

# PART B:

## Technical information

### 5. Measuring proficiency in writing

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#### 5.1. Overview

e-asTTle writing represents an analytical approach to the assessment of writing, where responses to prompts are scored against seven different elements of writing using a detailed rubric. Once a prompt has been scored, the e-asTTle application can be used to transform the rubric scores to a location on the e-asTTle writing measurement scale. The scale provides a measure of writing proficiency and is linked to curriculum performance levels, allowing students' scores to be reported within curriculum bands. Scale scores can also be compared with the achievement distributions of a range of representative reference groups.

This section of the manual describes the development of the e-asTTle writing measurement scale and the compilation of the reference data.

#### 5.2. Constructing the e-asTTle writing scale

The e-asTTle writing scale is based on an extension of the Rasch Measurement Model (RMM). Used widely in educational measurement, the RMM is a mathematical model that can be used to transform ordinal observations (such as rubric scores) into linear measures. The RMM predicts the probability of a test taker at a given proficiency level achieving success on a test item of known difficulty. Test-taker proficiency and item difficulty are assumed to be located on the same measurement scale and the probability of success on the item is a function of the difference between them.

The Multifacet Rasch Model (MFRM) extends the RMM by taking into account additional “facets” besides student proficiency and item difficulty that might be associated with the measurement context. In the context of a writing assessment, these include marker severity and the difficulty of the prompt.

To develop the e-asTTle writing scale, an MFRM was constructed that included:

- student writing proficiency
- the difficulty of the prompts to which the students were writing
- the difficulty of the elements against which the students' written responses were being judged
- the thresholds or barriers to being observed in a scoring category for an element relative to the scoring category below
- the harshness of the markers judging the students' written responses.

The model assumes that all these facets can be measured on a single continuum (measurement scale) and that their locations on this continuum are used to determine the probability that a student will score in the higher of two adjacent scoring categories. Statistical and graphical fit indicators are used to study the extent to which prompts, markers, students and marking rubrics fit the MFRM.

To construct the measurement scale, student responses to 21 writing prompts were collected in a national trial involving approximately 5000 students from Years 1 to 10. The students involved were selected using a random sampling methodology, which is described in section 6.2. Care was taken so that all markers and prompts could be linked across the students involved. This meant that many of the students completed two prompts and that many of the responses were double-marked.

The markers involved in the trial were trained teachers, or held relevant post-graduate degrees. Each marker attended a two-day training course at the start of the marking exercise. Marking was done in teams and moderation meetings were carried out on a daily basis. Data was entered and carefully validated before analysis of data was carried out using the computer program Facets (Linacre, 2010).

Figure 4 provides a graphical representation of the measurement scale constructed by the analysis process. The scale itself is presented on the left of the figure in e-asTTle writing scale units (aWs). The scale locations of students, prompts, markers, the elements of the rubric and the scale thresholds are displayed from left to right. As can be seen, these locations vary. Prompt 20, for instance, is located slightly higher on the scale than Prompt 27, indicating it was the more difficult of the two prompts. Similarly, some markers (indicated by asterisks) are higher on the scale than others, indicating they applied the rubric more harshly.

The final model for e-asTTle takes into account the scale locations of the prompts, elements and thresholds shown in Figure 4 to transform students' rubric scores to scale locations. Values for marker harshness are not included directly as there is no way to know how harshly a user may have marked. However, the variance in marker harshness exposed through the modelling process provides some idea of the imprecision markers introduce, and marker variance is included in the estimates of measurement error reported by the e-asTTle application for each scale score.

FIGURE 4 Scale locations for the difference facets used in developing a model for e-asTTle writing

aws	Student	Prompt	Marker	Element	1	2	3	4	5	6	7
1904	+	+	+	+	(6)	(7)	(6)	(6)	(7)	(6)	(6)
1843	+	+	+	+	+	---	+	+	+	---	+
1782	+	+	+	+	---	+	+	---	---	5	---
1721	+	+	+	+	5	6	---	---	6	+	---
1660	+	+	+	+	---	---	5	5	---	---	5
1599	+	+	+	+	4	5	---	---	5	4	---
1538	+	+	+	+	---	---	4	4	---	---	4
1477	+	20 21 23 26 29 31 11 12 13 14 19 22 24 28 30	+	7 2 4 5 3 1	---	---	---	---	4	3	---
1416	+	+	+	+	3	3	3	3	4	3	3
1355	+	+	+	6	---	---	---	---	3	---	---
1294	+	+	+	+	---	---	---	---	+	+	+
1233	+	+	+	+	2	2	2	2	2	2	2
1172	+	+	+	+	---	---	---	---	---	2	---
1111	+	+	+	+	---	---	---	---	---	---	---
1050	+	+	+	+	+	+	+	+	+	+	+
989	+	+	+	+	+	+	+	+	+	+	+
928	+	+	+	+	+	+	+	+	+	---	+
867	+	+	+	+	+	+	+	+	+	+	+
806	+	+	+	+	+	+	+	+	+	+	+
745	+	+	+	+	+	+	+	+	+	+	+
684	+	+	+	+	(1)	(1)	(1)	(1)	(1)	(1)	(1)
aws	* = 39		* = 1		1	2	3	4	5	6	7

**Element**  
 1= Ideas  
 2= Organisation  
 3= Vocabulary  
 4= Sentence structure  
 5= Punctuation  
 6= Spelling  
 7= Structure and language

### 5.2.1. Model fit

The Facets computer program provides several fit indices for different aspects of the model. In addition, a range of graphical displays are available to study the fit of the data to the measurement model.

Overall model fit was very good. The Infit mean-square indices (see Linacre, 2010) of the prompts ranged from 0.78 to 1.23 and those of the criteria ranged from 0.82 to 1.20. Values between 0.5 to 1.5 are generally considered “good enough” for measurement (Linacre, 2010). Infit mean-square indices for markers varied a little more, ranging from 0.75 to 1.46.

### 5.2.2. Numbering the e-asTTle writing scale

The e-asTTle writing scores produced by the MFRM were measured in “logits”. To convert these scores to the units used on the asTTle writing scale (the aWs scale), a linear transformation was applied to the logit scores, which would ensure that the mean of the transformed scores for Year 6 students in Quarter 3 was 1500 units and the standard deviation was 100 units. The reason for this choice was to maintain as much consistency as possible with the previous version of e-asTTle writing.

### 5.2.3. Reliability and precision

Reliability can be thought of as the degree to which consistency is maintained over repeated measurements. A highly reliable assessment administered on two separate but similar occasions will produce two results which are almost the same.

