

How to use the iLearnRW Reader



1.1 Login

When you open the reader the first screen you will see is the login screen. Please enter the login details that were provided for the child you are working with and click 'Login'.

If you check the Remember me box these details will be automatically filled in for next time you open the reader.

Username:
Enter your username

Password:
Enter your password

Remember me

Login

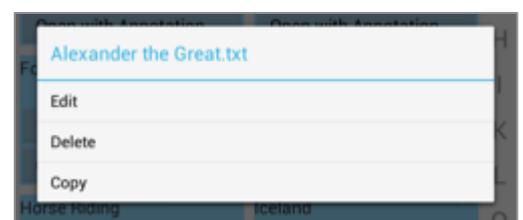
1.2 My Library



Once you have successfully logged in you will be taken to the 'My Library' screen, which displays all of the texts that have previously been added to your library. The texts are listed in alphabetical order.

If you want to add a new text then click on the plus (+) button in the top left hand corner of the screen. This opens up the device storage folder structure you can add any file to the reader that has a **.txt** ending (i.e. is a text file). If you wish to add new texts to the reader you can do this through your computer – please see separate instructions for doing this. The books we have pre-loaded onto the tablets can be found in iLearnRW/Books. The "Fables" folder contains some extracts from Aesop's fables, the "Non-Fiction" folder contains a number of graded texts from Dyslexia Action.

If you wish to edit the title of a text or remove a text from your library then hold your finger on the title of the text (i.e. within the light blue box) and a menu will appear in the middle of the screen (see right). From this menu you can select 'edit' or 'delete'. The 'copy' option copies the text to the device storage.



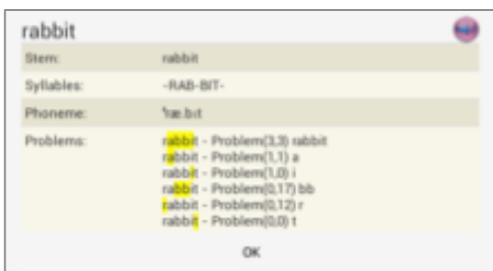
To read a specific text simply tap on the 'Open file' button under the text title. Selecting "Open with Annotation" will open the file with certain word segments highlighted depending on the annotation rules currently setup for that child. We discuss these presentation rules in more depth in section 1.5.



1.3 Reading Screen

When you open a text it will be displayed in the reading screen. From this screen you can return to the 'My Library' screen by clicking on the book icon in the top left hand corner. You can search the text for a particular word or phrase by clicking on the magnifying glass icon also in the top left hand corner.

You can scroll the text by swiping up the screen with your finger. To have the text read aloud press the play button at the bottom of the screen. You can control where in the text this start by tapping the sentence you wish to start with (which will become highlighted) and then pressing play. To skip through sentences or to go back to previous sentences you can use the back and forward buttons at the bottom of the screen.



You can also find out more information about a specific word by tapping and holding that word. This will bring up a pop-up box which gives you a breakdown of that words in terms of the syllables, phonemes and highlights potential problems that could occur with that word. You can also hear the word spoken aloud by tapping on the sound icon in the top right hand corner of the pop-up. This will only occur if our dictionary contains the word you have selected.

If you wish to change how the text is displayed on this screen you can tap the settings icon in the bottom right hand corner.

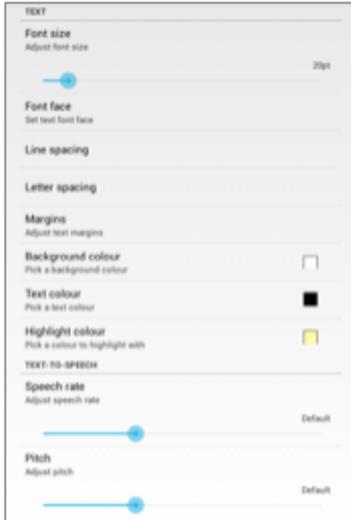
1.4 Text Settings

Within the 'Text Settings' menu you can adjust the appearance of the text in reader. The Font size slider changes the size of the text, slide it to the left to make it smaller and slide it to the right to make it bigger. To change to font, tap on the Font face option and you are able to select from 5 different dyslexia-friendly fonts.

To adjust how much space there is between the lines of the text then tap on the Line spacing option and similarly you can adjust the space between individual letters by tapping on the Letter spacing option. You can also change the amount of space on either side of the text by tapping on the Margins option and selecting either Cozy (tight margins), Comfy (small margins) or Roomy (big margins).

You can select your preferred colours for the background, text and highlight (when text is being read aloud) by tapping on the coloured boxes next to each of these options. Use the colour bar on the right hand side to select a colour and then the bigger box in the middle to adjust the shade. The two boxes at the bottom show your original colour (left) and your new colour (right). If want to change to the new colour the tap 'OK' or if you want to keep the original colour tap 'Cancel'.

Finally you can adjust the speed and pitch of the voice that reads the text aloud by dragging each of the sliders to the left to make the speech slower or lower and to the right to make the speech faster or higher.

