

# Hieroglyphics



Egyptian hieroglyphics ('holy writings') can be pictures of living creatures, objects used in daily life, or abstract symbols. As well as referring to the object they depict, the pictures can also represent sounds. For example, the owl stands for the sound "m", while the mouth stands for the sound "r". Are hieroglyphics a language?

# Binary code



When we use computers, all the letters of the alphabet, numbers, and symbols that we type are converted to strings of binary numbers (ones and zeroes). This reflects the way that computer hardware circuits work: they only have two states – on or off – which are represented as a one (on) or a zero (off). When we type the letters of the alphabet, they are translated into binary code and back again. For instance, the letter A is represented by the eight-character binary number 01000001. Is binary code a language?

# Mime



Mime is an ancient form of dramatic entertainment in which a performer tells a story without words. Mime artists use exaggerated body movements to convey action, and exaggerated facial movements to convey emotion. Is mime a language?

# The Gomeran whistle



The Gomeran whistle is a method of communication used in the Canary Islands, west of Morocco. It is a type of whistling in which the sounds of the Spanish language are replaced by whistled vowels and consonants. The whistling sounds can travel several kilometres from one mountain to another, across deep valleys. In a region without roads or telephones, using the Gomeran whistle to communicate is more effective than shouting, and more efficient than going by foot to transmit a message. Is the Gomeran whistle a language?

# Honey bee waggle dance



The waggle dance is a dance that a honey bee performs inside the hive to communicate to other bees important information about where to find flowers yielding nectar and pollen. Inside the hive, the bee waggles her body from side to side and then runs in a semicircle. The angle of the dance on the honeycomb conveys the direction from the hive (in relation to the sun) that the bees should fly. So, for example, if the bee waggles at an angle 60 degrees to the left of vertical, then the food source is 60 degrees to the left of the sun. The quality and quantity of the food source determines the liveliness of the dances. If the nectar source is of excellent quality, the bee will dance most vigorously. Is the honey bee waggle dance a language?

# An invented language



Imagine a new, artificially-constructed language that is spoken and understood by only one person. It has its own unique alphabet, vocabulary and grammar. Would you consider this to be a real language?