**SET 10** 

# Paul's rocket launch

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Written by Jacqui Edwards, based on a science experiment 'Fizzy bottle rockets'. Illustrated by Trent Lambert.

> SPELD SA Phonic Book Series

## Learning to read

SPELD SA Phonic Books support the teaching of reading by using a structured synthetic phonics approach. They are designed to build on the pre-reading skills of oral language and phonological awareness needed for reading success. The books support the learning of letter-sounds and blending in a sequential phonic order, helping students to develop their independent decoding skills. The books also contain limited high frequency words that need to be taught before reading the book. The questions and activities focus on increasing a student's vocabulary and fluency and encourage the student to make deeper connections with the author's message.

## Paul's rocket launch (137 words)

#### Before reading the book, use the practice page to:

#### 1. Revise the alternative spellings for sounds

#### 2. Teach the blending of letter-sounds in regular words

The student points to each letter or combination of letters, saying the sound they represent. Swipe left to right under the letters, saying the sounds quickly and smoothly together to read the word. *e.g. sh-ow-ed is 'showed' ; s-c-r-ew is 'screw'; l-au-n-ch is 'launch'.* 

During single word practice, check that the student understands the meaning of the word.

If the student is having difficulty hearing the word when blending:

- repeat the sounds more than once in succession to help the student 'hear' the word
- model stretching the sounds together without pauses, e.g. nnnniiiiiip, is 'nip'
- use letter tiles and push them together while saying the sounds.

#### 3. Teach the high frequency words

Tell the student the words and determine any 'tricky' parts by breaking up the word into its sounds. Many high frequency words will be able to be sounded out later as the student learns more sounds and how they are written.

#### **Reading tips**

A combination of letters can represent a sound, such as in boat (b-oa-t), song (s-o-ng), fern (f-er-n), shout (sh-ou-t), or night (n-igh-t).

A sound can be written as different letters or letter combinations, such as the sound /ai/ in 'rain', 'play', 'make', the sound /ee/ in 'sleep', 'heat', 'happy' and the sound /ou/ in 'shout' and 'brown'.

A letter or letter combination can also represent different sounds, such as <ow> in 'how' and 'grow' or <y> in 'yellow','try' and 'mystery'.

Words can contain split vowel digraphs, such as in 'make', 'eve', 'bite', 'note' and 'tune'.

The suffix (ed) can represent the sound /d/ as in 'rubbed', /t/ as in 'packed' and /id/ as in 'landed'.

Words can contain schwa vowel sounds. The schwa is pronounced as an /uh/ sound, such as in, 'Nana', 'butter', 'across', 'the'. Explore with the student which part of the word has the schwa sound by breaking the word into its sounds. Take note of how the schwa sound is spelt.

## **Practice page**

Set 10 includes words with alternate spellings for the sounds /oa/, /ou/, /er/, /ue/, /oo/ and /or/.

Practise blending sounds in words

<b>ow</b> /oa/	showed	followed	
ow /ou/	how	down	
ir /er/	third	first	
ur /er/	turned		
<b>ew</b> /oo/	screw	flew	
au /or/	Paul	launch	
al /or/	small		
Revision	escape	gas	rocket
	fizzy		

Practise high frequency words

to	of	two	the	put
int	to	why	does	water
bot	tle	whoosh	pushes	

## Vocabulary

The words on this page can be used to help the student's comprehension before, during or after reading the book. Link the meanings of words with what the student already knows, show examples or have students act out the words.

fizzy	- bubbly		
tablet	– a pill		
upside down - the wrong way round			
screw	- turn to tighten down		
launch	- take off		
escape	- break free		
Whoosh!	- the sound of the rocket going up		