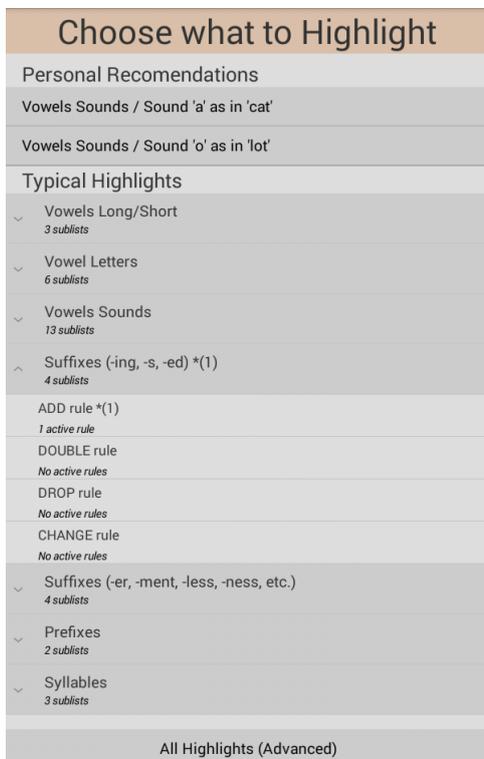


Once you have made all of your changes, they will be automatically saved. To go back to your text press the back button on the tablet in the bottom left hand corner of the screen and your new settings will have been applied to the text. If you are not happy with any of the changes you can go back and make adjustments by tapping the settings icon again.

If you wish to set all the settings back to the default, then simply tap the reset option at the bottom of the menu and select 'OK'.

1.5 Presentation Rules

Within the 'My Library' screen you also have the option to adjust the presentation rules of the text. These allow you to customize who specific word segments and/or whole words are coloured or highlighted. For instance you can choose to highlight a specific letter combination, or a particular prefix or suffix.



To access this screen tap on the page icon in the top left hand corner of the screen. This screen shows you the "typical" rules that could be applied including long/short vowels, vowel letters, vowel sounds, suffixes (using the add, double, drop and change rules), prefixes and different syllable patterns. Selecting a difficulty area will drop down a list of specific highlights which can be applied (and if rules for these difficulties already exist).



Highlight Settings

Suffixes (-ing, -s, -ed) / ADD rule

Presentation Settings

How to highlight

Background colour

Text colour

What to highlight

Part of word

Whole word

Text Rules

<input type="checkbox"/>	Apply to all
<input checked="" type="checkbox"/>	Suffix 's' adds to the word with no changes. For example: stress's, payments, finals
<input type="checkbox"/>	Suffix 'ed' adds to the word with no changes. For example: schooled, chickened, clouded
<input type="checkbox"/>	Suffix 'es' adds to the word with no changes. For example: times, greatneses, expensivenesses
<input type="checkbox"/>	Suffix 'ing' adds to the word with no changes. For example: stressing, rushing, steeling
<input type="checkbox"/>	Suffix 'ed-d' adds to the word with no changes. For example: schooled, timed, chickened
<input type="checkbox"/>	Suffix 'ed-t' adds to the word with no changes. For example: tripped, reached, accessed

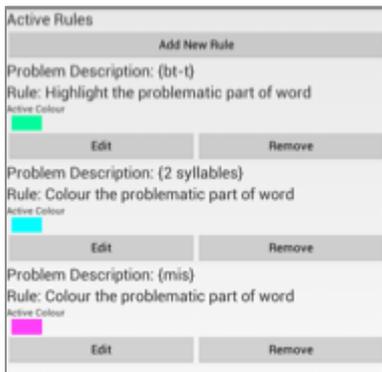
Cancel OK

Having selected a difficulty area to highlight, the following screen appears. This shows the specific rules that will be applied which can be turned on or off using the buttons to the left hand side. The options at the top of the screen control how the highlighting will appear within the text. Once you have made all of the changes you want, select "OK" at the bottom of the screen.

On the main screen there is an advanced option to view "All Highlights". This takes you to a system which gives complete control to create annotation rules for all of the linguistic difficulties the reader app can process. We are recommending that you use the "typical system" but have included a separate guide in the next section which details these advanced options.



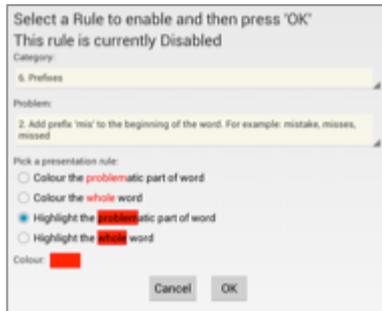
1.6 Advanced Presentation Rules



Having accessed the advanced annotation system, the screen will look like the screenshot on the left. If there have been previously created presentation rules then they will be listed in the 'Active rules' screen (see left). To add a new rule simply tap on the 'Add New Rule' button at the top of the screen. You will then be able to use the category and problem drop down menus to find the specific difficulty that you want to be highlighted within the text – please see the instructions below for choosing the appropriate difficulty.

On the "Add New Rule" screen (see below left) you can select how you want the word segment associated with the selected difficulty to be coloured or highlighted within the text. You can select from the following options:

- Colour the problematic part of the word e.g. for suffix 'ing' in the word starting **ing**
- Colour the word containing the problem e.g. for suffix 'ing' in the word **starting**
- Highlight the problematic part of the word e.g. for suffix 'ing' in the word start **ing**
- Highlight the word containing the problem e.g. for suffix 'ing' in the word **starting**



You can then change the annotation colour by tapping the colour square at the bottom and once you are happy with your new annotation rule tap the OK button to save.

Once you have finished creating your rule tap 'OK' to save it or to if you do not wish to save this rule tap on the 'Cancel' button. It will now be displayed on your list of active rules. If you wish to edit this rule at any point, you can adjust the colour/highlight options only by tapping the 'Edit' button underneath the rule description. You

cannot change the difficulty drop down menus. If you wish to do this then delete the rule by tapping the 'Remove' button and add a new rule with the adjusted difficulty.

The list of rules displayed on the 'Active Rules' screen will all be applied when the annotation mode is turned on within the reader. Therefore if you no longer want a rule to be applied you must remove it from this screen. The listed rules will include those set up through the standard "Typical Highlights" screen.



