## APPENDIX B <br> Phonograms Taught in Levels 1-7

Phonograms are letters or letter combinations that represent a single sound. For example, the letter $\underline{\mathrm{b}}$ represents the sound $/ \mathrm{b} /$ as in bat. The letter combination sh represents the sound $/ \mathrm{sh} /$ as in ship.


Phonograms Taught in Level 1

| 1 | m | /m/ | moon |  |  |  | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | s | /s/-/z/ | sun | has |  |  | 1 |
| 3 | P | /p/ | pig |  |  |  | 1 |
| 4 | a | /ă/-/ā/-/ah/ | apple | acorn | father |  | 1 |
| 5 | n | /n/ | nest |  |  |  | 1 |
| 6 | t | /t/ | tent |  |  |  | 1 |
| 7 | b | /b/ | bat |  |  |  | 1 |
| 8 | j | /j/ | jam |  |  |  | 1 |
| 9 | g | /g/-/j/ | goose | gem |  |  | 1 |
| 10 | d | /d/ | deer |  |  |  | 1 |
| 11 | C | /k/-/s/ | cow | city |  |  | 1 |
| 12 | Y | /y/-/i/-/ī/-/ē/ | yarn | gym | my | happy | 1 |
| 13 | h | /h/ | hat |  |  |  | 1 |
| 14 | k | /k/ | kite |  |  |  | 1 |
| 15 | $r$ | /r/ | rake |  |  |  | 1 |
| 16 | i | /î/-/T/-/ē/ | itchy | ivy | radio |  | 1 |
| 17 | v | /v/ | vase |  |  |  | 1 |
| 18 | f | /f/ | fish |  |  |  | 1 |
| 19 | z | /z/ | zipper |  |  |  | 1 |
| 20 | 0 | /ŏ/-/Ō/-/̄O/-/ŭ/ | otter | open | to | oven | 1 |
| 21 | 1 | /I/ | leaf |  |  |  | 1 |
| 22 | W | /w/ | wave |  |  |  | 1 |
| 23 | u | /ŭ/-/ū/-/ŏo/ | udder | unit | put |  | 1 |
| 24 | e | /ĕ/-/ē/ | echo | even |  |  | 1 |
| 25 | qu | /kw/ | queen |  |  |  | 1 |
| 26 | X | /ks/ | ax |  |  |  | 1 |
| 27 | th | /th/-/th/ | three | then |  |  | 13 |


| Card \# | Phonogram | Sound | For the Teacher's Use Only <br> (example of word containing the phonogram) |  |  |  | Lesson/ Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | sh | /sh/ | ship |  |  |  | 13 |
| 29 | ch | /ch/-/k/-/sh/ | child | school | chef |  | 13 |
| 30 | ck | /k/, two-letter /k/ | duck |  |  |  | 18 |
| 31 | ng | /ng/ | king |  |  |  | 19 |
| 32 | nk | /ngk/ | thank |  |  |  | 20 |
| Phonograms Taught in Level 2 |  |  |  |  |  |  | Level 2 |
| 33 | ee | /ē/, double $\underline{\text { e }}$ | feed |  |  |  |  |
| 34 | wh | /hw/ | while |  |  |  |  |
| 35 | er | /er/ as in her | her |  |  |  |  |
| 36 | ar | /ar/ | car |  |  |  |  |
| 37 | or | /or/-/er/ as in work | corn | work |  |  |  |
| 38 | oy | loy/ that we may use at the end of English words | toy |  |  |  |  |
| 39 | oi | /oy/ that we may not use at the end of English words | oil |  |  |  |  |
| 40 | aw | /aw/ that we may use at the end of English words | saw |  |  |  |  |
| 41 | au | /aw/ that we may not use at the end of English words | pause |  |  |  |  |
| 42 | ow | /ow/-/ō/ | cow | Iow |  |  |  |
| 43 | ou | /ow/-/̄/-// $\overline{\mathrm{O}} /-/ \mathrm{Lu} /$ | mouse | soul | soup | touch |  |
| Phonograms Taught in Level 3 |  |  |  |  |  |  | Level 3 |
| 44 | ay | /ā/, two-letter /ā/ that we may use at the end of English words | day |  |  |  |  |
| 45 | ai | /ā/, two-letter /ā/ that we may not use at the end of English words | rain |  |  |  |  |
| 46 | ur | /er/ as in nurse | nurse |  |  |  |  |
| 47 | oa | /ō/, two-letter /ō/ that we may not use at the end of English words | boat |  |  |  |  |


