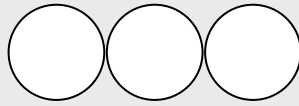


SOUND SEGMENTER Version 3 ©



This resource can be initially used in the first year of school after basic letter-sound relationships have been established. It provides plenty of opportunities for young learners to master two of the most important phonemic awareness tasks: sound (phoneme) segmenting and sound (phoneme) blending.

Note that in this manual, the word *teacher* is used to refer to any individual who is teaching sound segmentation and blending. This program is popular with tutors, teacher aides, speech pathologists and parents.

WHAT IS SOUND SEGMENTING?



Sound segmenting is the ability to perceive and “pull apart” the separate **speech sounds*** in a word. For example, the word “play” has three sounds to segment: /p/... /l/... /ay/.

A speech sound
= a phoneme.

The English
language has
44 phonemes.

WHAT IS SOUND BLENDING?



Sound blending is the reverse. It is the ability to “put together” given sounds to make a word. For example, the sounds /sh/.../i/.../p/... blend to make “ship”.

Sound blending is somewhat easier for most children than sound segmenting.

AUSTRALIAN STUDY FINDS SOUND SEGMENTING IS ONE OF THE TWO MOST IMPORTANT PREDICTORS OF SUCCESS IN LITERACY!

In a study of 543 Australian children at the beginning of their first year at school, Share, Jorm, McClean, and Matthews (1984) looked at students’ performance on a range of early literacy tasks. They found that performance on a PHONEME SEGMENTATION task and knowledge of letter names were the two strongest predictors of 1) reading performance at the end of that year and of 2) combined reading and spelling performance at the end of Grade One. This study considered many other factors also including oral language, social behaviour, motor skills, home environment and preschool environment.

WHY ARE SOUND SEGMENTING AND SOUND BLENDING SO IMPORTANT FOR LITERACY?

The awareness of single sounds in words is not innate. Young children perceive words as whole units—sometimes even phrases as whole units. They respond primarily to the meaning. It is only when it comes to transforming a spoken language into a written language that students must develop a sense of *phonemic awareness* (the awareness of individual speech sounds that make up words). This awareness underpins every alphabetic written language, which of course includes English. By segmenting and blending regular words, students can clearly observe how spoken words can be “mapped” onto letters and vice versa. It’s just like breaking a code. When this link between sounds and letters is realized, it is both exciting and empowering for young learners. Students begin to “see” and “hear” units within words and through this, learn about the many letter patterns and rules associated with each speech sound.

WHAT ABOUT IRREGULAR WORDS?

There are many irregularly spelt words in English, but far less than most people believe. For example, the word “ghost” is no longer considered irregular in a program that has taught the letter options for the /g/ sound (g, gh, gg) and the /oh/ sound (oa, o, ow, o_e). Truly irregular words, such as “eye” and “one” must be learnt using “the visual route”, a strategy which is utilized more and more as a reader becomes experienced.

It is important to acknowledge that the efficient working of the phonological route is absolutely vital for young learners.



SOUND SEGMENTER® TARGETS PRIMARILY PHONOLOGICAL AWARENESS, BUT ALSO PHONICS (LINKING THE SOUNDS TO THEIR CORRESPONDING LETTERS).

Sound Segmenter © focuses on developing the phonological route initially using words that are very regular (Unit One). By Unit Four, students are still required to use their phonological skills, but they are exposed to the more varied spelling of vowel sounds. **Orthographic knowledge*** is developed as students see how letters are mapped onto the sounds that they have segmented.

***Orthographic knowledge = information stored in the memory that tells us how to represent spoken language in its written form.**

WHAT IS INCLUDED IN THE **SOUND SEGMENTER**© DATA? (on the USB or via the downloads).