Choosing an appropriate difficulty

To create a new annotation rule you will need to firstly select a category of problem that you want to annotate within the text.

1. Consonants

This category includes single letter and double letter consonants as well as consonant digraphs and trigraphs.

2. Vowels

This category includes short, long and diphthong vowel sounds.

3. Blends and Letters Patterns

This category includes blends and letters patterns at the beginning, middle and ends of words, as well as specific vowel patterns and patterns including silent letters.

4. Syllables

This category includes closed and open syllables, *vc/cv*, *v/cv*, *v/v* and *vc/v* syllable splits as well as words with 2, 3, 4 or 5+ syllables.

5. Suffixes

This category includes suffixes that are added to words with no change, doubling a letter, changing a letter or dropping a letter.

6. Prefixes

This category includes prefixes that contribute to the meaning of the word (productive or that are common patterns at the beginnings (non-productive

7. Confusing Letters

This category include letter pairs that are often confused with one another.

Once you have selected a category the problem drop down list will be filtered to display on those problems associated within that particular category. A full detailed reference list for each of these problems can be found below, grouped by category. Please note for some problems e.g. the suffix '-ing' there are multiple entries for each of the different suffixing rule so you will need to use this list to double check the identification number to ensure you have selected the correct problem.



(1) Consonants

Problem	Description
1. t-t	Words containing consonant t pronounced as 't' e.g. to, it
2. tt-t	Words containing consonant tt pronounced as 't' e.g. little, better
3. p-p	Words containing consonant p pronounced as 'p' e.g. up, put
4. pp-p	Words containing consonant pp pronounced as 'p' e.g. happen, appear
5. n-n	Words containing consonant n pronounced as 'n' e.g. in, on
6. nn-n	Words containing consonant nn pronounced as 'n' e.g. runner, funny
7. s-s	Words containing consonant s pronounced as 's' e.g. so, say
8. ss-s	Words containing consonant ss pronounced as 's' e.g. pass, less
9. c-s	Words containing consonant c pronounced as 's' e.g. cell, city
10. d-d	Words containing consonant d pronounced as 'd' e.g. do, and
11. dd-d	Words containing consonant dd pronounced as 'd' e.g. add, odd
12. h-h	Words containing consonant h pronounced as 'h' e.g. his, he
13. r-r	Words containing consonant r pronounced as 'r' e.g. run, red
14. rr-r	Words containing consonant rr pronounced as 'r' e.g. carry, worry
15. m-m	Words containing consonant m pronounced as 'm' e.g. my, me
16. mm-m	Words containing consonant mm pronounced as 'm' e.g. summer, common
17. b-b	Words containing consonant b pronounced as 'b' e.g. by, be
18. bb-b	Words containing consonant bb pronounced as 'b' e.g. lobby, bubble
19. l-l	Words containing consonant l pronounced as 'l' e.g. let, old
20. ll-l	Words containing consonant ll pronounced as 'l' e.g. will, all
21. f-f	Words containing consonant f pronounced as 'f' e.g. if, for
22. ff-f	Words containing consonant ff pronounced as 'f' e.g. off, office
23. ph-f	Words containing consonant ph pronounced as 'f' e.g. phone, photo
24. g-g	Words containing consonant g pronounced as 'g' e.g. go, get
25. gg-g	Words containing consonant gg pronounced as 'g' e.g. egg, struggle
26. k-k	Words containing consonant k pronounced as 'k' e.g. make, ask
27. c-k	Words containing consonant c pronounced as 'k' e.g. can, come
28. ck-k	Words containing consonant ck pronounced as 'k' e.g. pick, back
29. ng-ŋ	Words containing consonant ng pronounced as 'ŋ' e.g. thing, long
30. nk-ŋk	Words containing consonant nk pronounced as 'ŋk' e.g. link, think
31. th-θ	Words containing consonant th pronounced as 'θ' e.g. thing, three
32. v-v	Words containing consonant v pronounced as 'v' e.g. have, very
33. w-w	Words containing consonant w pronounced as 'w' e.g. way, we
34. sh-ʃ	Words containing consonant sh pronounced as 'ʃ' e.g. she, should
35. s-ʃ	Words containing consonant s pronounced as 'ʃ' e.g. sugar, sure
36. ss-ʃ	Words containing consonant ss pronounced as 'ʃ' e.g. pressure, issue
37. y-j	Words containing consonant y pronounced as 'j' e.g. yard, yellow
38. j-dʒ	Words containing consonant j pronounced as 'dʒ' e.g. job, just
39. g-dʒ	Words containing consonant g pronounced as 'dʒ' e.g. gene, agent
40. dg-dʒ	Words containing consonant dg pronounced as 'dʒ' e.g. budget
41. qu-k	Words containing consonant qu pronounced as 'k' e.g. queen
42. z-z	Words containing consonant z pronounced as 'z' e.g. zone, dozen
43. zz-z	Words containing consonant zz pronounced as 'z' e.g. jazz, puzzle
44. s-z	Words containing consonant s pronounced as 'z' e.g. us, as
45. ch-tʃ	Words containing consonant ch pronounced as 'tʃ' e.g. much, which



46. tch-tʃ	Words containing consonant tch pronounced as 'tʃ' e.g. watch, catch
47. th-ð	Words containing consonant th pronounced as 'ð' e.g. the, that
48. x-gz	Words containing consonant x pronounced as 'gz' e.g. exist, exactly
49. x-ks	Words containing consonant x pronounced as 'ks' e.g. six, tax

