

Fast Brain Waves

Over half a century ago, scientists found they could record the (0)..... signals of the brain at work. What at first appeared a random hotch potch of activity became a pattern of elegant waves (16)..... determined. Ever since, scientists have wondered whether the secrets of our thoughts, (17)..... and even (18)..... itself might be hidden in the patterns of our brain waves.

**ELECTRIC
RHYTHM**

**PERCEIVE
CONSCIOUS**

The question of why we have brain waves is, (19)..... , as hotly debated today as it was when the patterns were discovered. But the meaning, and even the existence, of fast rhythms in the alert brain is highly (20)..... .

**ARGUE
CONTROVERSY**

What is problematic is that you can't perceive these rhythms directly, they are so well hidden in the noise created by other brain activity, but many (21)..... now hold the (22)..... that the significance of these brain waves should not be (23)..... .

**SEARCH
CONVINCE
ESTIMATE**

The latest suggestion is that the rhythms could be (24)..... in detecting processes going on in different regions of the brain. Some believe that these rhythms might even interact, and in doing so help the brain to package information into (25)..... thoughts. How we bring together these related signals in the brain is a puzzle as yet unresolved.

**DECIDE
COHERE**

Science – is it only for the specialist?

There was a time when, as an educated person, you would have been expected to discuss any (0)..... or cultural topic. You would have read the latest novel, been familiar with the work of poets, and been wholly (16)..... with the current state of art and music. You would have felt equally relaxed discussing philosophical ideas in some (17)....., should the subject of the discussion have changed. This would have meant the (18)..... of issues related to the results of scientific research.

**INTELLECT
CONVERSE**

**DEEP
INCLUDE**

However, as significant discoveries accumulated, it became (19)..... difficult for any one person to keep abreast of developments across the entire field. A point was reached where the pace of progress was so great that a single brain became completely (20)..... to absorb the wealth of information. Scientists could no longer (21)..... switch back and forth between disciplines as before. They became specialists.

INCREASE

**POWER
CONFIDENCE**

A broadly-educated person today can still have a general (22)..... of most of the specialisms, but not in the (23)..... detail in which research workers are themselves immersed. Trapped inside their own special areas, the pitfall for most research scientists is an (24)..... to communicate with those working on areas bordering their own, let alone totally (25)..... areas.

**AWARE
INTRICACY**

**ABLE
CONNECT**