



Grammar and Phonology Screening Test (GAPS)

Administration Manual

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GAPS

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Part One: Administration

The GAPS requires the child to repeat a small set of sentences and made-up words (non-words) after the administrator.

1. Sentence Repetition

Materials: Score sheet and pen
 Picture booklet
 Cardboard cut-out of alien BIK

Show the child the picture booklet. Say:

I'm going to tell you a little story.

Show the child the cardboard alien. Say:

This is Bik. He would like to hear the story too, but he only understands children. So, when I say something, you say it to Bik. Listen really carefully, and make sure you tell everything to Bik just the same as I said it to you. Okay? Let's practise.

Say: *Hello Bik. Here is the story.*

Wait for the child to repeat the sentence. If they fail to do so, repeat the sentence and say, eg:

Go on. You say "Hello Bik. Here is the story".

When the child has attempted to repeat the sentence, say, eg, *Well done. Now let's start.*

Practice Sentences: Turn to the first page of the picture booklet. Read **practice sentence (a)** from the score sheet. If the child repeats or attempts to repeat every part of the sentence, praise him/her and move on to the next practice sentence. If the child refuses to repeat the sentence or says something completely different, repeat the sentences saying, for example:

I'll say that again. Then you say it to Bik.

When the child repeats the sentence, or attempts to, praise him/her and move onto the next practice sentence. When the practice sentences have been repeated, move straight on to the test sentences.

Test Sentences: If the child repeats every part of the sentence correctly, put a tick in the column headed ✓

If not, circle each word the child gets wrong. In the **Response** column, write down what they said instead of the circled words. If the child missed out a word, circle it in the Sentence column and put a 'zero' (∅) in the Response column.

For question sentences 4, 6 and 13, the administrator needs to say to the child “*You say to Bik,*” and then say the sentence.

If the child does not repeat any of the sentences, you may:

- Prompt them as follows:

Go on, you say the same to Bik. He wants to hear, too. (Administrator may repeat the target sentence once if necessary.)

- Repeat the target sentence **once** if necessary. Mark sentence with ‘R’ if repeated.

(Please see the Troubleshooting section at the end of the instruction booklet).

Continue in this manner until all the sentences have been completed.

Practice items (a) and (b) and test items 5, 7 and 14 are filler items and should not be scored or counted as part of the total.

2. Non-word Repetition

Materials: Score sheet and pen

Say: Bik talks differently to us. Here are some of Bik’s words. Listen carefully. This time you have to say Bik’s words. Try to say them just the same.

Read out practice word (a) from the score sheet (under the heading: 2. Non-word Repetition).

If the child repeats the word exactly, put a tick in the column headed ✓.

If the child makes any mistakes, put a cross in the column headed ✗.

If the child has pronounced the word exactly the same as you, then mark it correct. Any sound changes in the child’s attempt to repeat the word mean it should be marked as incorrect. (Please see the Troubleshooting section at the end of the instruction booklet).

Continue down the list.

If the child does not repeat any of the items, say, for example:

Go on, you try to say this word just the same. (Administrator may repeat each item **once** if necessary, marking the word with an ‘R’ if it is repeated.)

The words should be pronounced exactly as written on the score sheet, with stress placed on the underlined syllable.

Part Two: Scoring

Do not attempt to score any section of the test until after the test is complete.

1. Sentence Repetition

In particular, look at the words you have circled. These will be the words which the child repeated incorrectly.

For each sentence, check to see whether you circled any words (or parts of words) which are printed in **bold**.

If **yes**, then the sentence is marked as incorrect. If **no**, then the sentence is marked as correct, **even if you circled some of the other words**.

Count the numbers of correct and incorrect responses, and mark the totals in the bottom row on the score sheet.