(2) Vowels

Problem	Description
1. i-ɪ	Words containing vowel sound i pronounced as 'ɪ' e.g. in, it
2. a-æ	Words containing vowel sound a pronounced as 'æ' e.g. at, as
3. o-ɒ	Words containing vowel sound o pronounced as 'ɒ' e.g. of, on
4. i-ɑɪ	Words containing vowel sound i pronounced as 'ɑɪ' e.g. child, find
5. e-e	Words containing vowel sound e pronounced as 'e' e.g. get, let
6. u-ʌ	Words containing vowel sound u pronounced as 'ʌ' e.g. up, but
7. ar-a	Words containing vowel sound ar pronounced as 'ɑ' e.g. far, car
8. ee-i	Words containing vowel sound ee pronounced as 'i' e.g. see, need
9. or-ɔ:	Words containing vowel sound or pronounced as 'ɔ:' e.g. for, nor
10. y-i	Words containing vowel sound y pronounced as 'i' e.g. very, any
11. y-ɑɪ	Words containing vowel sound y pronounced as 'ɑɪ' e.g. by, my
12. ie-ɑɪ	Words containing vowel sound ie pronounced as 'ɑɪ' e.g. die, lie
13. iCe-ɑɪ	Words containing vowel sound i_C_e pronounced as 'ɑɪ' e.g. time, like
14. aCe-eɪ	Words containing vowel sound a_C_e pronounced as 'eɪ' e.g. make, take
15. ay-eɪ	Words containing vowel sound ay pronounced as 'eɪ' e.g. payment, ways
16. er-ə	Words containing vowel sound er pronounced as 'ə' e.g. answer, timer
17. oo-u:	Words containing vowel sound oo pronounced as 'u:' e.g. school, boot
18. oo-ʊ	Words containing vowel sound oo pronounced as 'ʊ' e.g. book, good
19. oCe-əʊC	Words containing vowel sound oCe pronounced as 'əʊC' e.g. those, home
20. uCe-ju:C	Words containing vowel sound uCe pronounced as 'ju:C' e.g. minute, tube
21. ea-i:	Words containing vowel sound ea pronounced as 'i:' e.g. mean, leave
22. ea-e	Word containing vowel sound ea pronounced as 'e' e.g. head, dead
23. ou-əʊ	Words containing vowel sound ou pronounced as 'əʊ' e.g. out, about
24. igh-ɑɪ	Words containing vowel sound igh pronounced as 'ɑɪ' e.g. high, might
25. o-ʌ	Words containing vowel sound o pronounced as 'ʌ' e.g. son, other
26. ice-ɪs	Words containing vowel sound ice pronounced as 'ɪs' e.g. office, service
27. ai-eɪ	Words containing vowel sound ai pronounced as 'eɪ' e.g. aid, aim
28. ow-əʊ	Words containing vowel sound ow pronounced as 'əʊ' e.g. own, know
29. ow-ɑʊ	Words containing vowel sound ow pronounced as 'ɑʊ' e.g. how, down
30. oa-əʊ	Words containing vowel sound oa pronounced as 'əʊ' e.g. road, goal
31. o-əʊ	Words containing vowel sound o pronounced as 'əʊ' e.g. go, so
32. eCe-i:C	Words containing vowel sound eCe pronounced as 'i:C' e.g. these, gene
33. ir-ɜ:	Words containing vowel sound ir pronounced as 'ɜ:' e.g. first, sir
34. ur-ɜ:	Words containing vowel sound ur pronounced as 'ɜ:' e.g. turn, hurt
35. oi-ɔɪ	Words containing vowel sound oi pronounced as 'ɔɪ' e.g. oil, join
36. oy-ɔɪ	Words containing vowel sound oy pronounced as 'ɔɪ' e.g. boy, toy
37. ie-i:	Words containing vowel sound ie pronounced as 'i:' e.g. field, piece
38. au-ɔ:	Words containing vowel sound au pronounced as 'ɔ:' e.g. sauce, cause
39. aw-ɔ:	Words containing vowel sound aw pronounced as 'ɔ:' e.g. draw, law
40. ore-ɔ:	Words containing vowel sound ore pronounced as 'ɔ:' e.g. more, core
41. ew-u:	Words containing vowel sound ew pronounced as 'ju:' e.g. few, new