The Facets software produces reliability indices for each of the facets included in the model. These normally range from 0 to 1, with 0 indicating extremely poor reliability and 1, perfect reliability. The student reliability index was 0.96. The prompt and marker reliabilities were both 0.99 and the element reliability was 1.00. These indices all fall well within a widely accepted range.

The e-asTTle application provides an estimate of the precision associated with each scale score in the Individual Learning Pathways Report. An error of 40 aWs units on the scale, for instance, indicates that a given scale score is likely to be within plus or minus 40 units of the student's "true score" in about 70 percent of cases. The measurement errors for e-asTTle writing are generally in the range of plus or minus 40 to 50 scale units.

### 5.2.4. Validity

Validity refers to the extent to which an assessment measures that which it was intended to measure. In the current situation, this manifests as "does the e-asTTle writing tool measure the writing ability of New Zealand's Year 1 to 10 students?"

Statistical processes cannot, by themselves, prove validity. By far the best approach is for a teacher to examine the prompts and marking rubric to evaluate their suitability to provide useful and dependable information. The e-asTTle writing scale has been planned and constructed so that it assesses writing skills and abilities accepted as being important by teachers and experts in the area of school-age student writing. The prompts, marking rubrics and supporting processes were scrutinised by writing experts and researchers with expertise in test construction. The assessment itself is based on authentic writing that students have produced in a 40-minute period.

Evidence for validity is provided by the regular increases in achievement from one year-level to the next and the appropriately ordered locations of elements and thresholds on the scale.

All marking was completed "blind", that is, without knowledge of the year level or gender of the students. Markers were well qualified and carefully trained and moderation processes were applied throughout the marking exercise.

Finally, and from a statistical perspective, the writing proficiency norms (as described in section 6.3.1) are broadly similar to those documented by earlier versions of e-asTTle writing and also by other assessments in related proficiencies such as reading.

# 6. Constructing the reference data set

## 6.1. Overview

To develop the e-asTTle writing tool and construct nationally representative achievement distributions, a representative random sample of students was drawn from New Zealand's Year 1 to Year 10 student population. To produce the reference information needed by e-asTTle, these distributions were summarised using a statistical model. The model, in turn, was used to produce the normative reference information used in the e-asTTle application. For instances where the e-asTTle application has traditionally produced reference information, but where the current data was sparse or nonexistent, patterns in existing normative information from the original e-asTTle writing were used to produce the required reference values.

This section describes the sampling methodology and statistical methods used to produce the nationally representative reference information.

## 6.2. The sample

The e-asTTle writing sample was designed to:

- be broadly representative of New Zealand's Year 1 to Year 10 student population
- minimise school burden by selecting 30 students from, at most, two year-levels per school.

The sample was drawn as a stratified two-stage random sample of students within schools. Given the target audience of the e-asTTle writing tool, only English-medium schools were selected. In addition, special schools and very small schools were removed from the sample frame. The two stage nature of the sample minimised both cost and school burden across New Zealand.

The sampling of students within schools was the responsibility of the schools themselves. Schools were asked to randomly select students at the prescribed year-level from their rolls. NZCER provided a methodology for schools to follow and offered to carry out the sampling for schools if it was required.

The sampling frame of schools was stratified by year-level group, school decile group and school size groups (i.e. number of attending students). The six year-level groups consisted of year-levels 1 and 2, year-levels 2 and 3, year-levels 4 and 5, year-levels 5 and 6, year-levels 7 and 8 and finally year-levels 9 and 10. The three decile groups consisted of deciles 1, 2 and 3, deciles 4, 5, 6 and 7 and deciles 8, 9 and 10. The school-size groups were determined by an estimation of the number of classes of students at the relevant year-level and were nominated as small, medium or large.

This resulted in a stratified sampling frame with a collection of cells indexed by decile-group and school-size group for each year-level group. Within these cells, schools were selected randomly to form the sample.

Table 3 describes the participation of schools and students in the sample broken down by school decile. Schools that declined to participate were replaced by schools with similar demographics.

TABLE 3 Decile and participation

Decile	Participating schools	Participating students
1	10	277
2	16	469
3	19	556
4	9	260
5	15	450
6	15	466
7	23	687
8	10	306
9	19	568
10	24	716
<b>Total</b>	160	4758

### 6.2.1. The characteristics of the achieved sample

Table 4, Table 5 and Table 6 show the student-level demographics of the e-asTTle writing sample. Table 4 shows the sample broken down by the year-level and gender of the students. There are slightly more boys than girls overall, although this is not true at all year levels.

TABLE 4 Students in the sample by year-level and gender

Year-level	Girls	Boys	Missing	Total
1	219	229	2	450
2	259	213	1	473
3	230	246	1	477
4	217	258	1	476
5	249	233	0	482
6	216	214	0	430
7	251	235	0	486
8	230	254	0	484
9	239	260	1	500
10	229	263	0	492
<b>Missing year-level</b>	0	2	3	5
<b>Total</b>	2339	2407	9	4755

Table 5 shows the sample broken down by the year-level and ethnicity of the students. Note that the students could identify with more than one ethnic group and therefore there were more identifications than there were students. As might be expected, the phenomenon of identifying with more than one ethnic group is more prevalent in higher year-levels.

TABLE 5 Students in the sample by year-level and ethnicity

Year level	NZ European	Māori	Pasifika	Asian	Other	Total identifications	Total students
1	251	115	32	24	28	450	450
2	257	130	47	20	29	483	473
3	280	115	39	8	34	476	477
4	277	91	61	21	64	514	476
5	287	82	61	23	55	508	482
6	292	55	38	15	51	451	430
7	306	101	43	27	46	523	486
8	321	84	43	21	51	520	484
9	342	103	37	41	48	571	500
10	295	126	52	37	52	562	492
<b>Total</b>	4694	1468	693	398	734	5058	4750

Table 6 shows the sample broken down by the year-level of the students and the decile-group of the schools they attend. There are relatively fewer students from lower decile schools overall and at each year-level. However, the absolute numbers of students in each year-level at lower decile schools in the sample are sufficiently large so that summary statistics of writing ability of reasonable quality are still able to be produced.