Example:

Sentence <i>Circle any words or parts of words not repeated correctly</i>	Response <i>Write here what the child said instead of the circled words</i>	✓	✗
Practice Sentences			
a) This is the cat. <i>(Repeat if incorrect)</i>		FILLER	
b) The cat is grey. <i>(Repeat if incorrect)</i>	R	FILLER	
Test Sentences			
1 The cat with the bell is happy.	who has		✗
2 The cat wanted some milk.	licked	✓	
3 The milk is pulled by the dog.	The dog pulls the milk		✗
4 You say to Bik: What will the cat drink?	did		✗
5 Not milk!		FILLER	
6 You say to Bik: Which dog did the cat push ?	shove	✓	
7 The blue dog.		FILLER	
8 The dog gives the cat the milk .	the milk to the cat		✗
9 This cat likes milk.		✓	
10 The cat is washing herself .	∅		✗
11 The dog is licked by the cat.	The cat the dog	✓	
12 The cat is washing him .	∅ washed	✓	
13 You say to Bik: Who did the cat wash?	∅		✗
14 The red dog.		FILLER	
TOTAL:		5	6

2. Non-word Repetition

Count the numbers of correct and incorrect responses, and mark the totals in the bottom row on the score sheet.

Example:

Practice target	Response	✓	✗
a) dep	dep	✓	
b) pif	pat (R) → pif	✓	
Target	Response	✓	✗
1. drem <u>p</u>	drem <u>p</u>	✓	
2. kle <u>s</u> t	kle <u>s</u> t	✓	
3. to <u>h</u> ilf	to <u>b</u> lif		✗
4. di <u>f</u> imp	di <u>t</u> imp	✓	
5. ba <u>d</u> em <u>p</u> er	ba <u>d</u> em <u>p</u>		✗
6. fa <u>k</u> ester	fa <u>g</u> est <u>r</u> y		✗
7. pa <u>d</u> re <u>p</u> er	pa <u>d</u> re <u>p</u>		✗
8. di <u>f</u> ri <u>m</u> ple	di <u>t</u> ri <u>m</u> ply		✗
	TOTAL:	3	5

Part Three: Interpreting Results

1. Obtaining Percentile Scores

At the end of scoring, you will have two raw scores: one for sentence repetition and one for non-word repetition. The raw score in each section is the number of *correct* responses given by the child. In the examples used in Part 2: Scoring, the raw score for sentence repetition is 5 (see page 4) and raw score for non-word repetition is 3 (see page 5).

Each raw score will now be converted into a percentile score, eg, you will have two percentile scores.

Percentile scores standardise the language abilities of the child in respect to children of the same age. Each conversion table gives the percentage of children within an age group who obtained a particular score or lower on that component of the test.

For example, the 15 in Table 1 (at the intersection of the '2' row and '3:4-3:11' column) means that 15% of children between age 3 years & 4 months and 3 years & 11 months obtained a raw score of 2 or lower on the sentence repetition component of the test. This means that a child with a percentile score of 15 has scored the same as or higher than 15% of same-age children while scoring lower than 85% of same-age children.

Note that the average score for all children is 50%, and that the majority of children score near this mark. Thus, it is expected that your child will score close to 50 – few children score significantly higher or lower than this. We are interested in the children who do obtain significantly lower scores because it might be a sign of language difficulties.

a) Sentence Repetition

In the left-most column of Table 1, find the *row* that contains the child's sentence repetition raw score. Trace your finger across the row until you reach its intersection with the column that is headed by the range that includes the child's age. The number in the box where the row and column intersect is the child's percentile score.

Table 1. Raw score to percentile score conversion table for sentence repetition.

Raw Score	Age Group				
	3:4 – 3:11	4:0 – 4:5	4:6 – 5:5	5:6 – 5:11	6:0 – 6:8
0	5	1	1	0	0
1	<i>9</i>	1	2	0	0
2	<u>15</u>	<i>7</i>	4	0	0
3	22	<u>14</u>	5	0	0
4	31	20	<i>8</i>	0	0
5	45	27	10	2	0
6	55	32	<u>14</u>	4	0
7	64	36	20	<i>7</i>	0
8	73	50	27	<u>11</u>	3
9	85	61	37	21	<u>13</u>
10	94	81	60	44	40
11	100	100	100	100	100

Bold = lower 5%. *Italics* = lower 10%. Underline = lower 15%

Example:

If a child age 5 years and 7 months (5:7) obtains a sentence repetition raw score of 5, the child's percentile score is at the intersection of the raw score row of 5 and the age column headed by 5:6-5:11. In this case, the child's percentile score is 2.

The child's percentile score of 2 means that the child has scored the same or higher than 2% of same-age children while scoring lower than 98% of same-age children.

