NHS EASTERN & COASTAL KENT COMMUNITY SERVICES

SPEECH AND LANGUAGE THERAPY SERVICE

CANTERBURY & THANET

VERBAL REASONING SKILLS

ASSESSMENT

Collated by Maggie Johnson, B.Sc., M.R.C.S.L.T.

EAST KENT COASTAL TEACHING PCT
SPEECH AND LANGUAGE THERAPY SERVICE

CANTERBURY & THANET
VERBAL REASONING SKILLS ASSESSMENT

**[Taken from standardised material, mainly Terman Merrill,
supported by Valentine, Zimmerman and the Aston Index,
and reworded with simpler vocabulary and grammar.]**

Note: The tests at each level cover the **preceding** period of development. So a child of 8½ should pass **all** the 8 year items, plus some at 9 years. The idea however, is not to arrive at an exact score, but to ascertain if there is a significant discrepancy between either:

(a) the child's functional use of language (pragmatic skills and application of semantic knowledge) and their vocabulary development, sentence comprehension, syntactic skills, etc. as measured by standardised language measures.

or:

(b) different aspects of language ability. Is there a specific difficulty with auditory memory or semantic processing but reasonably intact logic/cause-effect relationships, for example.

As a very general rule of thumb, the verbal logic items (cause-effect, inference, deduction, verbal absurdities) provide the best indication of overall cognitive ability, and tend to equate to the Performance Scale on a WIPPSI* or WISC** assessment.

The semantic items (Similarities and Differences, Rhyme, Analogy, Word Recall, Association) tend to equate to the Verbal Scale on a WIPPSI* or WISC** assessment, and may be relatively intact in high level autistic spectrum conditions, e.g. Asperger's Syndrome.

---

*   Wechsler Pre-school and Primary Scale of Intelligence
**   Wechsler Intelligence Scale for Children

VERBAL REASONING SUMMARY SHEET

SUB TEST	3	3½	4	4½	5	6	7	8	9	10	11	12	13	14
Association	□	□	□											
Cause-Effect		□	□	□	□		□	□	□	□	□			
Explanation			□	□	□									
Opposite Analogy			□	□		□								
Definitions				□	□	□	□	□	□	□	□	□	□	□
Word Recall					□	□	□	□	□					
Analogy					□	□	□	□						
Inference					□	□	□	□	□		□	□	□	□
Similarities/ Differences					□	□	□	□	□		□	□	□	□
Deduction/ Absurdities						□	□	□	□	□	□	□	□	□
Auditory Memory					□									
Inference - high Aud.Mem. Load							□	□						
Rhymes - Aud.Mem. Load									□	□				

Name:	d.o.b.
Date of Test:	C.A.
Comments	

3

3 YEARS

Association: Pass ☐   Fail ☐

Provides 8 satisfactory nouns from the verbs given.

Conditioning: "What runs?" (If a good answer is not given say, "A boy runs, doesn't he?"). "What cries?" .... "Good".

1.	"What sleeps?"	_____	11.	"What sails?" _____
2.	"What scratches?"	_____	12.	"What boils?" _____
3.	"What flies?"	_____	13.	"What floats?" _____
4.	"What bites?"	_____	14.	"What growls?" _____
5.	"What swims?"	_____	15.	"What stings?" _____
6.	"What burns?"	_____	16.	"What gallops" _____
7.	"What cuts?"	_____	17.	"What aches?" _____
8.	"What blows?"	_____	18.	"What explodes?" _____
9.	"What shoots?"	_____	19.	"What roars?" _____
10.	"What melts?"	_____	20.	"What mews?" _____

N.B.   Provides 10 satisfactory nouns by **3½ years.**

Provides 13 satisfactory nouns by **4 years.**

3½ YEARS

Cause-Effect: Pass ☐   Fail ☐

Answers correctly 2 out of 3 questions:-

"What must you do when you are hungry?"   _____

"What must you do when you are sleepy?"   _____

"What must you do when you are cold?"   _____

N.B.   Provides 3 satisfactory answers by **4 years**

4

4 YEARS

Explanation Pass ☐ Fail ☐

Answers 2 out of 2 questions sensibly:-

"Why do we have houses?" _____

"Why do we have books?" _____

Opposite Analogy: Pass ☐ Fail ☐

Completes 2 out of 5 sentences correctly:-

(Emphasise the word in bold)

(a) Brother is a **boy**; sister is a _____ ?
     (If necessary, add "What is a sister?" But then no further prompts.)