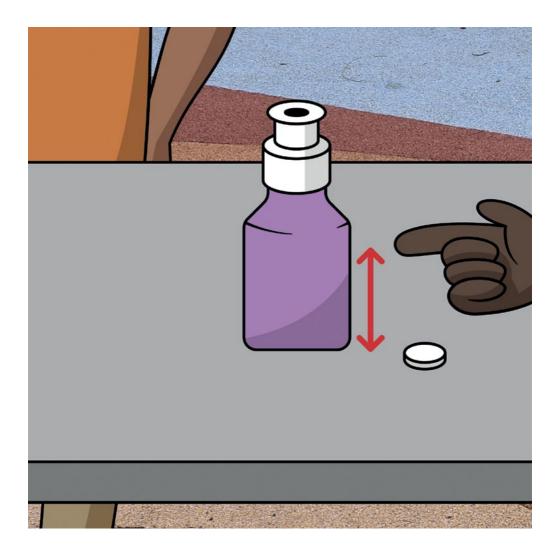
### Help with syllables

plas/tic rock/et es/cape teach/er fizz/y up/side count/ed



Paul's teacher showed him how to make a rocket:

1. First get a small, plastic bottle with a pop-top lid.



- 2. Then fill the bottle with water, two-thirds of the way.
- 3. Put a fizzy tablet in the bottle.



- 4. Quickly screw on the pop-top lid and put upside down in a mug to stand the bottle up.
- 5. Stand back!



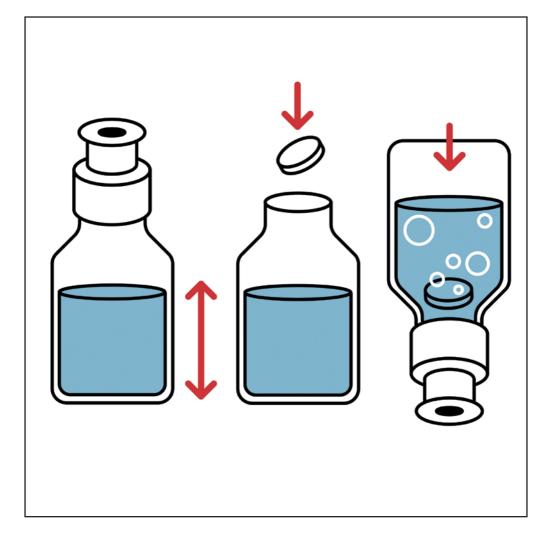
Paul followed the steps and turned the bottle upside down in the mug.



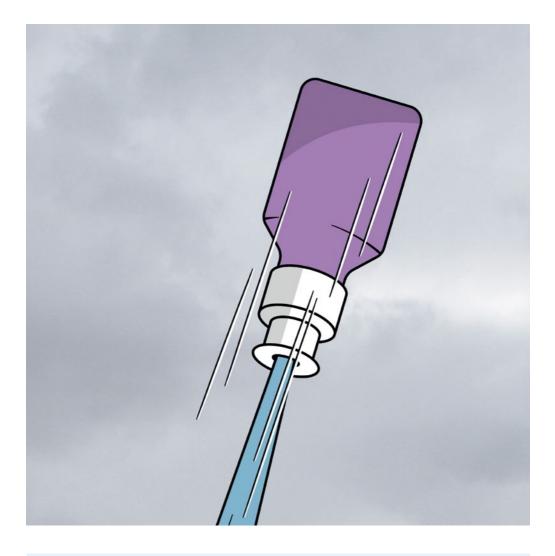
Paul counted down for the launch. 10, 9, 8, 7, 6, 5, 4, 3, 2, 1



Whoosh! It flew into the sky.



Why does the rocket go up? The fizzy tablet lets off a gas that fills the bottle.



The gas needs to escape. The lid pops open as the gas pushes the water down and out. This makes the bottle go up.

## From blending to fluency

To develop fluency, the student needs to re-read the same book multiple times. Students might initially sound out every word and re-read every sentence but, with practice, blending will become more automatic. The fluency chart can be used to develop automaticity of blending by providing single word blending practice.

While reading the book, the student:

- blends the sounds of each unknown word in the sentence
- identifies and reads high frequency words
- re-reads the sentence from the beginning
- discusses the meaning of the sentence

When finished, the student needs to re-read the whole book and practise reading the same book until they can read at a steady pace with minimal sounding out.

