

## Laterality of brain hemispheres

The human brain is separated into two distinct cerebral hemispheres connected by the corpus callosum. The sides resemble each other and each hemisphere's structure is generally mirrored by the other side. Yet despite the strong similarities, the functions of each cortical hemisphere are different.

**Left hemisphere** functions: analytical, verbal, logical, *numerical computation* (exact calculation), *language*: grammar/vocabulary, reading, writing...

**Right hemisphere** functions: holistic, prosodic, intuitive, *numerical computation* (approximate calculation), *language*: intonation/accentuation, emotional expression, imagination, good orientating skills...

The examination of laterality – the preference of one dominant organ – is predominantly important during childhood. *Left-handedness* is the preference for the left hand over the right hand for everyday activities (e.g. writing). *Right-handedness* is the preference for the right hand over the left hand for everyday activities. *Ambidexterity* is the state of being equally adept in the use of both right and left hands.

### Material

Tests for laterality examination

### Method

The laterality is examined using different methods including the following tests:

1. The examination of preferable dominant hand (e.g. writing of left or right hand)
2. The examination of preferable dominant leg (e.g. give a kick )
3. The examination of preferable dominant ear or eye (e.g. press mobile phone on the ear).

Demonstrate the individual examinations tests. Write the results for all working group.