(b) In the daytime it is **light**; at night it is _____ ?

(c) Father is a **man**; mother is a _____ ?

(d) A snail is **slow**; a rabbit is _____ ?

(e) The sun shines during the **day**; the moon shines at _____ ?

N.B. 3 out of 5 correct by **4½ years**.

     4 out of 5 correct by **6 years**.

Association: See 3 year level. Pass ☐ Fail ☐

Cause-Effect: see 3½ year level Pass ☐ Fail ☐

5

4½ YEARS

Definitions   Pass ☐   Fail ☐

Adequately defines 2 out of 3 items.
(Children mainly define by **use** at this age.)

(a)   "What is a key?" ("You know what a key is, tell me what a key is")

_____

(b)   "What is a dress?"   _____

(c)   "What is a bed?"   _____

Explanation: Pass ☐   Fail ☐

Answers 1 out of 2 questions correctly:-

"What do we do with our eyes?"   _____

"What do we do with our ears?"   _____

N.B.   Two correct by **5 years**.

Opposite Analogy: See 4 year level.   Pass ☐   Fail ☐

Cause-Effect: Pass ☐   Fail ☐

Answers correctly 1 out of 2 questions:-

"What must you do when you have lost something?"

_____

"What must you do before you cross the road?"

_____

N.B.   2 out of 2 correct by **5 years.**

6

5 YEARS

Word Recall   Pass ☐   Fail ☐

Names 6 animals in one minute. Lion/baby lion and rabbit/bunny count as **one**, but dog/puppy/collie, hen/chicken would **all** be credited.

"Name all the animals you can think of, until I tell you to stop."

_____

_____

N.B.   Names 8 animals in a minute by **6 years**.

Names 10 animals in a minute by **8 years**.

Names 12 animals in a minute by **10 years**.

Inference   Pass ☐   Fail ☐

Completes a story by supplying 5 sensible words/phrases out of a possible 10.
(Be careful with inflection on (4). The target word is **window**, so say 'shop' with rising intonation to cue child in).

"I'm going to tell you a story. Sometimes I shall ask you to help me make the story up. Listen ....

"It was a fine day and the sky was _____ (1). The sun was very _____ (2).

John and Sarah went to the shops and bought some _____ (3). They loved to see the

nice things in the shop _____ (4). Suddenly, the sky became quite dark; it was

covered with great big _____ (5). The little boy and girl hurried back to the

_____ (6), but before they got there, there was a great _____ (7). They were

frightened by the noise of the _____ (8). They ran to a shop and asked if they could

shelter there as it was pouring with rain and they had no _____ (9), and their clothes

were quite _____ (10)."

N.B.   Supplies 6 sensible words by **6 years**.

Supplies 7 sensible words by **7 years**.

Explanation: See 4½ year level   Pass ☐   Fail ☐

Definition: Pass ☐   Fail ☐

Defines correctly 2 of the following:-
(Definition by use is acceptable.)

"Ball" _____

"Hat" _____

"Oven"_____

Auditory Memory: Pass ☐   Fail ☐

Carries out 3 simple commands in the correct order. You may point out each thing you wish the child to do (e.g. "Bring me that box") but repeat instruction **twice** only.

Similarities/Differences: Pass ☐   Fail ☐

Understands concept *same/not the same* or *same/different* with visual materials.

Analogy: Pass ☐   Fail ☐   (If Pass, also credit 5 year **Opposite Analogy**)

Completes 3 out of 5 sentences correctly:-

(a)   Brother is a **boy**; sister is a _____ ?

(b)   A table is made of **wood**; a window of _____ ?

(c)   A bird **flies**; a fish _____ ?

(d)   The end of walking stick is **blunt**; the end of a knife is _____ ?
(sharp/pointed)

(e)   A mouse is **small**; a horse is _____ ? (big/large but not tall)

N.B.   4 out of 5 correct by **6 years**.
        5 out of 5 correct by **7 years**.

Cause and Effect: See 4½ year level.   Pass ☐   Fail ☐

6 YEARS

Cause-Effect   Pass ☐   Fail ☐

Completes 3 out of 3 sentences sensibly. Each can be given three times if necessary.

"Today I heard a man say to his little boy, when the boy was going out, "It's raining hard,

Johnny, so ...." - then I could not hear the rest.

What do you think he said next? Have a guess."

_____

"A little girl ran in from the garden and said to her mother,

"My hands are dirty because ...."

