

READING PASSAGE 3

Questions 28 - 40

You should spend about 20 minutes on Questions 28 – 40 which are based on Reading Passage 3 below.

What is Intelligence?

Intelligence can be defined in many different ways since there are a variety of individual differences. Intelligence to a lot of people is the ability to reason and respond quickly yet accurately in all aspects of life, such as physically, emotionally, and mentally. Anyone can define intelligence because it is an open-ended word that has much room for interpretation but there are some theories which have more general acceptance than others.

Jean Piaget, a Swiss child psychologist, is well known for his four stages of mental growth theory. The first stage is the sensorimotor stage, from birth to age 2, the child is concerned with gaining motor control and getting familiar with physical objects. Then from age two to seven, the child develops verbal skills. This is called the preoperational stage. In the concrete operational stage the child deals with abstract thinking from age seven to twelve. The final stage, called the formal operational stage, ends at age fifteen and this is when the child learns to reason logically and systematically. Piaget's theory provides a basis for human intelligence by categorising the major stages in child development and how they contribute to intelligence. Each of these invariant stages has major cognitive skills that must be learned. Knowledge is not merely transmitted verbally but must be constructed and reconstructed by the learner. Thus this development involves a few basic steps. The first fundamental process of intellectual growth is the ability to assimilate the new events learned into the pre-existing cognitive structures. The second fundamental process is the capability to change those structures to accommodate the new information and the last process is to find equilibrium between the first two processes.

Howard Gardner, a psychologist at Harvard University, has formulated an even more intriguing theory. He arranged human intelligence into seven sections. First of all Gardner characterises the logistical-mathematical intelligence as people who think logically and are able to transfer abstract concepts to reality. These people enjoy solving puzzles and can be good inventors because they can visualize an invention even before making a prototype. They normally do better in school, which is for the most part due to the fact that schools are designed for logical-mathematical type of thinkers. The linguistic type, as you might guess, is the natural born writer and poet. They usually have excellent storytelling skills, spelling skills, and love to play with words. They tend to be bookworms and can easily learn more than one language. This type of intelligence seems to be located in the Broca's Area, since damage to that portion of the brain will cause a person to lose the ability to express themselves in clear grammatical sentences, though that person's understanding of vocabulary and syntax remains intact. Next Gardner traced musical intelligence to certain areas of the brain. Impaired or autistic children who are unable to talk or interact with others have often exemplified exceptional musical talent. People of this type of intelligence show great aptitude for music, have excellent pitch, and a good sense of rhythm. They concentrate better with music playing in the background. A particular concerto by Mozart has shown positive changes in the brains of listeners. Thus, musical intelligence can be a form or a means of learning. Another form of intelligence is the interpersonal intelligence. This category is for people who are very well aware of their environment. They tend to be sensitive to people around them, have an excellent idea of how people behave, and are especially sociable. Politicians, leaders, counselors, mediators, and

clergy are excellent examples of people with this type of intelligence. Damage to the frontal lobe has shown damage to this type of person's personality and his or her ability to interact with others. Intrapersonal intelligence is almost the opposite of interpersonal intelligence. This kind of intelligence deals with how well you know yourself. People who possess a higher degree of this type of intelligence have a high self-esteem, self-enhancement, and a strong sense of character. They are usually deep thinkers, self-teachers, skilled in music or art, and have an inner discipline. This sort of intelligence is hard to measure since it is often difficult to recognize externally. Spatial intelligence is the ability to perceive and interpret images or pictures in three-dimensional space. The right hemisphere of the brain has been proven to control this form of intelligence and scientists are certain that spatial intelligence is clearly an independent portion of this intellect. A person of this intellect enjoys making maps and charts. Lastly, Gardner classifies people who are athletically inclined into the body-kinesthetic intelligence. They perform the best in atmospheres of action, touching, physical contact and working with their hands. Dancers and athletes are good examples of this form of intellect. Critics are a little sceptical that Gardner considers this a form of intellect since it is only a physical component of intelligence, but nonetheless, the brain does use both hemispheres to control movement.

Gardner believes that everyone has a mixture of all the categories varying at different levels. We can see a couple of intelligence types that stand out in people we know and including ourselves. For example a math major's logical-mathematical intelligence would be more predominant than his linguistic intelligence.

Questions 28 - 34

Gardner's Intelligence Types and some descriptions of different types of people displaying different aspects of Gardner's Intelligence types are listed below in two boxes.

Match each description with the appropriate intelligence type.

Write the appropriate letters (**A - G**) in boxes **28 - 34** on your answer sheet.

<u>Gardner's Intelligence Types</u>	
A	Logistical-mathematical type
B	Linguistic type
C	Musical type
D	Interpersonal type
E	Intrapersonal type
F	Spatial type
G	Body-kinesthetic type

- 28 People with this type of intelligence are often good at developing new products for a company.
- 29 People with this type of intelligence are often good novelists.
- 30 People with this type of intelligence often mix well with other people.
- 31 People with this type of intelligence are often very self-confident.
- 32 Young people with mental handicaps frequently display this type of intelligence.
- 33 People with this type of intelligence often learn by imagining things as pictures.
- 34 People with this type of intelligence are often good physiotherapists.

Questions 35 - 40

Read the passage *What is Intelligence?* again and look at the statements below.

In boxes **35 - 40** on your answer sheet write:

TRUE *if the statement is true*

FALSE *if the statement is false*

NOT GIVEN *if the information is not given in the text*

- 35 There are no theories of intelligence which have universal recognition around the world.
- 36 Part of Piaget's development theory includes children learning how to walk.
- 37 Piaget theorised that psychological development is finished before adulthood.
- 38 Piaget's and Gardner's theories are not mutually exclusive.
- 39 People usually have a blend of Gardner's intelligence types.
- 40 Someone can identify in themselves the kinds of Gardner's intelligence types that they display.