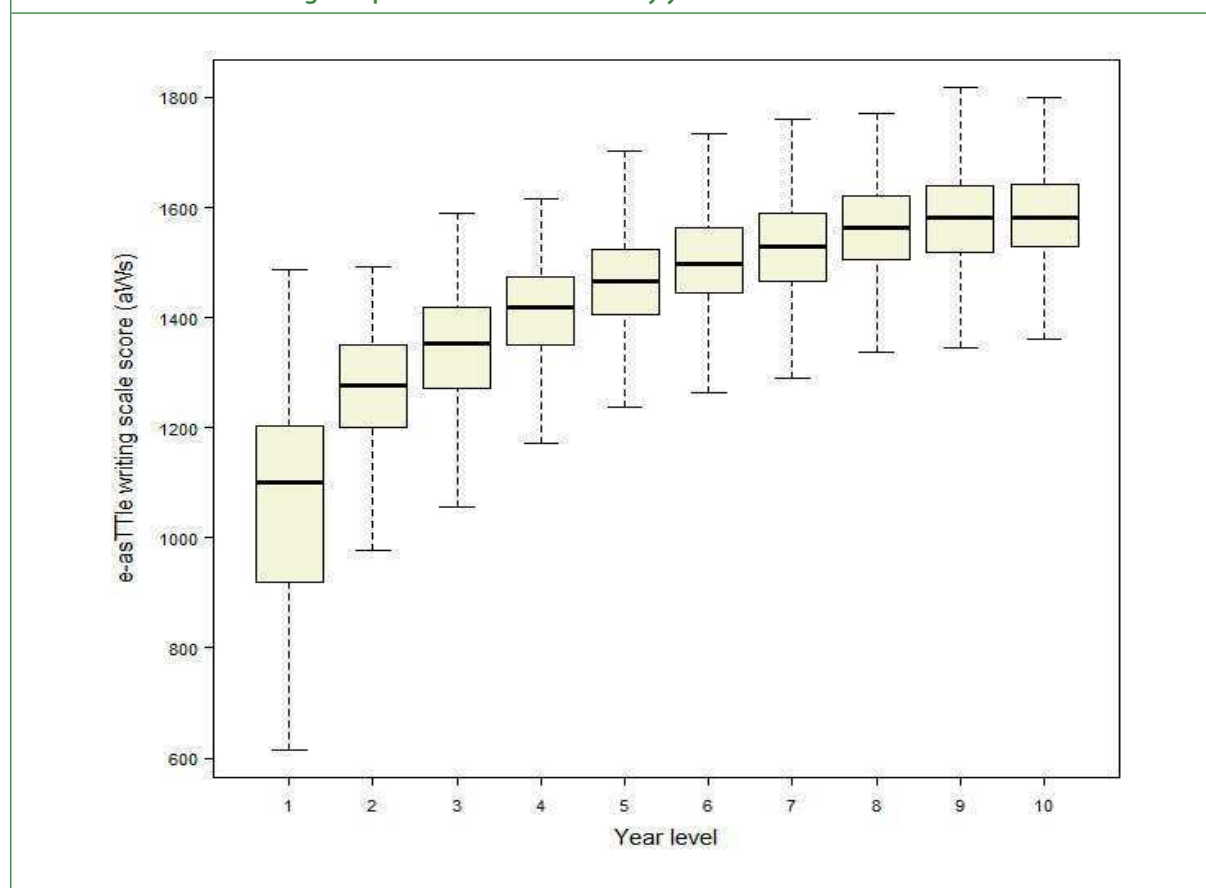
TABLE 6 Students in the sample by year-level and decile

Year-level	Deciles 1– 3	Deciles 4 - 7	Deciles 8 - 10
1	153	158	139
2	177	155	141
3	182	160	135
4	137	159	180
5	146	155	181
6	107	139	184
7	105	201	180
8	107	197	180
9	87	278	135
10	98	260	134
<b>Missing</b>	3	1	1
<b>Total</b>	1302	1863	1590

## 6.2.2. Writing scores in the sample

Figure 5 shows a box plot of the distribution of writing scale scores for each year-level in the sample. The box plot displays – in ascending order – the fifth percentile, the lower quartile, the median, the upper quartile and the ninety-fifth percentile of the writing scores. The medians exhibit a typical curved growth pattern. The variation in writing scores (as indicated by the interquartile range) is somewhat larger for year-levels 1, 2 and 3 than for the remaining year-levels.

FIGURE 5 e-asTTle writing sample score distributions by year-level



## 6.3. Constructing the e-asTTle reference data

The e-asTTle application is designed to provide a substantial amount of reference information. For example, it requires summary statistics for the distribution of writing scores (simultaneously) broken down by year-level, gender and ethnicity. The scope of the current work meant that some of the year-level-by-gender-by-ethnicity cells were too small to produce summary statistics that were suitably robust. Similarly, the e-asTTle tool requires all normative information for each quarter of the school year. This was also outside the scope of the current e-asTTle work.

To compile the normative data required by the application a linear regression model of the e-asTTle sample data model was used to:

1. summarise the information contained in the e-asTTle sample in an efficient, yet accurate way
2. provide a robust method for estimating the means and standard deviations needed to produce the normative information that is required by the e-asTTle tool.



It was not possible to use the data collected to model all of the norms required by the e-asTTle application. For instance, normative information by region was not able to be produced by the model. When this occurred and where relevant normative information existed from the previous version of e-asTTle writing, effect size calculations were used to estimate the distributions required. This was not possible at Years 1 to 3 where no data existed from the previous version.

### 6.3.1. Modelled norm reference data

Table 7 provides some of the normative statistics produced by the modelling process.

TABLE 7 Modelled e-asTTle writing statistics for Quarter 3, by year-level and gender

Year level	Boys		Girls		All students	
	Mean (aWs)	Sd (aWs)	Mean (aWs)	Sd (aWs)	Mean (aWs)	Sd (aWs)
1	1055	184	1127	184	1091	184
2	1216	138	1279	138	1249	138
3	1309	124	1367	124	1341	124
4	1376	100	1429	100	1407	100
5	1427	100	1478	100	1459	100
6	1470	100	1518	100	1500	100
7	1505	100	1551	100	1535	100
8	1536	100	1580	100	1566	100
9	1563	100	1606	100	1593	100
10	1588	100	1629	100	1616	100

## References

- Linacre, J. M. (2010) Facets Rasch Measurement computer program (Version 3.67.1) [Computer Software]. Chicago: Winsteps.com
- Ministry of Education. (2007). *The New Zealand curriculum*. Wellington: Learning Media.
- Ministry of Education. (2009). *The New Zealand curriculum reading and writing standards for years 1–8*. Wellington: Learning Media.
- Ministry of Education. (2010). *The literacy learning progressions: Meeting the reading and writing demands of the curriculum*. Wellington: Learning Media.

# APPENDIX 1: e-asTTle writing glossary and definitions

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## Definitions

**Category:** a device for describing and scoring a particular skill level within an element of the marking rubric. The categories provide an overview of skill development within an element of writing.

**Descriptors:** statements found in the marking rubric that describe a particular point on the continuum of development in an element of writing. The descriptors for each element enable scoring decisions to be made.