_____

_____

"A little boy was having his tea - he said to his mother,

"Mum, this tea is too hot, so ...."

_____

_____

Differences: Pass ☐   Fail ☐

Supplies one correct difference (either fundamental or superficial) out of the following three examples:-

"You know what milk is, don't you? And you know what water is. They are not the same are they? In what way are they not the same?"

Child's response: _____

_____

Repeat with: A man and a dog:-

Child's response: _____

_____

Repeat with: Wood and glass:-

Child's response: _____

_____

Deductions: Pass ☐   Fail ☐

Provide satisfactory answers and reasons for both the following items.

"Look at these funny creatures. They are called wagwums"

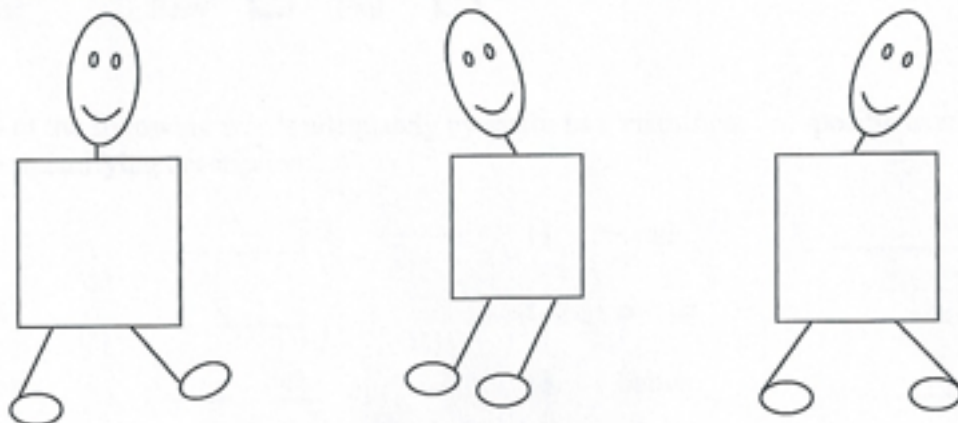All wagwums have only one leg, and no noses. Now look at this, is it a wagwum?"
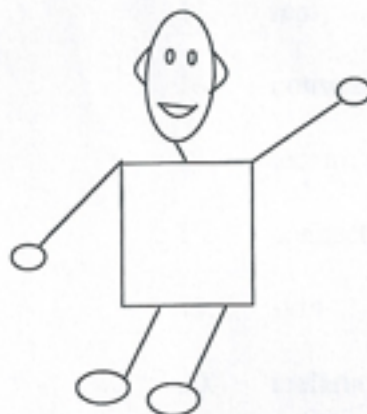

If child's answer is 'No', say "Why?".

Child's answer: _____

Child's reason:_____

"Here are some foozles. No foozles have arms, and none have ears.

Now look at this, is it a foozle?"

If the answer is 'No', ask "Why".

Child's answer: _____

Child's reason: _____

		Pass	Fail
Word Recall:	See 5 year level.	☐	☐
Opposite Analogy:	See 4 year level.	☐	☐
Inference:	See 5 year level.	☐	☐

Definitions: Pass ☐ Fail ☐

Defines 10 of the following words adequately by major use, classification, specific example, synonym or identifying description.

1.	house	_____	11.	spade	_____
2.	box	_____	12.	rescue	_____
3.	book	_____	13.	battle	_____
4.	ball	_____	14.	brave	_____
5.	cat	_____	15.	reply	_____
6.	tree	_____	16.	nonsense	_____
7.	orange	_____	17.	lecture	_____
8.	school	_____	18.	connect	_____
9.	fish	_____	19.	skill	_____
10.	green	_____	20.	malaria	_____

N.B. Stop after five incorrect answers.

Score 12	=	7 years
Score 14	=	8 years
Score 16	=	9 years

8 YEARS

Definitions: See 6 year level.   Pass ☐   Fail ☐

Analogy: Pass ☐   Fail ☐

Gives 3 out of 4 correct answers.

(a)   The rabbit's ears are long, the rat's ears are _____

(b)   Snow is white, blood is _____

(c)   The dog has hair, the bird has _____

(d)   Wolves are wild, dogs are _____

N.B.   Only 'short' is acceptable for 9(a). Only 'feathers' is acceptable for (c). Only 'tame' or 'domestic' are acceptable for (d).

Verbal Absurdities: Pass ☐   Fail ☐

Gives 3 sensible answers.