Sound Segmenter © is divided into four main units, each addressing a different stage of phonological awareness or a different set of sound-grapheme* learning targets. The difference with Version 3, is that Unit 2 is now divided into two subunits and Unit 4 is divided into four subunits – systematically working on different graphemes for vowel sounds. This change was made in response to the feedback from teachers and speech pathologists.

For each unit (and subunit), there are three components: **printable fold-over cards, a PowerPoint™ slideshow and Record of Sounds**. “**Circle strips**” are also provided on the USB to print. These are required for the fold-over card activities.

One laminated circle strip has been provided with the pack. Obviously, you will need to print and laminate these yourself if you buy the downloadable version. Note that when students are starting out, or for those who are struggling with segmenting, it may be necessary to use, say, a three-circle-strip for three-sound words and so on. Even if you have purchased the full version, you may need to print these from your USB. (See *How Do I Use Sound Segmenter?* later in this document).

A set of “sound stones” is supplied when you purchase the full pack: 3 X light blue, 3 X light green, 3 X dark green, 3 X dark blue. If you are purchasing the downloadable version, at least 5 glass pebbles will be needed. Colour is not vital, but useful if you wish to colour-code **digraphs*** and single letters (See *How Do I Use Sound Segmenter?* later in this document).

Also on the USB is a document, *Record of Sounds* depicting the graphemes studied. Each sheet represents a unit or subunit of Sound Segmenter ©. These are a handy reference for students to record their progress. They can colour in each circle when they can say the sound for each grapheme.

In Summary:

Full Pack: 9 Sound Stones, a laminated circle strip, a whiteboard marker, a printout of this manual, USB flash drive containing: Slideshows, fold-over cards, circle strips, Record of Sounds, manual.

Downloadable version: Slideshows, fold-over cards, circle strips, Record of Sounds, manual. (You’ll need some stones and a whiteboard marker).

A grapheme =
A letter or letters that map on to a single phoneme. (In the *Speech Sound Set*, a grapheme is also called a *Letter Option*.)

A digraph =
Two letters that map on to a single phoneme/two letters that make one sound.
E.g. sh, th, ee, ow

DETAILS OF EACH UNIT

Unit One focuses on **regular consonant-vowel-consonant** words. It is perfect for students who have established basic sound-letter links including the five short vowels a-e-i-o-u. There are also a couple of vowel-consonant-consonant words (“act” and “old”) in the slideshow to challenge the young learner.

- 43 pictures/words on a Microsoft PowerPoint slideshow
- 72 fold-over cards and a wordlist

Unit Two focuses on regular **consonant-vowel-consonant** words that include **consonant digraphs**. Only the **short vowel sounds of a-e-i-o-u** are included. It is divided into two subunits.

Unit 2:1 ck ff ll ss zz

- 20 pictures/words on a Microsoft PowerPoint slideshow
- 30 fold-over cards and a wordlist

Unit 2:2 sh, th, ch, ng

- 18 pictures/words on a Microsoft PowerPoint slideshow
- 18 fold-over cards and a wordlist

Unit Three focuses on **blends** - both initial and final blends. **Consonant digraphs** covered in Unit 2 may also be included.

- 20 pictures/words on a Microsoft PowerPoint slideshow
- 30 fold-over cards and a wordlist

Unit Four focuses on common **vowel digraphs**. There are four subunits.

Consonant digraphs and **consonant blends** are included. Note that some vowel digraphs are repeated. This is because they are representing different sounds (for example, **ow** (*as in now*) and **ow** (*as in cow*)).