**Elements:** the seven components of writing that are assessed by e-asTTle writing: ideas, structure and language, organisation, vocabulary, sentence structure, punctuation, and spelling

**Exemplars:** samples of student writing produced in response to each e-asTTle writing prompt. The exemplars have been selected as representative, rather than ideal, examples of writing. Each writing sample has been scored, using the marking rubric. Annotations explain how scoring decisions have been made.

**Notes:** additional information provided on the marking rubric to assist in making judgments on the most appropriate scores. The notes are not an exhaustive list, but provide guidance on features that may be present in students' writing.

**Prompts:** open-ended writing topics designed to “prompt” rather than “prescribe” writing. This emphasis encourages students to draw on their individual and cultural knowledge to interpret the writing topic.

**Purpose/specified purpose:** the goal to be achieved by the writing; the reason for writing. For example, for the prompt “It is wrong to fight”, the purpose is to *persuade* a reader to a point of view in relation to the statement “It is wrong to fight”.

**Topic:** the broad context and subject matter specified by the prompt instructions. For the prompt “It is wrong to fight”, the topic is fighting/violence.

## Glossary

**Abstract vocabulary:** words or phrases used to describe ideas or concepts that do not have a physical existence, e.g., *loyalty, respect, kindness*. See also concrete vocabulary.

**Academic vocabulary:** words and phrases that are commonly used in the classroom and in learning contexts but not often in everyday contexts (or with a different meaning in everyday contexts). Academic vocabulary includes the vocabulary required for classroom discussion and curriculum work, e.g., *define, method*.

**Active voice:** a verb form in which the subject of the sentence performs the action of the verb, e.g., *We [subject] mixed [verb] the baking soda and vinegar*. See also passive voice.

**Adjective:** a word that modifies (provides more information about) a noun, e.g., *red bus, tall building, beautiful flower*

**Adverb:** a word whose main function is to modify (provide more information about) a verb, e.g., *He spoke angrily; She walked slowly*

**Apostrophe:** a punctuation mark (') that signals the omission of letters as in a contraction (e.g., *can't, didn't*) or that indicates possession (e.g., *the dog's tail, the girl's hat, the women's dresses*)

**Article:** a word (*a*, *an* or *the*) that introduces a noun. The article may be indefinite (*a bus*, *an umbrella*) or definite (*the shops*).

**Blends:** two or three consonants that work together, e.g., *string*, *blue*, *growing*. Each consonant sound can be heard in the blend.

**Chunk:** a sound or a group of letters, within a spoken or written word, that includes more than one phoneme or grapheme. Identifying known or familiar chunks may help students spell or decode unfamiliar words.

**Clause:** a grammatical structure that contains a subject and a verb, e.g., *The butterfly emerges from the cocoon*. Clauses may be independent (able to stand alone, expressing a complete thought, as in *I play with my friends*) or dependent (unable to stand alone or express a complete thought, as in *When I am on holiday*).

**Coherence:** the quality of being logical and consistent, so that meaning is clear

**Cohesive devices/linking words/text connectives:** words or phrases used to make links between items or ideas in a text so that the reader is able to track how meaning is being developed

**Colon:** a punctuation mark (:) used at the end of a statement (usually a sentence) to introduce an explanation, an example, a list or a quotation, e.g., *There are many different kinds of music: classical, pop, rock, rap and folk*

**Comma:** a punctuation mark (,) whose functions include the separation of ideas or elements within a sentence. Commas can be used to separate phrases (e.g., *On Wednesday evening, we went to the movies*), clauses (e.g., *Because it was Dad's birthday, we went to the movies*) or items in a list (e.g., *We ate ice-cream, popcorn and lollies*).

**Complex ideas:** ideas that move beyond the immediate, everyday world of the writer, to draw on wider themes and issues that affect a broad range of people

**Complex punctuation:** punctuation that may be considered as higher-order, including commas to mark phrases and clauses, punctuation of direct speech, apostrophes for possession, colons, semicolons and parentheses

**Complex sentence:** a sentence that has a main, independent clause and at least one dependent (subordinate) clause beginning with a subordinating conjunction such as *when*, *how*, *because*, *although*, e.g., *She could paint amazing pictures [independent clause], although she was only six [dependent clause]; When we went to class [dependent clause], I put the certificate in my book bag [independent clause].* The subordinate clause is dependent on the main clause and cannot stand alone.

**Compound sentence:** a sentence consisting of at least two independent, main clauses. The clauses are independent of each other (each one could stand alone) and are linked by a coordinating conjunction such as *and*, *but*, or *or*, e.g., *I mowed the lawn, but you trimmed the edges*.

**Compound–complex sentence:** a sentence consisting of a compound sentence plus at least one dependent clause, e.g., *I mowed the lawn, but you trimmed the edges after I had finished*

**Concrete vocabulary:** words and phrases used to describe objects or events that exist in a physical form, e.g., *house*, *table*, *flower*. See also abstract vocabulary.

**Conjunction:** a word used to link two clauses within a sentence. Conjunctions can be coordinating (joining two independent clauses, e.g., *I have two friends and they are both girls*) or subordinating (joining an independent and a dependent clause, e.g., *I came because I needed to see you*).

**Continuous texts:** texts in which sentences are organised into paragraphs. See also non-continuous text.

**Contraction:** a shortened version of a word or words, formed by removing one or more letters and replacing them with an apostrophe, e.g., *it's, hadn't, couldn't*

**Dash:** a punctuation mark (–) that typically signals added information, an interruption or a change of thought, or that adds emphasis, e.g., *I have two friends – both girls – and I play with them every day*

**Dependent clause:** a clause that is unable to stand alone or express a complete thought, as in *When I am on holiday*. Dependent clauses (also known as subordinate clauses) add more detail to an independent (or main) clause.

**Difficult words:** words that are not considered to be high frequency and that do not follow common letter patterns and spelling rules. Difficult words may include:

- words that contain unusual consonant blends, digraphs and trigraphs (e.g., *guide, guess, guard, scholar, schedule, scheme*)
- compound words (e.g., *worthwhile, nevertheless*)
- homophones (e.g., *course/coarse, practicing/practising, whether/weather*)
- silent letters (e.g., *gnome, honest, wrestling, pseudonym*)
- difficult or unusual letter patterns (e.g., *hideous, amateur, behaviour, fashion, cautious, comfortable*)
- commonly confused words (e.g., *bought/brought, dependent/dependant*)
- irregular words (e.g., *height, through, yacht*).

**Digraph:** two letters representing one sound: *-th, -ng, -ee, -ou*. See also vowel digraph.

**Direct speech:** the words that are actually said by someone. Direct speech is indicated by inverted commas when included in written text, e.g., *"This is the first hike I've ever been on," said Bob*. See also reported speech.

