

## Speech discrimination for the under-fives

Margaret Glasgow, Educational Audiologist

Several speech discrimination tests have been devised to use with toddlers from two to three years old. The Kendall Toy Test (1954) and the McCormick Toy Test (1977) tend to be the most widely used for this age group.

### Purpose of the Test

The test should be one of a battery of tests to assess hearing function. A by-product of the speech test is that it often helps the parent/carer to realise that there may be a hearing loss present. Specifically, it tests discrimination of simple English vocabulary.

### Rationale

The test identifies the child's ability to point correctly to a toy when its name is spoken at a minimal voice level of 40 dBA. Lip-reading is denied the child by covering the mouth or ensuring the child is not looking when the words are spoken. The toys used in each test are deemed to be familiar to most English speaking two year olds.

### Criteria

The test is carried out when a child can identify a number of the toys used in the test and wait for long enough to listen and carry out a simple pointing or giving activity. This test can be effectively used with older children with more complex needs and with young children who have indistinct speech. The tester needs good child handling skills.

### Procedure

The child sits at a small table in an appropriate size chair, with the parent/carer sitting close by. The child should be sitting comfortably with his/her feet touching the floor.

The child may sit on a lap if s/he is shy or withdrawn.

- ◆ The toys are produced one at a time by the tester who is seated in front of the child, and the child is asked to name them. This is not a requirement of the test but can give valuable information about the quality of speech sounds. If the child does not name the toy the parent/carer is asked if the toy is known.
- ◆ Only pairs of toys well known to the child are used in the test.
- ◆ The child is conditioned to point to the toys when asked "Where is the..." or "Show me the...". Occasionally a child will only respond to "Give me the....". The tester has to be careful to replace the toy in its original place.
- ◆ When the child can respond reliably at a conversational level, the tester uses a small screen to cover his/her nose and mouth to eliminate visual clues and repeats the request at a conversational voice.
- ◆ The voice is quickly lowered to a level where the child can correctly identify four out of five of the toys requested.

The voice level is measured by a sound level meter at the child's ear. Sometimes it is possible to get more information by testing a metre to the side of each ear (as for the distraction test).

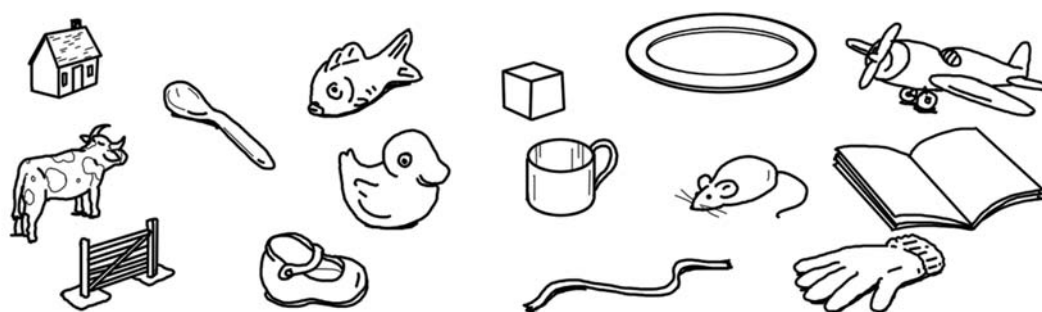
## Kendall Toy Test

The test items are grouped according to vowel sounds:

house	cow
spoon	shoe
fish	brick
duck	cup
gate	plate

The distractors are: mouse, book, string, glove, plane

This test can not be bought as a boxed set. It has to be collected by the tester.

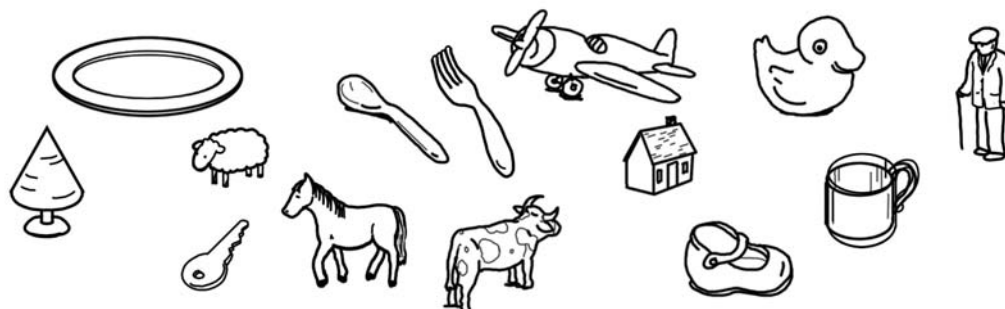


## The McCormick Toy Test

The toys are paired items of monosyllables with the maximum degree of acoustic similarity within the constraints of the child's limited vocabulary.

cup	duck
spoon	shoe
man	lamb
plate	plane
horse	fork
key	tree
house	cow

A boxed set of these toys can be purchased from:  
 J & B McCormick  
 Woodlands, 18 Nottingham Road, Lowdham  
 Notts NG14 7AP Tel: 0115 9663961  
[www.mccormicktoytest.co.uk/](http://www.mccormicktoytest.co.uk/)



A company called Soundbyte Solutions has produced two automated versions of the McCormick Toy Test known as the Parrot and the Phoenix. Details can be found on [www.soundbytesolutions.co.uk](http://www.soundbytesolutions.co.uk)

## References (for all behavioural tests)

Screening Hearing Impairment in Young Children, Barry McCormick. Croom Helm ISBN 0-7099-4643-0

Audiology in Education, McCracken and Laoide-Kemp Whurr Publishers ISBN 1-86156-017-6

Paediatric Audiology 0-5 years 3rd edition edition, Barry McCormick Whurr Publishers ISBN 1-86156-217-9