past five years. In the same period of time, Sara has visited Kajal only once.

(a) Kajal likes Sara better than Sara likes Kajal.

(b) Sara thinks small towns are boring.

(c) Sara is older than Kajal.

(d) Kajal wants to move to the East Coast.

(e) None of these

Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

Read both the statements and give answer:

(a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question

(b) If the data in statement II alone are sufficient to answer the question, while the data in statement 1 alone are not sufficient to answer the question

(c) If the data either in statement I alone or in statement II alone are sufficient to answer the question

(d) If the data given in both statements I and II together are not sufficient to answer the question and

(e) If the data in both statements I and II together are necessary to answer the question.

In which year was Rahul born?

Statements:

I. Rahul at present is 25 years younger to his mother.

II. Rahul's brother, who was born in 1964, is 35 years younger to his mother.

(a) I alone is sufficient while II alone is not sufficient

(b) II alone is sufficient while I alone is not sufficient

(c) Either I or II is sufficient

(d) Neither O nor II is sufficient

(e) Both I and II are sufficient

What will be the total weight of 10 poles, each of the same weight?

Statements:

I. One-fourth of the weight of each pole is 5 kg.

II. The total weight of three poles is 20 kilograms more than the total weight of two poles.

(a) I alone is sufficient while II alone is not sufficient

(b) II alone is sufficient while I alone is not sufficient

(c) Either I or II is sufficient

(d) Neither I nor II is sufficient

(e) Both I and II are sufficient

How many children does M have?

Statements:

I. H is the only daughter of X who is wife of M.

II. K and J are brothers of M.

(a) I alone is sufficient while II alone is not sufficient

(b) II alone is sufficient while I alone is not sufficient

(c) Either I or ll is sufficient

(d) Neither I nor II is sufficient

(e) Both I and II are sufficient

How much was the total sale of the company?

Statements:

I. The company sold 8000 units of product A each costing Rs. 25.

II. This company has no other product line.

(a) I alone is sufficient while II alone is not sufficient

(b) II alone is sufficient while I alone is not sufficient

(c) Either or II is sufficient

(d) Neither I nor II is sufficient

(e) Both I and II are sufficient

The last Sunday of March, 2006 fell on which date?

Statements:

I. The first Sunday of that month fell on 5th.

II. The last day of that month was Friday.

(a) I alone is sufficient while II alone is not sufficient

(b) II alone is sufficient while I alone is not sufficient

(c) Either I or II is sufficient

(d) Neither I nor II is sufficient

(e) Both I and II are sufficient

Problems on Verification of Truth

Yesterday I saw an ice cube which had already melted due to heat of a nearby furnace.

(a) Always   (b) Never

(c) Often   (d) Sometimes

A boy is sitting at the back seat of a car. When the driver suddenly starts moving the car, the boy experiences a backward force?

(a) Always   (b) Never

(c) Often   (d) Sometimes

If we are going early in the morning towards the south the sun will be visible at our left:

(a) Always   (b) Never

(c) Often   (d) Sometimes

SHORT ANSWERS

1.	B	2.	A	3.	B	4.	D	5.	C	6.	A	7.	D	8.	B	9.	A	10.	A
11.	C	12.	B	13.	A	14.	C	15.	C	16.	D	17.	C	18.	E	19.	C	20.	D
21.	E	22.	C	23.	B	24.	A	25.	A										

1. (b) As the Central Government faced financial loss on accounts of giving rebate on farming for the last few years, therefore, they declared to finish the rebate of farming.
   Hence, statement II is the cause while statement I is the effect.

2. (a) Since a huge truck overturned on the middle of the road last night, so, the police had cordoned off the entire area in the locality last morning for half of the day.

3. (b) As the awareness about health in the society is increasing particularly among middle-aged group of people, the importance of Yoga and exercise is being realized by all sections of the society.

4. (d) The prices of petrol and diesel being stagnant in the domestic market and the increase in the same in the international market must be backed by independent causes.

5. (c) The two statements discuss two separate statistical and generalized results.

6. (a) The man in the photograph is the son of the only son of Lata's grandfather i.e., the man is the son of Lata's father. Hence, the man is the brother of Lata.

7. (d) The man in the photo is the son of the sister of Bajpai. Hence, Bajpai is the maternal uncle of the man in the photograph.

8. (b) C and Q. are sisters and A is the son of C. Hence, C is the mother of A or Z is the mother Q. Hence, Z is the maternal grandmother of A. P is the son of Z. Hence, P is the maternal uncle of A.