Unit 4:1 ai ay ee ea oo

- 20 pictures/words on a Microsoft PowerPoint slideshow
- 40 fold-over cards and a wordlist

Unit 4:2 ow oa ow ou oy oi

- 20 pictures/words on a Microsoft PowerPoint slideshow
- 40 fold-over cards and a wordlist

Unit 4:3 ar ir er ur (w)or

- 20 pictures/words on a Microsoft PowerPoint slideshow
- 30 fold-over cards and a wordlist

Unit 4:4 or aw (w)ar ew ou

- 20 pictures/words on a Microsoft PowerPoint slideshow
- 26 fold-over cards and a wordlist

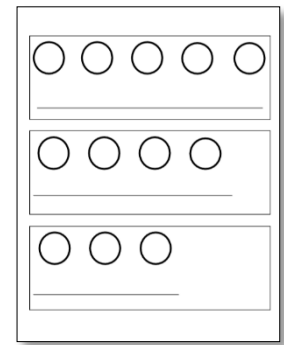
HOW DO I USE **SOUND SEGMENTER** ©?

Like all good phonological awareness and phonics teaching, **Sound Segmenter** should be implemented systematically. Later learning builds on earlier learning, so don't move on through the units until earlier ones have been mastered. A record of stages mastered can be kept by each student using the *Record of Sounds* document. Have them colour the circles in green or blue when they are able to say their sound (as studied in that particular unit). For each unit or subunit, have a discussion around any learning tips provided (see previous page).

Fold-Over Cards: Before starting, print out the pages of the unit you are studying. Fold each card in half so that the picture is on one side and the circles and writing are on the other. Cards can be laminated or printed on card, so they stand alone. They can simply be printed on paper, but they won't stand up on a table if you choose to do so.

You will also need to print out, cut up and laminate the "circle strips" – or you can use the one in your pack if you have purchased the full pack. If using the provided strip, you may have to cover up some circles for some young learners so that the number of circles corresponds to the number of sounds.

It is very important that a circle strip with enough circles are is provided to match the given picture (and accompanying word). For example, if the picture of STORM is shown, it is essential that a circle strip with at least 4 circles is provided segment that word. (Circle strips – see right). Likewise, enough stones must be provided to match the sounds for each word.



Circle strips/number of stones required:

Unit 1 3 circles/stones

Unit 2 3 circles/stones

Unit 3 4 - 5 circles/stones (mostly are 4 sound words)

Unit 4 2 - 4 circles/stones

For students who are having difficulty segmenting words into individual sounds, it is recommended that the **exact** number of stones and the **exact** number of circles is provided for each picture. For these students, it may be useful to focus on words that share the same number of sounds within each unit. To do this, simply sort the cards into sets of words that share the same number of sounds and provide the corresponding circle strip and stones for each set.

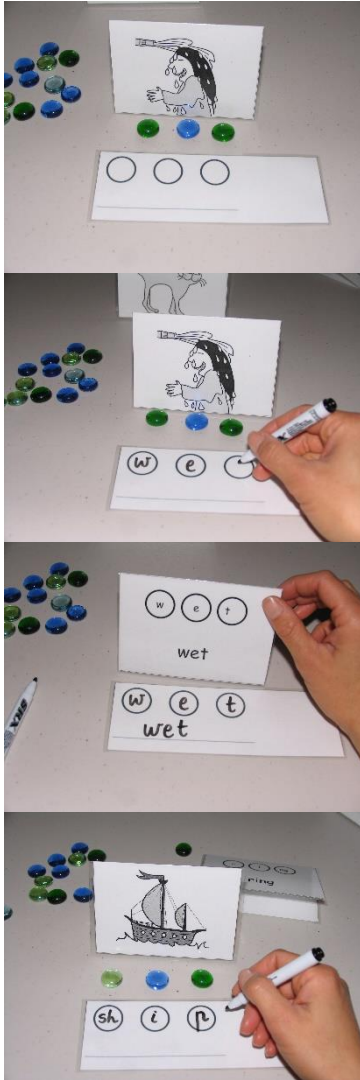
Example: Choosing the appropriate Circle Strip.

Zeb is struggling with vowel sounds such as /oa/ and /oi/. These particular vowel sounds are called diphthongs (two-part vowels). Although they have two sound parts to them, we still classify them as single phonemes and map them onto a single grapheme (usually a digraph).