| Card \# | Phonogram | Sound | For the Teacher's Use Only (example of word containing the phonogram) |  |  | Lesson/ Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48 | ०० | /̄̄0/-/00/-/ō/ | food | book | floor | Level 3 |
| 49 | ea | /ē/-/ĕ/-/ā/ | leaf | bread | great |  |
| 50 | ed | /ĕd/-/d/-/t/ | wanted | snowed | dropped |  |
| 51 | ir | /er/ as in first | first |  |  |  |
| 52 | igh | $/ \bar{T} /$, three-letter $/ \overline{\mathrm{T}}$ / | light |  |  |  |
| Phonograms Taught in Level 4 |  |  |  |  |  | Level 4 |
| 53 | tch | /ch/, three-letter /ch/ | watch |  |  |  |
| 54 | dge | /j/, three-letter /j/ | badge |  |  |  |
| 55 | or | /or/-/er/ as in work | corn | work |  |  |
| 56 | ew | / $\overline{0} /-/ \overline{\text { ü }}$ | grew | few |  |  |
| 57 | ie | /ē/-/ī/ | field | pie |  |  |
| 58 | wr | /r/, two-letter /r/ used only at the beginning of a word | write |  |  |  |
| 59 | kn | /n/, two-letter /n/ used only at the beginning of a word | know |  |  |  |
| 60 | eigh | /ā/, four-letter /ā/ | eight |  |  |  |
| 61 | ear | /er/ as in early | early |  |  |  |
| 62 | ph | /f/, two-letter /f/ | phone |  |  |  |
| 63 | ti | /sh/, tall-letter /sh/ | nation |  |  |  |
| 64 | ey | /ē/-/ā/ | key | they |  |  |
| 65 | oe | /ō/, two-letter /ō/ that we may use at the end of English words | toe |  |  |  |
| Phonograms Taught in Level 5 |  |  |  |  |  | Level 5 |
| 66 | si | /sh/-/zh/ | mission vision | vision |  |  |
| 67 | ough | /̄̄/-/ठo//-/ŭff/- | though cough | through thought | rough bough |  |
| 68 | ei | /ā/-/ē/ that we may not use at the end of English words | vein | ceiling |  |  |
| 69 | ui | / $\overline{0} /$ | fruit |  |  |  |


| Card \# | Phonogram | Sound | For the Teacher's Use Only (example of word containing the phonogram) | Lesson/ Level |
| :---: | :---: | :---: | :---: | :---: |
| 70 | gn | /n/, two-letter /n/ used at the beginning or end of a word | gnat | $\begin{gathered} \text { Level } \\ 5 \end{gathered}$ |
| 71 | our | /er/ as in journey | journey |  |
| Phonograms Taught in Level 6 |  |  |  | $\begin{gathered} \text { Level } \\ 6 \end{gathered}$ |
| 72 | mb | /m/, two-letter /m/ | lamb |  |
| 73 | gu | /g/, two-letter /g/ | guide |  |
| 74 | augh | /aw/, four-letter /aw/ | daughter |  |
| Phonograms Taught in Level 7 |  |  |  | $\begin{gathered} \text { Level } \\ 7 \end{gathered}$ |
| 75 | ci | /sh/, short-letter /sh/ | special |  |
| 76 | rh | /r/, two-letter /r/ | rhyme |  |

## APPENDIX D

## How to Review the Flashcards

In each teaching session, choose a mix of no more than twenty Phonogram, Sound, Word, and Rule Cards to review. The following procedures will help you make the most of your review time.

## Phonogram Cards



1. Shuffle the cards behind the Review divider before starting. If there are no cards behind the Review divider, either skip that part of the review or choose cards from behind the Mastered divider, according to your student's needs.
2. Choose a small number of cards, between 4-12 depending on your student's age, ability, or attention span.
3. Show the front of the Phonogram Card to your student.
4. Have the student say the sound or sounds.
5. If a phonogram has several sounds, you can give your student a hint by holding up the appropriate number of fingers.

Alternatively, you may wish to use one of the review activities in Appendix M.

When do I move a Phonogram Card behind the Mastered divider?
Look for these signs. If you see all three, the card is mastered!

- Your student responds quickly and easily when you hold up the card.
- Your student says the pure, clipped sound(s) without adding /uh/ at the end (for example, he says / $\mathrm{p} /$, not /puh/).
- You have no doubt that your student knows the card thoroughly.