## Making connections - questions and discussion

After the student has read the book, or the relevant page, ask them one or more of the following questions and discuss:

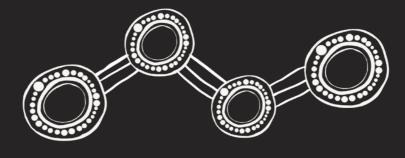
- 1. Can you re-tell the steps for the experiment in order?
- 2. Paul counted from 10 to 1. Can you?
- 3. From the teacher's instructions, make a list of the items you need to do the experiment.
- 4. Try this experiment yourself. Can you make the bottle go higher? How much water do you need? Does hot or cold water make it go higher? Experiment! Have a go!
- 5. Practise measuring one third of a cup with a cup measure or a jug. Can you use something else to measure 1/3 cup?
- 6. What did you learn from this experiment? If an experiment does not work the first time, what can you do?

Story based on a science experiment '*Fizzy bottle rockets*' from The Royal Institution -Science Lives Here, <u>www.rigb.org/families/experimental</u>. Use a child-friendly search engine to look for other fizzy bottle rocket experiments and information sheets.

\*Note the fizzy tablet can be Alka Seltzer which contains medicine. Supervise children when doing this experiment. Do not let them eat or swallow the tablet. A Berocca-type tablet might also work. This experiment can also work with vinegar and Bi-carb soda.

# **Fluency chart**

lid	mug	gas	how
way	turn	show	fill
down	flew	open	make
first	small	thirds	steps
stand	fizzy	launch	rocket
screw	follow	escape	teacher



#### Cover artwork by Elizabeth Close

Elizabeth Close is an A<u>n</u>angu woman from the Pitjantjatjara and Yankunytjatjara language groups in the APY Lands in outback South Australia. She was born in Adelaide and spent much of her upbringing in remote communities, learning her language and receiving cultural education.

'This artwork represents the literacy and numeracy learning journey, and the path towards independent learning. The circles represent the collaborative learning and supports around children with specific learning difficulties, including children, schools, families, SPELD SA and others.' **Elizabeth Close**, Artist.

#### About this series

The SPELD SA Phonic Book Series complements the teaching of reading and writing using a structured synthetic phonics approach. SPELD SA aims to help Aboriginal students engage with phonic books by having characters, content and settings that reflect Aboriginal communities. In developing this series, SPELD SA has consulted with people who live and work in the A<u>n</u>angu, Pitjantjatjara Yankunytjatjara (APY) Lands. We understand that the content, settings and characters may not reflect all Aboriginal people and their experiences but hope that Aboriginal students learning to read can find some familiarity in and connection with these books in their literacy journey.

Each set of books introduces a group of sounds for students to blend to read words. The books with a single star icon on the front cover contain a lower word count and less high frequency words. The books with two stars contain a higher word count, a greater number of high frequency words and/or more complex word structure. Please consider your student's ability when choosing a book for them to read. For a comprehensive explanation of the structure of the series, please refer to the SPELD SA website.

#### Acknowledgments

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SPELD SA is grateful for the contributions of volunteers for: consultation and project development; writing texts, comprehension questions, charts and games; illustrating, photography and graphic design; character development and cultural advice; speech and language advice. This is a wide community project, with talents, expertise and knowledge being shared for a common purpose – to improve literacy. Thank you all.

Book design by Tricia Smith Design, compilation and additional design by Janet Stone.

SPELD SA Phonic Books follow the sequence of letter-sounds used in the Jolly Phonics synthetic phonics program. The books can be used with other phonics programs.

- Set 1 s, a, t, p, i, n
- Set 2 c, k, ck, e, h, r, m, d
- Set 3 **g**, **o**, **u**, **l**, **f**, **b**
- Set 4 ai, j, oa, ie, ee, or
- Set 5 z, w, ng, v, oo (book), oo (room)
- Set 6 y, x, sh, ch, th (think), th (that)
- Set 7 qu, ou, oi, ue, er, ar
- Set 8 y (sunny), a (apron), a-e (cake), e (female), e-e (eve), i (silent), i-e (kite), o (open), o-e (home), u (student), u-e (tune)
- Set 9 **ay** (play), **ey** (they), **oy** (toy), **y** (mystery), **ea** (dream), **ie** (chief), **y** (dry), **igh** (night)
- Set 10 oe (toe), ow (rainbow), ow (now), ir (bird), ur (turn), ew (few), au (launch), aw (paw), al (talk)



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