"I'm going to tell you something and then ask you what was silly about it."

Read each statement and after each one, ask "What was silly about that ?". If the child has a poor auditory memory, pause between each 'chunk' to allow one piece of information to be absorbed before delivering the next. Then repeat the whole thing. If the response is ambiguous (e.g. repetition of part of the sentence) ask "Why is that silly?"

(a)   Some people found a man locked in his room with his hands tied behind him and his feet tied together. They think he locked himself him in.

(b)   A wheel came off Mr Smith's car. As he could not get the wheel back on by himself, he drove his car to the garage to get it mended.

       (If a child begins to talk about a tyre, stress that it was a **wheel** and repeat the sentence.)

(c)   I read in the paper that the police fired two shots at a man. The first bullet killed him but the second bullet didn't hurt him much.

(d)   An engine-driver said that the more carriages he had on his train, the faster he could go.

15

Similarities and Differences   Pass ☐   Fail ☐

Child can tell you how two things are (i) **alike** and (ii) **different**. Both a similarity and difference for 3 out of 4 pairs of words are given.

(a)   Cricket ball : orange.

(b)   Aeroplane : kite.

(c)   Sea : river.

(d)   1p : 10p.

N.B.   If by response it is clear that the child has recalled a word incorrectly (e.g. orange → lemon) repeat question. If in (a) or (b), one of the comparisons is omitted, prompt for the remainder of the answer. No further comment for (c) or (d) however.

Cause-Effect: Pass ☐   Fail ☐

Gives 2 sensible answers.

(a)   What makes a sailing boat move?   _____

(b)   What should you say if it's your first day at a new school you have never seen before and someone asks you where the staffroom is?

_____

(c)   What would you do if you were in the street and found a baby that was lost?

_____

N.B.   Only 'wind' is acceptable for (a).

N.B.   3 sensible answers by **9 years**.

Inference: Pass ☐   Fail ☐

Gives 2 sensible answers.
(a)   At about 2 o'clock one afternoon, some boys and girls dressed in their best clothes, rang the bell at Lucy's house. Lucy opened the door. What was happening?

_____

(b)   Julie heard a big 'bang' and came running outside. There were nails all over the road and a car had just stopped beside the road. What was the 'bang'?

_____

(c)   A man and lady were sitting in a restaurant. They had just eaten a big dinner. The waiter brought the bill. The man looked at it, and then seemed worried and embarrassed. Why?

_____

N.B.   Precede (c) with "Do you know what a restaurant is?" Make sure child realises payment is involved, but avoid saying this yourself.

N.B.   3 sensible answers by **9 years**

Inference and Auditory Memory: Pass ☐   Fail ☐

a) Answers correctly and gives an adequate reason for the answer to the following puzzle, which should be read through twice, and can be read a third time if the child requires a second attempt.

"It is Sunday and on Sunday afternoon Peter usually takes his little brother out, or goes by himself to the cinema, or walks over to see his aunt, or else goes by bus to the park. Today he has no money with him and his brother is playing in the garden. Where do you think Peter has probably gone?"

_____

"How do you know?"

_____

b) Answers correctly both the following questions which should be read over slowly three times before the child answers:-

"John is bigger than Ted. Ted is bigger than Paul. Who is the biggest?"

_____

"Ann runs faster than Pat. Jane runs slower than Pat. Who is the slowest?"

_____

9 YEARS

Definitions: See 6 year level.   Pass ☐   Fail ☐

Rhymes: Pass ☐   Fail ☐

Give an example of rhyming words, before going onto this test. Child should easily be able to both generate and recognise rhyme at this age and supply 3 out of 4 appropriate answers.

(a)   "Tell me the name of a colour that rhymes with **head**"   _____

(b)   "Tell me a number that rhymes with **tree**"   _____

(c)   "Tell me the name of an animal that rhymes with **fair**"   _____

(d)   "Tell me the name of a flower that thymes with **nose**"   _____

N.B.   4 out of 4 correct by **10 years**.

Similarities and Differences   Pass ☐   Fail ☐

See 8 year level for procedure. Child gives both a similarity and difference for all 4 items.

(a)   Honey : glue

(b)   Pencil : pen

(c)   Banana : lemon

(d)   Shoe : glove

Verbal Absurdities: Pass ☐   Fail ☐

See 8 year level for procedure. Gives 3 sensible answers. It may be necessary to explain 'in the right direction' before presenting (c).

(a)   I saw a smart man who was walking down the road with his hands in his pockets and twirling an umbrella.