**Elaborate:** to add more detail. Elaboration of ideas in writing may involve description, explanation, analysis, evaluation or additional information.

**Ellipsis/ellipses:** a punctuation mark (. . .) consisting of three equally spaced dots. It is used to indicate the omission of words or sentences, for example in a quotation. It can also be used, especially at the end of a sentence, to indicate an unfinished thought, e.g., *She wondered where the hair straighteners could have got to ...*.

**Expressive language/vocabulary:** vivid, lively, and/or emotive words and terms

**Extending phrases and/or clauses:** words or groups of words added to a simple sentence to add detail, e.g., *The **three** men walked into the **dense, overgrown** bush, **carrying large packs***. Extending phrases or clauses may be at the beginning, in the middle, or at the end of a sentence.

**Figurative language:** language that uses images to build meaning without literal description and often without direct comparison, e.g., by using metaphor, as in *Night is a Blanket*. Other forms of figurative language include similes (*the ice cream tasted like a fluffy cloud*) and onomatopoeia (*the waves **crashed** on the shore*). Also referred to as "figures of speech".

**Figure of speech:** see figurative language

**Flow:** the rhythm, pace and logical consistency of a piece of writing. Writing that has "flow" moves in an easy, natural way so the reader can follow it without difficulty or interruption.

**Fragments:** see sentence fragments

**Generalisation:** moving beyond concrete facts to make links to more abstract or universal principles or themes

**Grapheme:** a written unit that represents one phoneme, e.g., *f, th, o, ee*

**High-frequency words:** words that occur most commonly in writing, such as those listed in essential lists 1–7 (Croft, 1998)

**Hyphen:** a punctuation mark (-) used to join compound words, most commonly compound adjectives that come before a noun, e.g., *a well-known fact*. (Note that a compound adjective formed with an adverb ending in *-ly* is not usually hyphenated, e.g., *a beautifully presented portfolio*.)

**Idiom:** a sequence of words with a fixed expression in common usage, and whose meaning is not literal, e.g., *raining cats and dogs; kick the bucket; put a sock in it!*

**Incomplete sentence:** *see* sentence fragmen

**Independent clause:** a clause capable of standing on its own and that conveys a message. The following sentence has two independent clauses: *The sky grew dark and the clouds rolled in*. The following sentence has an independent clause followed by a dependent clause: *They smiled as if they meant it*. *See also* clause; dependent clause.

**Language features:** the language patterns typically associated with a text written for a particular purpose, including choice of tense, tone, connectives and vocabulary. For example, when narrating, typical language features include past tense, connectives denoting time, expressive and/or descriptive vocabulary, and dialogue.

**Linking words/cohesive devices/text connectives:** words or phrases that help the reader follow the relationships between the parts of a text, e.g., *first, finally, because, therefore*)

**Metaphor:** a figure of speech that makes an imaginative link between two objects or ideas to create a clear or surprising image, for example using the idea of a blanket to create an image of the night sky in *Night is a Blanket*

**Modal verbs:** verbs that convey judgments about the likelihood of events. The nine modal verbs are *can, could, may, might, must, shall, should, will, would*.

**Mood:** the atmosphere created by the writing and conveyed to the reader, for example mysterious, humorous or ominous

**Morphemes:** the smallest parts of words that have meaning. *Snowing* has two morphemes, *snow* and *-ing*. *See also* morphology.

**Morphology:** the study of the forms of words and how they are constructed in terms of parts that have meaning

**Nominalisation:** forming a noun from a verb or adjective, e.g., the noun *breakage* formed from the verb *break*. Nominalisation makes a written text more compact and concise, e.g., *When your body reaches an abnormally low temperature, you will need to be taken to hospital* might be rewritten with nominalisations as *Hypothermia requires hospitalisation*.

**Non-continuous texts:** texts that do not contain sentences organised into paragraphs, for example, charts and graphs, tables and matrices, diagrams, maps, forms, information sheets, advertisements, vouchers and certificates

**Noun:** a word class with a naming function: *the cat, a dream*

**Noun–pronoun referencing:** the match between a pronoun and the noun that it refers to. An example of incorrect noun–pronoun referencing is *The dogs are splashing in the water. It has a shaggy coat*.

**Objective language/tone:** language that does not focus on thoughts, feelings, and opinions. Third person pronouns (e.g., *it, they*) are reasonably common but first and second (e.g., *I, you*) are not. *See also* subjective language.

**Onomatopoeia:** the use of words that evoke the sounds associated with the objects or actions they refer to, e.g., *splash, honk*

**Orientation:** an opening statement/s that provides the reader with a clear idea of what the text will be about, and/or that engages the reader's interest

**Overblown language:** language that is exaggerated or pretentious

**Overgeneralise (spelling rules):** apply spelling or morphological patterns more widely than is appropriate, such as to a word that is irregular. An overgeneralisation of the spelling rule “add *-ed* to a verb to form the past tense” is *I **standed** up*.

**Parentheses:** punctuation marks (()) consisting of upright curved lines, most commonly used to mark off qualifying phrases, as in *The girl (the one in the red dress) is called Alysha*. Also called brackets.

**Passive voice:** a verb form in which the subject of the verb receives the verb's action, i.e., the subject is the target of the action, as in *Baking soda and vinegar [subject] were mixed [verb]*. *See also* active voice.

**Personal words/vocabulary:** words and phrases that have personal meaning for the writer, such as familiar names and words for places, activities, actions, and feelings that are important to that person

**Phoneme:** the smallest segment of sound in spoken language

**Phoneme–grapheme relationships:** the relationships between spoken sound units and the written symbols that represent them

**Phrase:** A cluster of words smaller than a clause, forming a grammatical unit, e.g., *the tall trees; in a box*

**Precise words:** words that are exact and accurate in expressing the writer's intention. Precise words may be descriptive, expressive, academic, technical or abstract.

**Prepositions:** words that describe a relationship between other words in the sentence, most typically location in space (***under** the bed, **in** the box, **on** the television*) or time (***after** the flood, **during** the race, **since** my birthday*)

**Pronoun:** a word that can substitute for a noun or a noun phrase, e.g., *I've got a red hat and Jane's got a green **one**; My Uncle Fred's just arrived. **He's** quite tired*

**Referring words:** words that create links in the writing, by referring to something that has already been mentioned, e.g., *The butterfly has two wings. **These** are orange, black and white*. The most common referring words are pronouns.