Zeb tends to draw out these diphthongs into two vowel sounds. For example, he segmented BOAT by saying something like /b/ /ar/ /oo/ /t/. He segmented the word BOIL by saying /b/ /aw/ /ee/ /l/. For each of the four sounds, he placed a stone on the circle strip.

*To overcome this, we together studied the written digraphs in the circles (on the final page of the fold-over cards). I said the sound for each circle and acknowledged that they **did** have two parts but explained we call them one sound. I had him copy each sound. We wrote these again and practised saying their sounds a second time. This reinforced the concept that /oi/ and /oa/ are classified as single sounds.*

*Next I provided him with a **3 circle sound strip and 3 sound stones**. I selected the 3 sound picture/words in Unit 4:2 and together we worked through these. (If I had provided him with the same pictures, along with the 4 or 5 circle strip, he may have continued to draw the vowel sounds out into two distinct sounds).*



SEGMENTING

Show the picture and provide the laminated circle strip, sound stones and the marker.

Say the word for the student. You may need to refer to the word list at the end of the fold-over card printout– otherwise, peep over the card where the word is written. In the example, the word is “wet”.

The student takes the “sound stones” and lays them out as they say each sound. If the student is struggling with segmenting, you may get them to isolate only the first sound and then model the next two as you place down each stone.

Next the student tries to write the corresponding letters in the circles.

Remember, if the word contains a digraph, two letters should be written in one circle.

After writing the word on the line, the student turns the card over and checks whether they are correct! At this point, the letters are erased from the circle strip and another picture card is presented.

COLOUR-CODING WITH THE STONES

To reinforce the concept of vowel sound versus consonant sound, green is used for consonant sounds and blue for vowel sounds. These colours are used in the slideshow. You can also use these same colours when using the sound stones. If you choose to do this, begin with the darker green and blue stones for Unit 1.

When digraphs are introduced lighter colours can be used to reinforce the concept of digraphs. (Light green for consonant digraphs in Unit 2 and light blue for vowel digraphs in Unit 4).

In the slideshows, it’s a way of showing a student, “This is a light green circle, therefore you need to use a consonant digraph.”

Remember you can’t “hear” a digraph. A digraph is simply a way of writing some sounds.

For young learners, you may decide not to use the colour-coding when using the stones.

BLENDING

Blending is simply the reverse of segmenting. Instead of showing the picture to the student, the other side of the card is shown. The student says each sound as they touch each circle and then blends the sounds to say the word. The card is turned over to reveal the picture.

Alternatively, the teacher does not show the card to the student but instead, provides the circle strip and the marker. The teacher says the sounds.

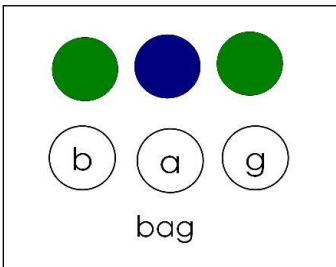
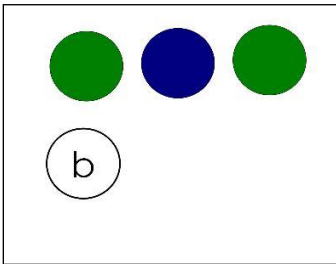
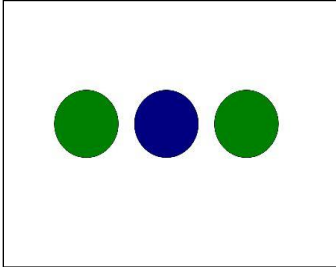
The student writes the corresponding letters in each circle. The student then blends the sounds to make a word and then rewrites the word on the line.

The teacher then shows them the letters on the card and the student checks if they have the correct letters in each circle. The card is then turned over to reveal the picture.

THE WORD LISTS

The word lists at the end of the fold-over card document are usually used for teacher reference – to ensure that the pictures are being named correctly when presented.