(b)   A father wrote to his son 'Here is fifty pounds. If you do not receive this letter, please let me know straightaway.'

(c)   On Sports Day, a boy running in a race moaned that everyone was running in the wrong direction except himself.

10 YEARS

Definitions   Pass ☐   Fail ☐

Defines 2 out of 4 abstract words.

(a)   Pity

(b)   Curiosity

(c)   Grief

(d)   Surprise

N.B.   3 out of 4 satisfactory answers by **12 years**

Word Recall: See 5 year level.   Pass ☐   Fail ☐

Cause-Effect: Pass ☐   Fail ☐

Passes both items.

(a)   Give two reasons why children should not be too noisy in school.

(b)   Give two reasons why most people would rather have a car than a bicycle.

Verbal Absurdities: Pass ☐   Fail ☐

Gives 2 sensible answers. See 8 year level for procedure.

(a)   In the year 2001, many more women than men got divorced in Britain.

(b)   A man wished to dig a hole in which to bury some rubbish, but could not decide what to do with the dirt from the hole. A friend suggested he dig a hole large enough to hold the dirt too.

(c)   They began the meeting late, but they set the hands of the clock back so that the meeting would finish before sunset.

Rhyme: See 9 year level.   Pass ☐   Fail ☐

11 YEARS

Definitions: Pass ☐   Fail ☐

Defines 3 out of 5 abstract words.

(a)   Connection

(b)   Compare

(c)   Conquer

(d)   Obedience

(e)   Revenge

N.B.   4 out of 5 by **13 years**

Verbal Absurdities: See 9 year level.   Pass ☐   Fail ☐

Cause-Effect: Pass ☐   Fail ☐

Passes both items (lenient scoring).

(a)   Give two reasons why children should obey their parents. (or 'do what their parents say')

(b)   Give two reasons why there should be plenty of railways in Britain.

Similarities: Pass ☐   Fail ☐

Child says how 3 out of 5 word-lists are alike, in either a fundamental or superficial way.

(a)   snake : cow : sparrow

(b)   rose : potato : tree

(c)   wool : cotton : leather

(d)   knife blade : coin : piece of wire

(e)   book : teacher : newspaper

N.B.   4 out of 5 by **12 years**.

       5 out of 5 by **13 years**.

12 YEARS

Definition: See 10 year level.   Pass ☐   Fail ☐

Verbal Absurdities: Pass ☐   Fail ☐

See 8 year level for procedure. Gives adequate answers for 4 out of 5 items.

N.B.   Examiners may substitute another deceased adult in (d) if child is not familiar with Henry VIII, e.g. Christopher Columbus, Elvis Presley, Shakespeare.

(a)   Bill Jones' feet are so big that he has to pull his trousers on over his head.

(b)   A man called one day at the Post Office and asked if there was a letter waiting for him. "What is your name?" asked the postmaster. "Oh" said the man, "You'll find my name on the envelope".

(c)   The fireman hurried to the burning house, got his firehose ready, and after smoking a cigar, put out the fire.

(d)   In an old graveyard in Spain they have discovered a small skull which they believe to be that of Henry VIII when he was about 10 years old.

(e)   One day we saw several icebergs that had been entirely melted by the warmth of the Gulf Stream.

N.B.   5 out of 5 adequate answers by **13 years**.

Similarities: See 11 year level.   Pass ☐   Fail ☐

Inference: Pass ☐   Fail ☐

Say 'I'm going to read you a story. At the end there is a question. I'll read the story **twice** before you need to answer'. (Read it a **third** time if needed).

A man was found nearly dead. He was bleeding from a deep cut. On the back of his left arm was the blood-stained mark of a left hand. A policeman said he tried to kill himself. Do you think the policeman is right?

_____

Can you explain why?

_____

_____

13 YEARS

Definitions: See 11 year level. Pass ☐ Fail ☐

Inference: Pass ☐ Fail ☐

Child listens to and answers 2 out of 3 correctly.

(a) A man who was walking in the woods near a cemetery stopped suddenly, very frightened, and then ran to the nearest police station, saying that he had just seen something sticking out of the ground....... what was it?

_____

(Any part of a human body is acceptable.)

(b) My neighbour has been having odd visitors. First a doctor came to his house, then a lawyer, then a priest (vicar). What do you think happened there?

_____

(The child must be able to explain how the three visits were linked to a single event.)