**Relative pronoun:** the pronouns *who, whom, whose, that, which*. These pronouns introduce relative clauses, such as *People **who recycle plastic bags** are helping to take care of our planet and reduce global warming; The tadpole develops two small legs, **which will eventually allow it to move on land***.

**Reported speech:** a summary or paraphrase of what someone said, in which the actual words are not quoted directly. Reported speech does not require inverted commas, e.g., *Bob said it was the first hike he'd ever been on*. *See also* direct speech.

**Run-on sentences:** two or more sentences that have been run together without appropriate punctuation to separate them (i.e., full stop and capital letter, or a semicolon) or an appropriate conjunction to join them. Run-on sentences are often joined inappropriately with commas (also known as comma splices).

**Semicolon:** the punctuation mark (;) used between two independent clauses (sentences) that are related in meaning, e.g., *I am going home; I intend to stay there*

**Sensory detail/language:** language that appeals to the senses, describing how something smells, feels, looks, sounds or tastes

**Sentence fragment:** a sentence that is incomplete because it is missing at least one essential element, such as a subject or verb. A sentence fragment does not express a complete thought.

**Simile:** A figure of speech that compares one thing with another, using *like* or *as*, e.g., *The ice cream tasted like a fluffy cloud; Her eyes were as bright as stars.*

**Simple ideas:** ideas that are related to the personal, immediate world of the writer (concrete, predictable, familiar, personal or close to the writer's experience)

**Simple sentence:** a sentence that contains a single, independent clause, e.g., *My community needs a new gym*

**Structural features:** the component parts that are typically associated with a text written for a particular purpose. For example, when narrating, structural features may include an orientation to the context, a series of events, a problem and a resolution.

**Subject–verb agreement:** use of the correct form of the verb (singular or plural) to match the subject. A singular subject takes a singular verb, and a plural subject takes a plural verb.

**Technical vocabulary:** words that are specific to a particular topic, field, or academic discipline, e.g., *antennae, chrysalis, larvae*

**Tense:** a change in the form of a verb to mark the time at which an action takes place (present tense: *tell*; past tense: *told*)

**Text connectives/cohesive devices/linking words:** the words or phrases used to make links between items or ideas in a text so the reader is able to track how meaning is being developed

**Tone:** the attitude that the writer conveys, through choice of vocabulary and/or phrasing, e.g., informal/formal or objective/subjective

**Topic:** the subject matter to be addressed by the writing, e.g., dogs at the beach, the life cycle of the Monarch butterfly, or friendship

**Topic sentence:** the first and most general sentence of a paragraph, which introduces the main idea (topic) being written about in that paragraph

**Vowel digraph:** two vowels combining to make a single vowel sound, e.g., *ea (beat)*, *oa (boat)*.

**Word chunks:** see chunk.

## References

Croft, C. (with Mapa, L.). (1998). *Spell-write: An aid to writing and spelling* (Rev. ed.). Wellington, New Zealand: New Zealand Council for Educational Research.

## Further information

Additional information about language, which will help teachers to analyse student responses to e-asTTle writing prompts, can be found in *Thinking about how language works*, available through the Assessment Resource Banks ([arb.nzcer.org.nz](http://arb.nzcer.org.nz)).



# e-asTTle writing marking rubric

	page number
Ideas	1
Structure and language	2
Organisation	3
Vocabulary	4
Sentence structure	5
Punctuation	6
Spelling	7

**Note**

The e-asTTle writing rubric is supported by a set of generic exemplars as well as smaller sets of exemplars specific to each prompt.  
The generic exemplars can be downloaded from the 'Enter Scores' page under 'Mark Test'.



# Ideas

*Skill focus:* the relevance, quantity, quality, selection and elaboration of ideas for the topic

## Definition

- Quality of ideas**

Simple ideas are related to the personal, immediate world of the writer (concrete, predictable, familiar, personal and/or close to writer's experience).

Complex ideas may involve generalisation, abstraction and reflection on the wider world and groups of people.

- Selection of ideas**

The deliberate choice of relevant ideas or subject matter to engage and influence the reader.

- Elaboration of ideas**

Elaboration should be relevant and may be given by providing background information or factual detail, describing, explaining, providing evidence, analysing, or evaluating.

Category	R1	R2	R3	R4	R5	R6
Descriptor	Ideas are unrelated to the topic  OR  One brief, simple idea related to the topic	Text has a few simple, unelaborated ideas related to the topic	Text has many simple, unelaborated ideas related to the topic  OR  An idea is related to the topic and has some basic elaboration	Ideas are relevant and begin to show some complexity  AND  • Text has one elaborated idea  OR  • Text has several ideas that have some elaboration	Ideas are complex and elaborated	Ideas show insight, originality and some authority and/or reflection on the wider world  Ideas are deliberately selected, effective and elaborated
Notes		One idea may be repeated	Ideas may be disconnected or brief points in a list  Some evidence of a main idea (e.g., persuasive text may take a position)		Elaboration may lack depth and detail  Complexity may not be controlled  Main idea/theme is present but focus may not be sustained	Elaboration is detailed  Complex issues or themes are raised  Main idea is focused
Generic exemplars	<ul style="list-style-type: none"> <li>• S n</li> <li>• The girl</li> </ul>	<ul style="list-style-type: none"> <li>• I be kin</li> <li>• Fealing seaweed</li> </ul>	<ul style="list-style-type: none"> <li>• The Erfeh</li> <li>• The adventerous dog</li> </ul>	<ul style="list-style-type: none"> <li>• Margin for era</li> <li>• When I</li> </ul>	<ul style="list-style-type: none"> <li>• Evolving life pattern</li> <li>• Heavy-booted feet</li> </ul>	<ul style="list-style-type: none"> <li>• Plastic bags</li> <li>• Don't move</li> </ul>

# Structure and language

*Skill focus:* the presence and development of structural and language features appropriate to the specified purpose

## Definition

### • **Structural features**

The component parts that are typically associated with a text written for a particular purpose. For example, when narrating, structural features may include an orientation to the context (place, time and participants), a series of events/actions, a problem or complication, and a resolution.

### • **Language features**

The language patterns that are typically associated with a text written for a particular purpose. These include selection of tense, tone, text connectives and vocabulary. For example, when narrating, typical language features include use of past tense, connectives denoting time (in order to provide a clear sequence of events), expressive and/or descriptive vocabulary, and dialogue.