Table 2. Example of raw score to percentile score conversion for sentence repetition

Raw Score	Age Group				
	3:4 – 3:11	4:0 – 4:5	4:6 – 5:5	5:6 – 5:11	6:0 – 6:8
0	5	1	1	0	0
1	<i>9</i>	1	2	0	0
2	<u>15</u>	<i>7</i>	4	0	0
3	<u>22</u>	<u>14</u>	5	0	0
4	31	<u>20</u>	<i>8</i>	0	0
5	45	27	<u>10</u>	2	0
6	55	32	<u>14</u>	4	0
7	64	36	20	<i>7</i>	0
8	73	50	27	<u>11</u>	3
9	85	61	37	21	<u>13</u>
10	94	81	60	44	40
11	100	100	100	100	100

b) Non-word Repetition

Follow the same procedure as for the sentence repetition raw score, but use Table 3 for the conversion instead of Table 1.

Table 3. Raw score to percentile score conversion table for non-word repetition.

Raw Score	Age Group				
	3:4 – 3:11	4:0 – 4:5	4:6 – 5:5	5:6 – 5:11	6:0 – 6:8
0	5	4	4	0	0
1	<u>12</u>	<i>8</i>	<i>6</i>	1	1
2	19	17	<i>9</i>	2	1
3	29	19	<u>13</u>	5	3
4	44	33	<u>22</u>	<u>11</u>	<i>7</i>
5	58	50	35	22	17
6	79	67	66	40	36
7	87	84	79	65	65
8	100	100	100	100	100

Bold = lower 5%. *Italics* = lower 10%. Underline = lower 15%

Note about conversion tables: In the row beneath the heading 'Age Group', ages are recorded in a year:month format, eg, '3:4' refers to the age of three years and four months.

2. Interpretation of Test Results

Interpretation of the test is based on percentile, not raw scores.

For each percentile score, refer to the font keys below Tables 1 and 3 to find the broader category into which your child falls. For the sentence repetition raw score example (Part 3, Section 1), the bold font of the percentile score **2** indicates that the language abilities of the child fall in the lower 5% of same-age children.

0-10: If your child's percentile score in any or both components falls in the lower 10% (*Italics* or **Bold**), then further, detailed assessment by professionals is recommended.

10-15: If your child's percentile score in any or both components falls between the lower 15% and 10% (Underline), re-testing the child in the component(s) where the score fell into this range is recommended, to ensure the accuracy of the results.

15-100: If your child's percentile score in both components is higher than 15 (they fall into the upper 85% of same-age children), no further action is recommended.

Children 6 years and older: Because most children 6 years of age and older have well-developed grammatical abilities, any error made by a child of this age range is significant. Detailed assessments by professionals is recommended.

Part Four: Troubleshooting – questions administrators might ask

1. What if child doesn't seem to understand the task?

Generally, if the task is introduced to the child carefully and slowly, paying attention to the cardboard alien and encouraging the child to repeat sentences to him, the child will more often than not repeat, or attempt to repeat the sentence. The practice and filler sentences and non-words are designed to be easier for the child to repeat. Therefore he/she will experience success early on in the task. If necessary, the administrator may repeat the practice items until you think the child understands the task.

2. What do I do if a child does not repeat the sentences or words?

If this happens, encourage the child by saying, eg,

“Go on, you say the same to Bik. He wants to hear, too”.

If the child seems to have forgotten the target sentence/word or is reluctant to speak, the Administrator may repeat it once only.

3. How many times can I repeat a sentence?

Practice sentences/words: you may repeat these as many times as you need to get an approximate repetition.

Test sentences/words: you may repeat these sentences only once.

4. What do I do if a child answers a question sentence rather than repeats it?

In this instance it is best to say, “**You say to Bik.**” and then repeat the question sentence once only.

eg, “**You say to Bik** “*What will the cat drink?*”

Avoid stressing ‘what’, ‘which’, ‘who’ whilst you are asking this.

5. What if a child has difficulties with articulation?

Sentence repetition:

- If a child makes an approximate pronunciation of a word then this is acceptable, for example: ‘*taɪ*’ for ‘*caɪ*’ is okay.
- The child must mark, eg, past tense in some way, for example: ‘*Wa-ted*’ (wanted) is okay, but ‘*wa-t*’ (wanted) is not okay.

Non-word repetition:

All words must sound the same as the target words.



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