42. ue-u:	Words containing vowel sound ue pronounced as 'u:' e.g. blue , true
43. ear-ɜ:	Words containing vowel sound ear pronounced as 'ɜ:' e.g. earn , learn
44. y-ɪ	Words containing vowel sound y pronounced as 'ɪ' e.g. gym , system
45. yCe- aɪC	Words containing vowel sound yCe pronounced as 'aɪC' e.g. type , style
46. ou-ɑʊ	Words containing vowel sound ou pronounced as 'ɑʊ' e.g. out , about
47. ei-i:	Words containing vowel sound ei pronounced as 'i:' e.g. receive , protein
48. ei-eɪ	Words containing vowel sound ei pronounced as 'eɪ' e.g. surveillance
49. eigh-eɪ	Words containing vowel sound eigh pronounced as 'eɪ' e.g. weigh , eight
50. our-ə	Words containing vowel sound our pronounced as 'ə' e.g. your
51. ar-u:	Words containing vowel sound ar pronounced as 'ə' e.g. sugar , year
52. ui-ɪ	Words containing vowel sound ui pronounced as 'u:' e.g. suit , fruit
53. ui-i:	Words containing vowel sound ui pronounced as 'ɪ' e.g. build , guilty
54. ey-eɪ	Words containing vowel sound ey pronounced as 'i:' e.g. key
55. ey-əʊ	Words containing vowel sound ey pronounced as 'eɪ' e.g. hey , survey
56. oe-əʊ	Words containing vowel sound oe pronounced as 'əʊ' e.g. toe
57. eu-ju:	Words containing vowel sound eu pronounced as 'ju:' e.g. neutral
58. eur-ə	Words containing vowel sound eur pronounced as 'ə'
59. ine-aɪn	Words containing vowel sound ine pronounced as 'aɪn' e.g. line , fine
60. ine-ɪn	Words containing vowel sound ine pronounced as 'ɪn' e.g. imagine , determine
61. ine-i:n	Words containing vowel sound ine pronounced as 'i:n' e.g. machine , magazine
62. air-eə	Words containing vowel sound air pronounced as 'eə' e.g. hair , pair
63. are-eə	Words containing vowel sound are pronounced as 'eə'
64. ear-ɪə	Words containing vowel sound ear pronounced as 'ɪə' e.g. wear , bear
65. ear-ɪə	Words containing vowel sound ear pronounced as 'ɪə' e.g. hear , near
66. eer-ɪə	Words containing vowel sound eer pronounced as 'ɪə' e.g. beer , peer
67. ere-ɪə	Words containing vowel sound eer pronounced as 'ɪə' e.g. here , merely
68. ure-ʊə	Words containing vowel sound ure pronounced as 'ʊə' e.g. sure , ensure
69. oor-ʊə	Words containing vowel sound oor pronounced as 'ʊə' e.g. poor
70. our-ʊə	Words containing vowel sound our pronounced as 'ʊə' e.g. tour
71. a-ɒ	Words containing vowel sound a pronounced as 'ɒ' e.g. want , what

(3) Blends and Letter Patterns

Problem	Description
1. ip-ɪp	Pronounce ending vowel pattern ip as 'ɪp' e.g. lip , tip
2. in-ɪn	Pronounce ending vowel pattern in as 'ɪn' e.g. win , skin
3. st-st	Pronounce beginning blend st as 'st' e.g. still , state
4. sp-sp	Pronounce beginning blend sp as 'sp' e.g. spot , speak
5. sn-sn	Pronounce beginning blend sn as 'sn' e.g. snow , snap
6. sm-sm	Pronounce beginning blend sm as 'sm' e.g. small , smile
7. ad-æd	Pronounce ending vowel pattern ad as 'æd' e.g. bad , dad
8. and-ænd	Pronounce ending vowel pattern and as 'ænd' e.g. hand , land
9. de-de	Pronounce beginning vowel pattern de as 'de' e.g. desk , debt
10. act-ækt	Pronounce ending vowel pattern akt as 'ækt' e.g. fact , react
11. sc-sk	Pronounce beginning blend sc as 'sk' e.g. score , scale
12. cr-kr	Pronounce beginning blend cr as 'kr' e.g. cry , crew
13. dr-dr	Pronounce beginning blend dr as 'dr' e.g. dry , drug
14. pr-pr	Pronounce beginning blend pr as 'pr' e.g. price , print
15. tr-tr	Pronounce beginning blend tr as 'tr' e.g. try , true



16. str-str	Pronounce beginning blend str as 'str' e.g. strong , street
17. spr-spr	Pronounce beginning blend spr as 'spr' e.g. spring , spread
18. scr-skr	Pronounce beginning blend scr as 'skr' e.g. screen , scream
19. ed-t	Pronounce ending vowel pattern ed as 't' e.g. increased ed , mixed d
20. ed-d	Pronounce ending vowel pattern ed as 'd' e.g. used d , armed d
21. am-æm	Pronounce ending vowel pattern am as 'æm' e.g. program d , dam d
22. amp-æmp	Pronounce ending vowel pattern amp as 'æmp' e.g. camp d , lamp d
23. im-ɪm	Pronounce ending vowel pattern im as 'ɪm' e.g. him d , victim d
24. V_b-b	Pronounce vowel pattern V_b as 'b' e.g. job d , lab d
25. br-br	Pronounce beginning blend br as 'br' e.g. bring , break
26. V_lt-lt	Pronounce vowel pattern V_lt as 'lt' e.g. salt d , result d
27. bl-bl	Pronounce beginning blend bl as 'bl' e.g. blue , blow
28. cl-kl	Pronounce beginning blend cl as 'kl' e.g. club , class
29. pl-pl	Pronounce beginning blend pl as 'pl' e.g. play , plan
30. sl-sl	Pronounce beginning blend sl as 'sl' e.g. slip , slow
31. spl-spl	Pronounce beginning blend spl as 'spl' e.g. split
32. V_ll-l	Pronounce vowel pattern V_ll as 'l' e.g. all d , will d
33. V_ss-s	Pronounce vowel pattern V_ss as 's' e.g. pass d , less d
34. V_ft-ft	Pronounce vowel pattern V_ft as 'ft' e.g. left d , lift d
35. elf-elf	Pronounce ending vowel pattern elf as 'elf' e.g. himself d , shelf d
36. fl-fl	Pronounce beginning blend fl as 'fl' e.g. fly d , flow d
37. fr-fr	Pronounce beginning blend fr as 'fr' e.g. from d , free d
38. V_g-g	Pronounce vowel pattern V_g as 'g' e.g. big d , dog d
39. gl-gl	Pronounce beginning blend gl as 'gl' e.g. glad d , glass d
40. gr-gr	Pronounce beginning blend gr as 'gr' e.g. group d , great d
41. V_sk-sk	Pronounce ending diagraph V_sk as 'sk' e.g. ask d , risk d
42. V_lk-lk	Pronounce ending diagraph V_lk as 'lk' e.g. milk d , silk d
43. sk-sk	Pronounce middle of word blend sk as 'sk' e.g. ask d , sky d
44. V_ng-ŋg	Pronounce ending diagraph V_ng as 'ŋg' e.g. thing d , long d
45. V_nk-ŋk	Pronounce ending diagraph V_nk as 'ŋk' e.g. think d , bank d
46. thank-θ æŋk	Pronounce beginning vowel pattern thank as 'θ æŋk' e.g. thankful d
47. ath-ɑ: θ	Pronounce ending vowel pattern ath as 'ɑ: θ' e.g. path d , bath d
48. oth-ɒ θ	Pronounce ending vowel pattern oth as 'ɒ θ' e.g. cloth d
49. ength-eŋ θ	Pronounce ending vowel pattern ength as 'eŋ θ' e.g. length d , strength d
50. V_ck-k	Pronounce ending diagraph V_ck as 'k' e.g. back d , pick d
51. ic-ɪk	Pronounce ending vowel pattern ic as 'ɪk' e.g. music d , public d
52. ve-v	Pronounce silent letter pattern ve as 'v' e.g. have d , leave d
53. sw-sw	Pronounce beginning blend sw as 'sw' e.g. sweet d , swing d
54. tw-tw	Pronounce beginning blend tw as 'tw' e.g. twin d , twice d
55. dw-dw	Pronounce beginning blend dw as 'dw'
56. wa-wɒ	Pronounce beginning vowel pattern 'wɒ' e.g. want d , watch d
57. tion-ʃən	Pronounce ending vowel pattern tion as 'ʃən' e.g. nation d , action d
58. swa-swɒ	Pronounce beginning vowel pattern swa as 'swɒ' e.g. swallow d
59. V_sh-ʃ	Pronounce ending diagraph V_sh as 'ʃ' e.g. push d , fish d
60. shr-ʃr	Pronounce beginning trigraph shr as 'ʃr' e.g. shrug d , shrimp d
61. V_x-ks	Pronounce vowel pattern V_x as 'ks' e.g. six d , tax d
62. zz-z	Pronounce ending letter pattern zz as 'z' e.g. jazz d
63. V_ff-f	Pronounce vowel pattern V_ff as 'f' e.g. off d , staff d
64. V_nch-ntʃ	Pronounce ending trigraph v_nch as 'ntʃ' e.g. lunch d , bunch d