Category	R1	R2	R3	R4	R5	R6
Descriptor	Structural features and language features are inappropriate for purpose or absent	Some structural features are appropriate to purpose  AND/OR  Some language features are appropriate to purpose	Some structural features are appropriate to purpose  AND  Language features are mostly appropriate to purpose	Structural features are appropriate to purpose and some show development (may be one well-developed element with others less developed)  AND  Language features are appropriate to purpose	Structural features are appropriate to purpose and are developed and mostly controlled  AND  Language features are appropriate to purpose and mostly controlled	Structural features and language features are appropriate to purpose, controlled and effective
Notes	See 'Structure and Language Notes' for each prompt for guidance on appropriate structural and language features.					
Generic exemplars	<ul style="list-style-type: none"> <li>The girl</li> <li>The adventurous dog</li> </ul>	<ul style="list-style-type: none"> <li>Yea I'm agree</li> <li>By the mall</li> </ul>	<ul style="list-style-type: none"> <li>The Erfeh</li> <li>My iPod</li> </ul>	<ul style="list-style-type: none"> <li>Rainbow's end</li> <li>When I</li> </ul>	<ul style="list-style-type: none"> <li>Plastic bags</li> <li>Youth gym</li> </ul>	<ul style="list-style-type: none"> <li>Don't move</li> <li>And the All Blacks scored!</li> </ul>

# Organisation

*Skill focus:* the organisation of ideas into a coherent text

## Definition

### • **Coherence**

The way ideas are linked to each other and to the broader context of the writing and/or the wider world, to produce a text that is meaningful to the reader. When the text is coherent, the relationships between ideas are clear and the writing ‘flows’. When assessing a text’s coherence, look for clear text connectives, consistency of verb tense, and accuracy of referring words (e.g., pronouns) across the text as a whole.

**NOTE:** The focus is on the text as a whole, rather than on individual sentences.

Category	R1	R2	R3	R4	R5	R6	R7
Descriptor	Ideas are disconnected and/or random  OR  Text lacks coherence	Text attempts to group and sequence ideas  Text has some coherence	Ideas are grouped and sequenced, and text generally flows  Text may be brief but coherent	Text shows control over grouping and sequencing of ideas but paragraphs are not used or are indicated incorrectly  Text is coherent	Ideas are organised into basic paragraphs	Paragraphs support the development of the text	Paragraphs are deliberately structured to direct the reader  Ideas are linked effectively within and across paragraphs
Notes	May be a very short text	Some ideas are grouped spatially, temporally or logically  May have random or visual breaks (breaks do not support reader meaning)  Text contains like ideas	Errors in or absence of linking words or inconsistencies in tense across text may interrupt flow	Errors in or absence of linking words or inconsistencies in tense across text do not interrupt flow	Paragraphs have minimal development (e.g., one sentence), or some paragraph breaks are not indicated  Some paragraphs may be out of sequence  May be a minor glitch in flow that does not interfere with meaning	Subheadings, topic sentences and linking words are present and appropriate	
Generic exemplars	<ul style="list-style-type: none"> <li>• S n</li> <li>• I be kin</li> </ul>	<ul style="list-style-type: none"> <li>• The Erfeh</li> <li>• By the mall</li> </ul>	<ul style="list-style-type: none"> <li>• The adventuresome dog</li> <li>• My iPod</li> </ul>	<ul style="list-style-type: none"> <li>• Plastic bags</li> <li>• Rainbow’s end</li> </ul>	<ul style="list-style-type: none"> <li>• Think about</li> <li>• A library</li> </ul>	<ul style="list-style-type: none"> <li>• Evolving life pattern</li> <li>• And the All Blacks scored!</li> </ul>	<ul style="list-style-type: none"> <li>• Don’t move</li> <li>• I personally believe</li> </ul>

# Vocabulary

*Skill focus:* the range, precision and effectiveness of word choices appropriate to the topic

## Definition

- **Simple everyday words:** words that are related to the personal world of the writer; words that are used frequently
- **Precise words:** words that are descriptive, expressive, academic, technical or abstract

Category	R1	R2	R3	R4	R5	R6
Descriptor	Uses a small range of simple, everyday words and phrases from personal vocabulary	Uses a range of simple, everyday words and phrases from personal vocabulary	Uses a range of everyday words and phrases, with a small number of precise words to add detail	Uses a variety of precise words and phrases to add information and/or interest	Selects words and phrases to enhance meaning and/or mood	Precise language choices consistently enhance meaning and/or mood
Notes			May use adjectives, adverbs and/or precise verbs to add interest and detail  May use simple idioms or figures of speech	May use idioms, metaphors, similes and other figures of speech  May be some experimentation with vocabulary: some words may be used incorrectly	Use of precise words may be inconsistent (use of everyday or overblown language may cause jarring)	Deliberate and sustained use of precise vocabulary (descriptive, expressive, academic, technical and/or abstract) for effect
Generic exemplars	<ul style="list-style-type: none"> <li>• S n</li> <li>• I be kin</li> </ul>	<ul style="list-style-type: none"> <li>• The adventerous dog</li> <li>• Stifcit</li> </ul>	<ul style="list-style-type: none"> <li>• The Erfeh</li> <li>• Think about</li> </ul>	<ul style="list-style-type: none"> <li>• Margin for era</li> <li>• Rainbow's end</li> </ul>	<ul style="list-style-type: none"> <li>• Youth gym</li> <li>• Plastic bags</li> </ul>	<ul style="list-style-type: none"> <li>• Don't move</li> <li>• And the All Blacks scored!</li> </ul>

# Sentence structure

*Skill focus:* the quality, effectiveness and correctness of sentences

## Definition

When judging the correctness of each sentence, consider the following (note: the focus is on the use of correct forms within a sentence, rather than between sentences or paragraphs or across the text as a whole):

- word form (e.g., singular or plural)
- verb tense
- subject-verb agreement
- articles and pronouns
- use of prepositions and relative pronouns to expand sentences
- arrangement of (order of) elaborating phrases and clauses
- missing words
- order of words

**NOTE:** In order to make assessment of sentence structure more manageable, 'read in' missing or incorrect sentence punctuation (including full stops). (Punctuation is assessed separately, in the 'Punctuation' element.)