## Sound Cards



1. Shuffle the cards behind the Review divider before starting. If there are no cards behind the Review divider, either skip that part of the review or choose cards from behind the Mastered divider, according to your student's needs.
2. Choose a small number of cards to review, depending on your student's age, ability, or attention span.
3. Dictate the sound(s) listed on the flashcard. If there is more than one sound, pause briefly between them. Do not read the key words.
4. Your student will write the phonogram that makes the sound(s).

## When do I move a Sound Card behind the Mastered divider?

If your student does not hesitate when writing the phonogram, the card is mastered!

## Word Cards



1. Shuffle the cards behind the Review divider before starting. If there are no cards behind the Review divider, either skip that part of the review or choose cards from behind the Mastered divider, according to your student's needs.
2. Choose a small number of cards, between 4-12 depending on your student's age, ability, or attention span.
3. Dictate the word and have your student spell it. Alternatively, use one of the review activities in Appendix N .

## When do I move a Word Card behind the Mastered divider? <br> If your student does not hesitate when spelling the word, the card is mastered!

A good practice is to keep no more than twenty Word Cards behind the Review divider at a time: the ten cards from the most recent lesson, plus several cards that have not yet been mastered.

If you find that the Word Cards for review are stacking up too much, or that your student is misspelling a lot of words during daily review, slow down the pace of the lessons and spend more time on review. Move on to the next lesson only when you are sure your student has mastered the previous one.

See also Appendix K: How to Handle Spelling Mistakes.

## Rule Cards



1. Shuffle the cards behind the Review divider before starting. If there are no cards behind the Review divider, either skip that part of the review or choose cards from behind the Mastered divider, according to your student's needs.
2. Choose a small number of cards to review, depending on your student's age, ability, or attention span.
3. Read the Rule Card to your student, pausing so that your student can verbally fill in the blank(s) or answer the question(s) on the card.

## When do I move a Rule Card behind the Mastered divider?

If your student does not hesitate when filling in the blanks or answering the questions, the card is mastered!

## APPENDIX E Procedure for Spelling with Letter Tiles

The following routine is very effective and is used throughout the All About Spelling program.

Dictate the word, then point to the tiles.

```
a b clllllllllllll
```


(This indicates to the student that it is his turn to use the tiles.)

The student segments the word aloud, selecting the correct tile for each sound.

(Segmenting aloud helps the student represent each sound with a phonogram.)

## 3

The student reads the word he just spelled.

(Reading the word enables the student to self-correct if he has made a mistake.)
After each word, the student puts the tiles back in order (physical tiles) or clears the workspace (app).


## APPENDIX F <br> Solving Letter Reversal Problems

Most of the letters of the alphabet have unique shapes, so no matter which way you turn them, they can't be confused with any other letters. For example, the letter $\underline{m}$ looks quite different from the letter $\underline{\mathrm{x}}$, and $\underline{f}$ is not likely to be confused with $\underline{z}$.

There are a few notorious troublemakers, however, particularly $\underline{b}$ and $\underline{d}$, the letters that students most often have trouble with.

It is easy to see where the confusion comes in: flip the $\underline{b}$ and it becomes a $\underline{d}$. The beginning student may not realize that the direction of the letter matters, or he may not be able to remember which letter is which.

Letters and numbers that can be flipped include:

## bd pq pd nu 69

## What is considered normal?

If your student is between the ages of three and seven, is just starting to read and spell, and makes occasional reversal errors when reading or writing, it's perfectly normal. It doesn't mean that your student has dyslexia or a reading disability. Make a gentle correction and move on.

But if your student is eight years or older, has had prior reading and spelling instruction, and is making frequent letter reversal errors, it is important to take action to solve the reversal problems.

As teachers, we have two jobs to do regarding reversals:

1. Try to prevent confusion.
2. Where confusion exists, resolve it.

## Try to prevent letter confusion before it begins.

The All About Spelling program is carefully structured to minimize the likelihood of letter reversals. We teach the sounds of potentially confusing letters like $\underline{b}$ and $\underline{d}$ in separate lessons. The student's task is simplified because he only has to make one new visual discrimination at a time.

When your student is learning to print, be sure to teach correct letter formation. Doing so is critical to prevent confusion.

When forming the letter $\underline{b}$, start with the stick first, followed by the circle. To write the letter $\underline{d}$, start with the circle first, followed by the stick.

Have your student use lined paper so it is clear where the circle is in relation to the stick. Also be sure your student does
 not lift the pencil from the paper when writing any of the confusable letters.