65. V_se-z	Pronounce ending vowel pattern V_se as 'z' e.g. expertise
66. V_ze-z	Pronounce ending vowel pattern V_ze as 'z'
67. arch-tʃ	Pronounce ending vowel pattern arch as 'tʃ'
68. V_ce-ɪs	Pronounce ending vowel pattern V_ce as 'ɪs' e.g. ice, face
69. V_nce-ns	Pronounce ending vowel pattern V_nce as 'ns' e.g. since, dance
70. wh-w	Pronounce beginning diagraph wh as 'w' e.g. why, what
71. V_ge-dʒ	Pronounce ending vowel pattern V_ge as 'dʒ' e.g. college, image
72. V_rge-dʒ	Pronounce ending vowel pattern V_rge as 'dʒ' e.g. large, charge
73. V_nge-ndʒ	Pronounce ending vowel pattern V_nge as 'ndʒ' e.g. challenge, orange
74. V_dge-dʒ	Pronounce ending vowel pattern V_dge as 'dʒ' e.g. edge, judge
75. ble-bəl	Pronounce ending vowel pattern ble as 'bəl' e.g. able, table
76. fle-fəl	Pronounce ending vowel pattern fle as 'fəl' e.g. rifle
77. ple-pəl	Pronounce ending vowel pattern ple as 'pəl' e.g. people, apple
78. tle-təl	Pronounce ending vowel pattern tle as 'təl' e.g. little, title
79. dle-dəl	Pronounce ending vowel pattern dle as 'dəl' e.g. middle, handle
80. kle-kəl	Pronounce ending vowel pattern kle as 'kəl' e.g. ankle, tackle
81. cle-cəl	Pronounce ending vowel pattern cle as 'cəl' e.g. cycle, article
82. gle-gəl	Pronounce ending vowel pattern gle as 'gəl' e.g. single, struggle
83. zle-zəl	Pronounce ending vowel pattern zle as 'zəl' e.g. puzzle
84. stle-səl	Pronounce ending vowel pattern stle as 'səl' e.g. castle
85. c-s	Pronounce beginning consonant c as 's' e.g. city, cell
86. sc-s	Pronounce beginning blend sc as 's' e.g. scene, science
87. age-ɪdʒ	Pronounce silent letter pattern age as 'ɪdʒ' e.g. image, manage
88. ege-ɪdʒ	Pronounce silent letter pattern ege as 'ɪdʒ' e.g. college, privilege
89. V_tch-tʃ	Pronounce ending trigraph tch as 'tʃ' e.g. watch, catch
90. ph-f	Pronounce middle of word silent letter pattern ph as 'f' e.g. phone, photo
91. pph-f	Pronounce middle of word silent letter pattern pph as 'f' e.g. sapphire
92. ch-k	Pronounce beginning diagraph 'ch' as 'k' e.g. character, chemical
93. ch-ʃ	Pronounce beginning diagraph 'ch' as 'ʃ' e.g. chef
94. kn-n	Pronounce silent letter pattern kn as 'n' e.g. know, knee
95. gn-n	Pronounce silent letter pattern gn as 'n' e.g. gnome
96. gh-g	Pronounce silent letter pattern gh as 'g' e.g. ghost
97. ps-s	Pronounce silent letter pattern ps as 's' e.g. psychological
98. rh-r	Pronounce silent letter pattern rh as 'r' e.g. rhythm
99. mb-m	Pronounce silent letter pattern mb as 'm' e.g. bomb, climb
100. bt-t	Pronounce silent letter pattern bt as 't' e.g. debt, doubt
101. mn-m	Pronounce silent letter pattern mn as 'm' e.g. column, condemn
102. wr-r	Pronounce silent letter pattern wr as 'r' e.g. write, wrap
103. pt-pt	Pronounce middle of word blend pt as 'pt' e.g. adopt, accept
104. st-s	Pronounce silent letter pattern st as 's' e.g. listen
105. gu-g	Pronounce silent letter pattern gu as 'g' e.g. guard, guarantee
106. gue-g	Pronounce silent letter pattern gue as 'g' e.g. league, colleague
107. que-k	Pronounce silent letter pattern que as 'k' e.g. unique, technique
108. sch-sk	Pronounce beginning trigraph sch as 'sk' e.g. school, scheme
109. xc-ks	Pronounce middle of word blend xc as 'ks' e.g. except, excellent
110. al_C-əlC	Pronounce vowel pattern al_C as 'əlC'
111. oh-əʊ	Pronounce middle of word vowel pattern oh as 'əʊ'
112. cqu-kwa	Pronounce middle of word vowel pattern cqu as 'kwa'
113. ngue-	Pronounce silent letter pattern ngue as 'ŋ' e.g. tongue