Category	R1	R2	R3	R4	R5	R6
Descriptor	Few correct sentences	Correct sentences are short and may have minimal extension	Correct sentences begin to show variety in structure and type	Most sentences are correct  Correct sentences show variety in structure, length and type and have extending phrases and/or clauses  OR  All sentences are correct but repetitive	Sentences are controlled and show variety in structure, length and type and have extending phrases and/or clauses	Sentences are deliberately crafted to impact and engage
Notes	Text consists of fragments, phrases or sentences with missing words  Some meaning is discernable	Sentences may be simple and/or compound and/or basic complex  May contain long, run-on sentences with overuse of conjunctions	Some sentences may have repeated structures  Errors in longer sentences may be brought about by use of speech-like structures	May attempt to use sentences for effect	Some sentences may be controlled for effect  Meaning is clear (may be some inconsistency or minor error)	Sentences express precise meaning
Generic exemplars	<ul style="list-style-type: none"> <li>• The girl</li> <li>• Yea I'm agree</li> </ul>	<ul style="list-style-type: none"> <li>• The adventurous dog</li> <li>• Stifcit</li> </ul>	<ul style="list-style-type: none"> <li>• The Erfeh</li> <li>• My iPod</li> </ul>	<ul style="list-style-type: none"> <li>• Rainbow's end</li> <li>• When I</li> </ul>	<ul style="list-style-type: none"> <li>• Evolving life pattern</li> <li>• Plastic bags</li> </ul>	<ul style="list-style-type: none"> <li>• Don't move</li> <li>• And the All Blacks scored!</li> </ul>

# Punctuation

*Skill focus:* the accurate use of sentence punctuation markers and the range and accuracy of other punctuation to aid understanding of the text and to enhance meaning

Category	R1	R2	R3	R4	R5	R6	R7
Descriptor	Little, no or random punctuation	Experimentation with sentence punctuation	Some correct use of sentence punctuation	Correct punctuation of most sentences – beginning and end – AND some correct use of other punctuation  OR Correct punctuation of ALL sentences – beginning and end – with no other punctuation used	Correct sentence punctuation AND correct use of other punctuation (contractions, commas in lists) with experimentation in complex punctuation (e.g., direct speech, commas for phrases and clauses)	Punctuation assists meaning  Sentence punctuation is correct AND a wider range of other punctuation is used correctly, including capital letters	Control of punctuation to enhance meaning  Few or no errors in punctuation
Notes	<b>FULL STOPS</b> May be one full stop at end of writing	<b>FULL STOPS</b> Used separately to meaning of text (e.g., random, end of line or end of page). May be one instance of correct use	<b>FULL STOPS</b> Some sentences may be joined by commas	<b>FULL STOPS</b> Sentence endings are marked by full stops, exclamation marks or question marks	<b>FULL STOPS and CAPITAL LETTERS</b>  May have some minimal incorrect use	<b>FULL STOPS and CAPITAL LETTERS</b>  May be some minor error in sentence punctuation	<b>FULL STOPS and CAPITAL LETTERS</b>  May be some minor error in sentence punctuation
	<b>CAPITAL LETTERS</b> Letter formation may make it hard to distinguish whether capitals are intended for sentence beginnings or proper nouns	<b>CAPITAL LETTERS</b> Letter formation may make it hard to distinguish whether capitals are intended for sentence beginnings or proper nouns	<b>CAPITAL LETTERS</b> Letter formation may make it hard to distinguish whether capitals are intended for sentence beginnings or proper nouns	<b>CAPITAL LETTERS</b> Used to begin sentences  May be used randomly (incorrect use, where handwriting style overrides function)			
		<b>OTHER PUNCTUATION</b> May experiment with contractions or commas (may be some correct use)	<b>OTHER PUNCTUATION</b> May experiment with contractions, commas or other punctuation (may be some correct use)	<b>OTHER PUNCTUATION</b> May use one or two other types correctly	<b>OTHER PUNCTUATION</b> Experiments with other types: direct speech may not use a new line for new speaker; punctuation within "" incorrect; attempts to create effects  Capital letters may be used incorrectly (handwriting style overrides function)	<b>OTHER PUNCTUATION</b> May include dashes, parentheses, commas for phrases and clauses, hyphens, semicolons, colons, more control over direct speech  May have one area that shows consistent weakness	<b>OTHER PUNCTUATION</b> May have minor error in complex punctuation, e.g., in direct speech or commas for phrases and clauses
Generic exemplars	<ul style="list-style-type: none"> <li>The girl</li> <li>The Erfeh</li> </ul>	<ul style="list-style-type: none"> <li>The adventuresome dog</li> <li>Yea I'm agree</li> </ul>	<ul style="list-style-type: none"> <li>My iPod</li> <li>Margin for era</li> </ul>	<ul style="list-style-type: none"> <li>Plastic bags</li> <li>When I</li> </ul>	<ul style="list-style-type: none"> <li>A library</li> <li>I personally believe</li> </ul>	<ul style="list-style-type: none"> <li>Youth gym</li> <li>Heavy-booted feet</li> </ul>	<ul style="list-style-type: none"> <li>Don't move</li> <li>And the All Blacks scored!</li> </ul>

# Spelling

*Skill focus:* the difficulty of words used and the accuracy of the spelling

Category	R1	R2	R3	R4	R5	R6
Descriptor	<p>Uses some letters to represent meaning</p> <p>Single letters or strings of letters that do not support meaning</p>	<p>Spells a few personal and high-frequency words correctly (e.g., my, it, if)</p> <p>Attempts words using phoneme–grapheme relationships</p>	<p>Spells a range of personal and high-frequency words correctly (e.g., school, where, friend, outside, playing)</p> <p>Attempts a wider range of words using phoneme–grapheme relationships and word chunks</p>	<p>Spells a wide range of high-frequency words correctly</p> <p>Attempts difficult word/s using phoneme–grapheme relationships and developing knowledge of spelling rules and morphemes</p>	<p>Spells high-frequency and some difficult words correctly</p> <p>Attempts difficult words using diverse phoneme–grapheme relationships, and knowledge of spelling rules and morphemes</p>	<p>Spells high-frequency and a range of difficult words with few or no errors</p>
Notes		<p>Some consonants and vowel sounds (including blends and digraphs) may be reproduced correctly, e.g., -sh, -ch, ee, -ow</p> <p>Some words may contain all their letters but in the wrong order (e.g., fnu, swa)</p> <p>Records the dominant sounds in words</p>	<p>May attempt words with more than two syllables, e.g., amasing (amazing)</p>	<p>All sounds are represented in words</p> <p>Uses basic spelling rules but may over-generalise</p> <p>Achieves close approximations of difficult words</p>	<p>Irregular words may be spelt correctly (e.g., weird, through)</p>	
Generic exemplars	<ul style="list-style-type: none"> <li>• S n</li> <li>• Mi kat</li> </ul>	<ul style="list-style-type: none"> <li>• I be kin</li> <li>• The Erfeh</li> </ul>	<ul style="list-style-type: none"> <li>• My iPod</li> <li>• Margin for era</li> </ul>	<ul style="list-style-type: none"> <li>• The advenferous dog</li> <li>• Think about</li> </ul>	<ul style="list-style-type: none"> <li>• Evolving life pattern</li> <li>• I personally believe</li> </ul>	<ul style="list-style-type: none"> <li>• Plastic bags</li> <li>• Don't move</li> </ul>