## What to do if your student already reverses letters.

If you are working with older learners, it may be too late to prevent confusion. They may have had a few false starts in spelling and reading and may have already confused these troublemakers. They may encounter the letter $\underline{b}$ and misinterpret it as the letter $\underline{\mathrm{d}}$. They may read or spell the word $b a d$ as $d a b$ or $f a d$ as $f a b$. You might give a gentle correction and re-teach the letters separately, but your student still mixes them up.

Below are four effective methods to clear up tough reversal problems.

The demonstrations are for correcting $\underline{b}$ and $\underline{d}$ reversals, but the same concepts can be applied to any letter or number. You may only need to use one of these methods, but for really resistant cases, you will need to use all four methods.

Please note that it's important to concentrate on just one letter per session. Wait until that letter is completely mastered before teaching another letter.

## Method 1: Teach the letters $\underline{b}$ and $\underline{d}$ using tactile surfaces.

Have a variety of tactile surfaces for your student to choose from. Possibilities include flannel fabric, corrugated cardboard, very fine sandpaper, fluffy fur fabric, or a carpet square. Ask your student which surface reminds him of the letter $\underline{b}$, and then cut a large lowercase $\underline{b}$ out of the chosen tactile surface.

Using the pointer finger of his dominant hand, have your student trace the letter $\underline{b}$ on the textured surface. Be sure he starts and ends in the correct place. Practice until he can easily write the letter $\underline{\mathrm{b}}$.

When your student is ready to go on to a new letter, choose a different textured surface. If fine sandpaper was used for the letter $\underline{b}$, perhaps furry fabric can be used for the letter $\underline{d}$.

## Method 2: Use "air writing" to reinforce proper letter formation.

Another simple but powerful method for correcting reversals is "air writing." Using the dominant hand, the student uses his entire arm to write letters in the air as he says the sound of the letter. The whole arm should be involved, and the student should pretend that his pointer finger is a pen.

Brain research shows that two ideas practiced at the same time can permanently bond the ideas together. In this case, the large movements of the arm combined with saying the sound of the letter helps link these two concepts together in your student's brain. Additionally, this multisensory activity takes advantage of the fact that the muscles in the shoulder and in the jaw have muscle memory, and this makes it easier for your student to recall the shape and sound of the letter.

## Method \#3: Teach the letters $\underline{\mathbf{b}}$ and $\underline{\mathbf{d}}$ using analogies.

Explain that the letter $\underline{b}$ is made up of two shapes: a bat and a ball. Using the tactile surface, demonstrate how you write the bat part of the letter first, followed by the ball.

As you write the letter $\underline{b}$, say "bat-ball-/b/," like this:


To further clarify which side of the letter the straight line is on, tell your student that first you grab the bat and then you bit the ball.

Have your student practice this motion and chant many times over a two-minute time period. Repeat the exercise several times a day.

Show your student that when you are reading and writing from left to right, you encounter the bat part of the letter first. If he is ever unsure of the sound this letter makes when he sees it, he should think to himself, "bat-ball-/b/." This will help him recall the sound of the letter $\underline{b}$.

To teach the letter $\underline{d}$, you can use the analogy of a doorknob and a door. The doorknob represents the circle part of the letter and the door represents the straight line, like this:


To clarify which side of the letter the straight line is on, tell your student that first you grab the doorknob and then you open the door.

Again, practice the motion and chant many times over a two-minute period. Repeat the exercise several times a day.

Show your student that when you are reading or writing from left to right, you encounter the doorknob part of the letter first. If he is ever unsure of the sound this letter makes when he sees it, he should think to himself, "doorknob-door-/d/." He will now be able to recall the sound of the letter $\underline{d}$.

Another common analogy to help with $\underline{b}$ and $\underline{d}$ is a bed. Though this analogy may help some kids, for others it may require more thought, and for many kids it may not become automatic.


Method \#4: Help your student notice the shape of the mouth while saying the letter sounds.
When we say /b/, our lips come together in a straight line. Point out that the straight line comes first when you write the letter $\underline{b}$.

When we say /d/, our lips are open. Coincidentally, the circle comes first when you write the letter $\underline{d}$.

If your student misreads or mispells a $\underline{\mathrm{b}}$ as a $\underline{\mathrm{d}}$, refer back to the tactile surface activity and air writing that you did together. Point to the misread or mispelled letter and say, If you wrote this letter, what would this letter say?

If your student can't answer easily, ask him to draw the letter $\underline{b}$ using air writing. The sound of the letter (/b/-bat) should come more easily this way. Then have your student read the word again.