114.	ol_C-əʊ	Pronounce vowel pattern ol_C as 'əʊ'
115.	quarC-kwɒ	Pronounce beginning vowel pattern quarC as 'kwɒ'
116.	C_re-tə	Pronounce silent letter pattern C_re as 'tə'
117.	ro-ra,rə	Pronounce middle of word vowel pattern ro as 'ra,rə'
118.	wor-wɜ:	Pronounce beginning vowel pattern wor as 'wɜ:' e.g. work , world
119.	sci-saɪ	Pronounce silent letter pattern sci as 'saɪ' e.g. science
120.	scle-səl	Pronounce silent letter pattern scle as 'səl' e.g. muscle
121.	sure-ʒə	Pronounce silent letter pattern sure as 'ʒə' e.g. measure , pleasure
122.	ti-ʃ	Pronounce middle of word vowel pattern ti as 'ʃ' e.g. nation , action
123.	ci-ʃ	Pronounce middle of word vowel pattern ci as 'ʃ' e.g. social , special
124.	zure-	Pronounce silent letter pattern zure as 'ʒə'
125.	thr-θr	Pronounce beginning trigraph thr as 'θr' e.g. three , through
126.	nd-nd	Pronounce ending blend nd as 'nd' e.g. and , find
127.	nt-nt	Pronounce ending blend nt as 'nt' e.g. want , student
128.	nch-ntʃ	Pronounce ending trigraph nch as 'ntʃ' e.g. lunch , bunch
129.	mp-mp	Pronounce ending blend mp as 'mp' e.g. camp , jump
130.	cise-saɪz	Pronounce silent letter pattern cise as 'saɪz'

(4) Syllables

Problem	Description
1. 1 syllable	Words containing only 1 syllable
2. Closed syllables	Words containing syllables where the vowel is followed by a consonant
3. Open syllables	Words containing syllables where the vowel is followed by nothing
4. vc/cv	Words containing syllable splits that have a vowel/consonant before the split and a consonant/vowel after the split
5. v/vc	Words containing syllable splits that have a vowel before the split and vowel/consonant after the split
6. v/v	Words containing syllable splits that have a vowel before the split and a vowel after the split
7. vc/v	Words containing syllable splits that have a vowel/consonant before the split and a vowel after the split
8. qu:vc/cv qu:v/cv qu:v/v	Words containing syllables divided by the 'qu:vc/cv', 'qu:v/cv' or 'qu:v/v' patterns
9. ture:vc/cv ture:v/vc ture:vc/v	Words containing syllables divided by the 'ture:vc/cv', 'ture:v/vc' and 'ture:vc/v' patterns
10. 2 syllables	Words containing only 2 syllables
11. 3 syllables	Words containing only 3 syllables
12. 4 syllables	Words containing only 4 syllables
13. 5 or more syllables	Words containing more than 5 syllables



(5) Suffixes

Problem	Description
1. s	Words with suffix -s following add rule
2. ed	Words with suffix -ed following add rule
3. es	Words with suffix -es following add rule
4. less	Words with suffix -less following add rule
5. ness	Words with suffix -ness following add rule
6. en	Words with suffix -en following add rule
7. ing	Words with suffix -ing following add rule
8. ful	Words with suffix -ful following add rule
9. ish	Words with suffix -ish following add rule
10. ist	Words with suffix -ist following add rule
11. ing	Words with suffix -ing following double rule
12. ed	Words with suffix -ed following double rule
13. en	Words with suffix -en following double rule
14. ish	Words with suffix -ish following double rule
15. y	Words with suffix -y following add rule
16. y	Words with suffix -y following double rule
17. ly	Words with suffix -ly following add rule
18. ity	Words with suffix -ity following change rule
19. ility	Words with suffix -ility following change rule
20. ty	Words with suffix -ty following add rule
21. ing	Words with suffix -ing following drop rule
22. ed	Words with suffix -ed following drop rule
23. y	Words with suffix -y following drop rule
24. en	Words with suffix -en following drop rule
25. er	Words with suffix -er following add rule
26. er	Words with suffix -er following drop rule
27. er	Words with suffix -er following double rule
28. ed-d	Words with suffix -ed following add rule ('ed' pronounced as 'd')
29. ed-d	Words with suffix -ed following drop rule ('ed' pronounced as 'd')
30. ed-d	Words with suffix -ed following double rule ('ed' pronounced as 'd')
31. ed-t	Words with suffix -ed following add rule ('ed' pronounced as 't')
32. ed-t	Words with suffix -ed following drop rule ('ed' pronounced as 't')
33. ed-t	Words with suffix -ed following double rule ('ed' pronounced as 't')
34. est	Words with suffix -est following add rule
35. est	Words with suffix -est following drop rule
36. est	Words with suffix -est following double rule
37. al	Words with suffix -al following add rule
38. al	Words with suffix -al following drop rule
39. es	Words with suffix -es following change rule
40. ed	Words with suffix -ed following change rule
41. ly	Words with suffix -ly following change rule
42. ness	Words with suffix -ness following change rule
43. ful	Words with suffix -ful following change rule
44. less	Words with suffix -less following change rule
45. er	Words with suffix -er following change rule