The word lists can also be used for extended reading practice after the unit has been completed. Print the page and cut up each word. The vowels in the circles can also be used as a student reference when spelling the words in each unit.



With each unit (or subunit) comes a slideshow. The student should be set up with the slideshow alongside a teacher, or alternatively, the slideshow can be presented to the whole class with students taking turns to participate. It is important that a teacher is present to model, to check performance and to give feedback when necessary. For this reason, sound has not been provided along with the slideshows. **The resource is a teaching tool and requires a teacher's monitoring.**

Some pictures are a little ambiguous, so until the teacher is familiar with each slideshow, it is recommended they have the *WORD LIST* nearby (at the end of this document). This way, they can correctly name the picture for the student or class.

The procedure is as follows:

Each slideshow begins with a title page, where graphemes appear in circles. Encourage students to say the sounds for each of the target graphemes. Next, some of the slideshows include a number of slides that encourage students to think about and discuss each grapheme – the sounds they might make and any associated *orthographic patterns* (patterns relating to where in a word a particular grapheme is used). The Learning Tips on page 3 of this document help teachers direct this discussion.

After this, the first slide appears with a picture. The teacher should name the picture and if it is an unfamiliar word, put it in a sentence.

Click! The next slideshow presents the required number of circles. The green circles represent consonant sounds and the blue circles, the vowel sounds. The lighter ones, digraphs.

Click! The circles will move up, meaning that it is time to start segmenting! Click again and the first circle will pulse. The student should try and say the first sound. Click, and the second circle will pulse, as the student says the second sound. Click, and the next sound should be said and so on.

The next clicks will see the appearance of the corresponding graphemes, one by one. This reinforces the phoneme-grapheme links. As each grapheme appears, the student should try and say the sound again.

Finally, the last click will make the complete word appear. It is nice reinforcement to have a sheet of paper next to the computer, so the student can write the word down.

An alternative is to provide each student with circle strips and a whiteboard marker. As the slideshow is shown by the teacher, the students write letters in their circles and then checks them as the slideshow progresses.

Continue through the slideshow using the procedure above.

Reference:

Share, D., Jorm, A., Maclean, R., & Matthews, R. (1984). Sources of individual differences in reading acquisition. *Journal of Educational Psychology*, 76, 1309-1324.

WORD LISTS for SLIDESHOWS

UNIT 1

bus
bag
cot
cut
beg
can
dot
bog
dip
ant
bin
zip
fan
lip
fog
dam
jog
fat
hat
sun
hot
jam
leg
beg
log
jet
men
mop
net
run
old
pet
pig
rag
rat
wig
sit
sad
top
act
vet
wet
yak

UNIT 2:1

neck
duck
kiss
pick
miss
hill
lick
bill
pack
doll
sick
gull
fizz
peck
moss
cuff
less
huff
buzz
wick

UNIT 2:2

rash
ship
king
chip
cash
thong
sing
shop
wing
fish
fang
thin
posh
chin
ring
bang
thing
chop

UNIT 3

drip
clap
flip
swim
flag
brush
club
grub
crash
drum
twig
plug
nest
spin
spot
plant
tent
stop
twin
stamp

UNIT 4:1

bead
leaf
meat
clay
feet
bait
tree
say
room
play
moon
chain
deep
shoot
teeth
rain
tray
root
boot
feed

UNIT 4:2

boat
blow
boy
cloud
shout
snow
coat
boil
road
foil
pouch
point
throw
cow
howl
soap
low
coin
bow
mow

UNIT 4:3

arm
art
dark
burn
sharp
worm
work
farm
dirt
fern
shark
hurt
jar
turn
scar
world
stir
shirt
skirt
surf

UNIT 4:4

torch
chew
cord
new
lawn
saw
war
warm
corn
paw
yawn
wart
fork
group
soup
jaw
draw
few
thorn
short