9. (a) M is the father of N and N is the son of V. Hence, V is the mother of N. From statement 1, P is the brother of V Therefore, M is the brother-in-law of P because V is the wife of M.
   From statement 2, the daughter of N, is the granddaughter of V. From this we do not get any relation of M to P
   .

10. (a)
    F3M → F is the wife of M

M5K → M is the father of K

Therefore, F is the mother of K.

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11. (c) The correct order is:

Arrival Introduction Presentation Discussion Recommendation 35 142

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12. (b) The correct order is:

Skull	Face	Neck	Shoulder	Hand	Chest	Stomach	Thigh	Knee	Heel
3	9	4	2	10	6	8	7	5	1

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13. (a) The fact that Vincent and Thomas live on the same street indicates that they live in the same neighborhood. There is no support for any of the other choices.

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14. (c) Given the information presented, the only statement that could be considered true is that the fruit should not be eaten because it is poisonous. There is no support that taxol is poisonous or that taxol has cured anyone (choices a and b). There is no support for choice (d).

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15. (c) Since Shruti's parents think a dog would not be happy in an apartment, we can reasonably conclude that the family lives in an apartment. We do not know if Shruti's parents dislike dogs (choice a) or if Shruit dislikes birds (choice b). There is no support for choice (d).

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16. (d) The first sentence makes this statement true. There is no support for choice (a). The passage tells us that the spa vacation is more expensive than the island beach resort vacation, but that doesn't necessarily mean that the spa is overpriced; therefore, choice (b) cannot be supported. And even though the paragraph says that the couple was relieved to find a room on short notice, there is no information to support choice (c), which says that it is usually necessary to book at the spa at least six months in advance.

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17. (c) Since the paragraph states that Kajal is the younger cousin, Sara must be older than Kajal. There is no information to support the other choices.

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18. (e) From both 1 and II, we find that Rahul is (35 - 25) = 10 years older than his brother, who was born in 1964. So, Rahul was born in 1954.

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19. (c) From I, we conclude that weight of each pole = (4 x 5) kg = 20 kg. So, total weight of 10 poles = (20 x 10) kg = 200 kg. From II, we conclude that: Weight of each pole = (weight of 3 poles) - (weight of 2 poles) = 20 kg. So, total weight of 10 poles = (20 x 10) kg = 200 kg.

20. (d) From I, we conclude that 1-1 is the only daughter of M. But this does not indicate that M has no son. The information given in II is immaterial.

21. (e) From I, total sale of product A = Rs. (8000 x 25) = Rs. 200000. From II, we know that the company deals only in product A. This implies that sale of product A is the total sale of the company, which is Rs. 200000.

22. (c) From I, we conclude that 5th, 12th, 19th and 26th of March, 2006 were Sundays. So, the last Sunday fell on 26th. From II, we conclude that 31st March, 2006 was Friday. Thus, 26th March, 2006 was the last ' Sunday of the month.

23. (b) Since the ice cube had already melted due to the heat of a nearby furnace so after this ice cannot remain as ice cube.

24. (a) When a car suddenly starts the lower part of the boy's body will be in the motion while his upper will be at rest. Hence, he will always experience backward force.

25. (a) Early in the morning the sun is in the direction of east. If we are going towards the south, our face will be in the direction of South and our left hand will be in the direction of east. Hence, if we go early in the morning towards the south the sun will always be visible at our left.

You Must KN◆W

❖ Inferring information involves an approach to reasoning and logical understanding.
❖ It is a kind of verbal reasoning in which understanding and reasoning using concepts are framed in words.
❖ It aims at evaluating ability to think constructively, rather than at simple fluency or vocabulary recognition.
❖ Verbal reasoning tests of intelligence provide an assessment of an individual's ability to think, reason and solve problems in different ways.

IMPORTANT TERMS

- Inferring information relates to verbal tasks that might involve concepts, like concrete or abstract ideas; or internalized language-based reasoning.
- Verbal tasks involve skills, such as the ability to listen to and recall spoken information; understanding the meaning of written or spoken information; solving language based problems of a literary, logical, or social type; understanding the relationships between language concepts and performing language analogies or comparisons; and the ability to perform complex language-based analysis.

SUMMARY

- Inferring information speaks about verbal intelligence which is the ability to analyze information and solve problems using language-based reasoning.
- Verbal reasoning is important in most aspects of school work. Reading and language arts tasks required verbal reasoning skills. Even the more abstract courses such as Math and Physics require verbal reasoning skills, as most concepts are either introduced orally by the teacher or introduced in written form in a text book.
- Verbal reasoning is typically assessed in a full intellectual assessment of
- Basic verbal reasoning may also be evaluated through brief in diligence tests and language assessment.