46. est	Words with suffix –est following change rule
47. ing,last:double,first:add	Words of 2+ syllables with suffix –ing following double rule where last syllable is stressed and following add rule where first syllable is stressed
48. ed,last:double,first:add	Words of 2+ syllables with suffix –ed following double rule where last syllable is stressed and following add rule where first syllable is stressed
49. ation-	Words with suffix -ation
50. otion-	Words with suffix -otion
51. ition-	Words with suffix -ition
52. ution-	Words with suffix -ution
53. action-	Words with suffix -action
54. ection-	Words with suffix -ection
55. iction-	Words with suffix -iction
56. uction-	Words with suffix -uction
57. ention-	Words with suffix -ention
58. asion-	Words with suffix -asion
59. usion-	Words with suffix -usion
60. ision-	Words with suffix -ision
61. osion-	Words with suffix -osion
62. mission-	Words with suffix -mission
63. ession-	Words with suffix –ession
64. ussion-	Words with suffix -ussion
65. version-	Words with suffix -version
66. ulsion-	Words with suffix -ulsion
67. ous	Words with suffix –ous following add rule
68. ous	Words with suffix –ous following drop rule
69. ous	Words with suffix –ous following change rule
70. tious	Words with suffix –tious
71. cious	Words with suffix –cious
72. ious	Words with suffix –ious
73. tial-	Words with suffix –tial
74. sion-	Words with suffix –sion
75. sure-	Words with suffix –sure
76. cial-	Words with suffix –cial
77. tial-	Words with suffix –tial
78. ology-	Words with suffix –ology
79. tory-	Words with suffix –tory
80. cian-	Words with suffix –cian
81. dual-	Words with suffix –dual
82. tual-	Words with suffix –tual
83. sual-	Words with suffix –sual
84. ayor-	Words with suffix –ayor
85. ayer-	Words with suffix –ayer
86. uous-	Words with suffix –uous
87. or-	Words with suffix –or following add rule
88. or-	Words with suffix –or following change rule
89. able-	Words with suffix –able following add rule
90. able-	Words with suffix –able following drop rule
91. able-	Words with suffix –ous following change rule
92. ment-	Words with suffix –ment following add rule



(6) Prefixes

Problem	Description
1. un	Words starting with productive prefix un-
2. mis	Words starting with productive prefix mis-
3. under	Words starting with productive prefix under-
4. over	Words starting with productive prefix over-
5. pro	Words starting with productive prefix pro-
6. pre	Words starting with productive prefix pre-
7. ad	Words starting with productive prefix ad-
8. abb	Words starting with common pattern abb-
9. acc	Words starting with common pattern acc-
10. aff	Words starting with common pattern aff-
11. agg	Words starting with common pattern agg-
12. all	Words starting with common pattern all-
13. ann	Words starting with common pattern ann-
14. app	Words starting with common pattern app-
15. arr	Words starting with common pattern arr-
16. ass	Words starting with common pattern ass-
17. att	Words starting with common pattern att-
18. con	Words starting with productive prefix con-
19. coll	Words starting with common pattern coll-
20. corr	Words starting with common pattern corr-
21. comm	Words starting with common pattern comm-
22. in	Words starting with common pattern in-
23. ill	Words starting with common pattern ill-
24. imm	Words starting with common pattern imm-
25. irr	Words starting with common pattern irr-
26. im	Words starting with common pattern im-
27. ir	Words starting with common pattern ir-
28. sub	Words starting with common pattern sub-
29. succ	Words starting with common pattern succ-
30. suff	Words starting with common pattern suff-
31. sugg	Words starting with common pattern sugg-
32. sup	Words starting with common pattern sup-
33. sum	Words starting with common pattern sum-
34. surr	Words starting with common pattern surr-
35. dis	Words starting with common pattern dis-
36. diff	Words starting with common pattern diff-
37. ob	Words starting with common pattern ob-
38. off	Words starting with common pattern off-
39. opp	Words starting with common pattern opp-
40. occ	Words starting with common pattern occ-
41. ex	Words starting with productive prefix ex-
42. eff	Words starting with common pattern eff-



(7) Confusing Letters

Problem	Description
1. n/h	Words containing the confusing letter n or h
2. a/o	Words containing the confusing letter g or o
3. r/t	Words containing the confusing letter r or t
4. m/n	Words containing the confusing letter m or n
5. m/h	Words containing the confusing letter m or h
6. b/d	Words containing the confusing letter b or d
7. l/r	Words containing the confusing letter l or r
8. b/g	Words containing the confusing letter b or g
9. d/g	Words containing the confusing letter d or g
10. t/f	Words containing the confusing letter t or f
11. r/f	Words containing the confusing letter r or f
12. b/q	Words containing the confusing letter b or q
13. d/q	Words containing the confusing letter d or q
14. q/g	Words containing the confusing letter q or g
15. k/x	Words containing the confusing letter k or x