(c) An alien had come to Earth to learn about life on our planet. He saw a man riding towards him. As the man rode by, the alien said, "That man is lazy; he runs sitting down". What was the man riding on, that made the alien say 'he runs sitting down'?

_____

(Answer: Any sort of bike with pedals)

N.B. 3 out of 3 by **14 years**.

Similarities: See 11 year old level. Pass ☐ Fail ☐

Verbal Absurdities: See 12 year level. Pass ☐ Fail ☐

23

14 YEARS

Definitions   Pass ☐   Fail ☐

Defines 2 out of 5 abstract words.

(a)   Generosity

(b)   Independent

(c)   Envy

(d)   Authority

(e)   Justice

Deduction: Pass ☐   Fail ☐

Let child see a copy of the problem as you read it aloud, and while he is solving it.

My house was burgled last Saturday. I was at home all of the morning but out during the afternoon until 5 o'clock. My father left the house at 3 o'clock and my brother was there until 4 o'clock. At what time did the burglary take place?

Similarities: Pass ☐   Fail ☐

Child says how 2 out of 5 opposites are alike.

(a)   winter : summer

(b)   happy : sad

(c)   loud : soft

(d)   much : little

(e)   beginning : end

Inference: See 13 year level   Pass ☐   Fail ☐

Canterbury and Thanet
Verbal Reasoning Skills Assessment - ages 3 - 14 years

N.B. S = semantic knowledge (word-meaning); P = pragmatic ability (world knowledge)

1. **Association**

Child is presented with an action word and asked to provide the person or object that would perform that action, e.g. 'What sleeps?'. This taps into the child's vocabulary knowledge and vocabulary storage system (ability to make links between words), together with their grammatical understanding (the difference between 'What?' as opposed to 'When?' or Where?' for example). (S)

The child also has to understand that they are being asked a question rather than being given a command. (P)

2. **Cause-Effect**

This explores the child's ability to make logical links between events - they are given one event and asked to either predict the **next** event or deduce the **previous** event (this is more difficult). (P).

3. **Explanation**

The child answers questions which require reasons or verb-associations for common objects. They will need to sift through their word-associations and select the most **relevant** information to answer a specific question. In addition, the child needs to appreciate that they are being put in the role of explaining rules to someone who is **ignorant** - they have to look beyond the immediate situation and the tester's actual knowledge. (S/P)

4. **Analogy**

The child has to see the relationship between the first two words, and then apply the same relationship to a third word. (S)

With good rote-memory, some children manage to do this item at a fairly automatic level, particularly **Opposite Analogy**.

5. **Definitions**

The child is asked to define a word and may do so by providing main use, category, identifying description, alternative word or specific example. This taps word-knowledge and the ability to be concise and relevant. (S) As for explanation, the child needs to look beyond the immediate situation and provide a definition which would be useful to an ignorant listener. (P)

6. **Word Recall**

The child has to think of as many different animals as possible in one minute. This requires divergent thinking, and short-term memory (some children lose track and start repeating themselves). (S) The rigid thinkers may get stuck on one type of animal and appear to do well at first, but then can't shift to a different category.

7. **Auditory Memory**

Memory span for a series of spoken items (e.g. words, commands, pieces of information).

8. **Same/Different**

A measure of the child's ability to identify and verbalise:

(i)   appropriate relationships between two objects;
(ii)   distinguishing characteristics of two objects. (S)

9. **Deductions**

The ability to use given information in order to solve a problem. This is the only sub-test where the child has pictures to refer to, to reduce the memory/vocabulary load. (P).

N.B.   As a general rule of thumb, all the necessary information is available and must be pulled together in 'Deduction' tasks, while 'Inference' tasks can only be solved by drawing on implied information.

10. **Inference**

The child is presented with some facts, and is required to supply missing information which can be implied from the given information. This taps their general knowledge, word association, the ability to make logical links between events, and ability to see the **whole** picture rather than process each piece of information in isolation. (S/P)

The task becomes harder the more information is presented, as this requires not only a well developed memory span, but also the ability to retain the information for long enough to be processed for meaning.

11. **Absurdities**

Contradictory statements are made and the child has to work out why they don't make sense. This involves a combination of inference ("well if that was the case, then X must be true"), deduction ("but if that happened, then Y would follow"), and the ability to see the whole picture rather than isolated 'snapshots'. (P).

12. **Rhymes**

Children can usually generate rhyming words at an early age, but this task requires them to select only rhymes that fall into a certain category (e.g. a **colour**). (S)