

David Newman

Speech – Language Pathologist

# Sound Partners */ʃ/ & /ʒ/*



Sound stimulation techniques for  
the */ʃ/ & /ʒ/* speech sounds

# **A Friendly Reminder**

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# INTRODUCTION

The purpose of this program is to provide clinicians with speech sound elicitation techniques that involve the /f/ & /z/ speech sounds. The program features two parts. *Part 1* focuses on elicitation techniques for the /f/ & /z/ sounds. *Part 2* features general speech therapy tips to move a child from sound level to consonant/vowel combinations. The speech therapy tips section is based on *traditional* articulation intervention techniques.

## Why work on speech sound errors?

Sound errors can become so firmly established in the child's language that he/she never corrects them and the error remains, even into adulthood. Speech sound errors if left untreated also tend to turn up later in children's written language as spelling errors.

This particular Sound Partners program targets the /f/ & /z/ speech sounds. Each sound features a cutaway diagram that helps the clinician and client to visualize the correct approximation of the target sound.



The unvoiced /f/ features a **green** image.

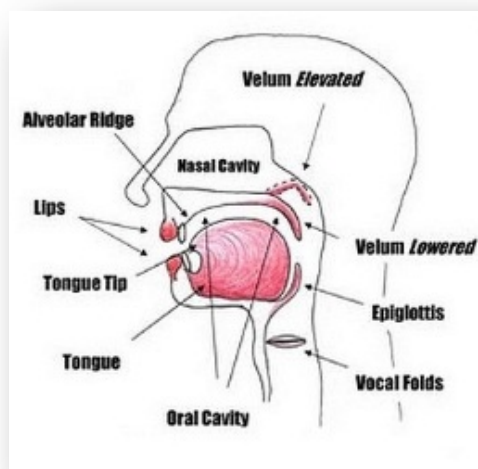


The voiced /z/ features a **red** image.

# SPEECH SOUND STRUCTURES

Speech sounds are produced by the precise movements of the tongue, palate, velum and lips, which create the *vowel* and *consonant* sounds that make up the phonemic elements of language.

We make speech sounds by using our **tongue**, **teeth** and **lips** to control the air as it passes through our mouth. Our lips, tongue and teeth all work in harmony to turn the air from our lungs into speech sounds (phonemes) and ultimately spoken words. Consonants are created by obstructions of the air flow created by our tongue, teeth, and lips. In contrast, vowels are generally produced with an open vocal tract.



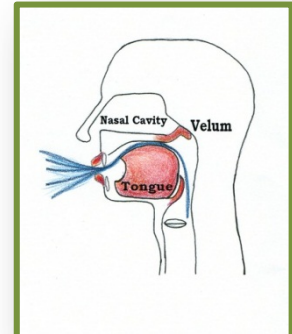
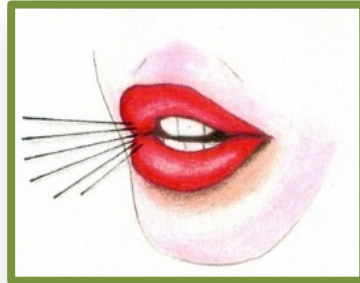
# PART 1

## SPEECH ELICITATION TECHNIQUES FOR

/ʃ/ & /ʒ/

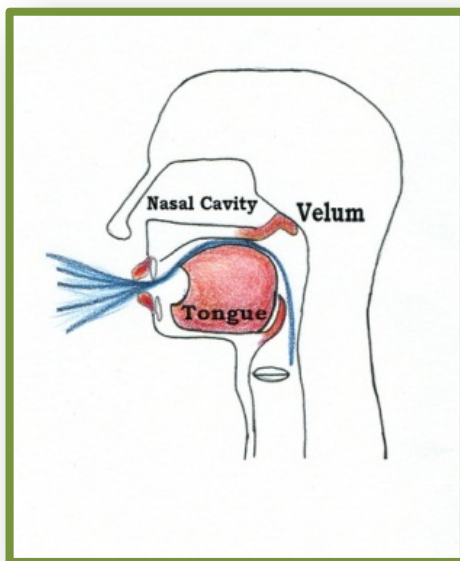
# SOUND PARTNERS

/ʃ/



## How is the /ʃ/ sound produced?

The tongue elevates high within the mouth and touches the upper back teeth. The blade of the tongue retreats to the rear of the oral cavity which helps to form a spacious yet shallow valley down the centre of the tongue. This mouth shape produces a long shallow constriction which begins at the velum (soft palate) at the rear of the oral cavity to the alveolar ridge toward the front of the oral cavity.



## Cutaway /ʃ/ Diagram

As can be seen in the diagram, the airstream passes between a narrow fissure between the velum and the tongue. Note that the tongue is slightly raised and the vocal folds *do not* vibrate. The /ʃ/ (*sh*) sound is **voiceless**.

# SOUND STIMULATION TECHNIQUES

## Demonstrate correct /ʃ/ production

Demonstrate the characteristics of correct /ʃ/ production to the client.

- For the /ʃ/ sound the blade of the tongue is at the rear of the oral cavity touching the upper back teeth.
- The vocal folds do not vibrate and are silent.
- The airstream passes through the centre of the oral cavity over the shallow valley between the tongue and the roof of the mouth.
- The lips stick out slightly like puckering for a kiss.

## Client instruction

Work through the following procedures with your client.

Script...

1. Raise your tongue so that you can feel the upper teeth at the back of the mouth.
2. Touch the tongue tip at the roof of the mouth then *lower* it so that it doesn't touch any structure in the mouth. The tongue should feel like it is in the *middle* of the mouth.
3. Pucker your lips.



4. Allow the airstream to flow over the centre or the middle of the tongue. (*I prefer to not use the term **blow** as the client can become confused and attempt to blow the airstream by pursing the lips, which changes the structure of the mouth*)

## Shaping /f/ from similar sound structures

The /f/ sound can be shaped from other sounds which have some similarities to the mouth shape and tongue position of the /f/ sound.

### Script...

1. The /f/ sound can be moulded and formed from the /n/ sound. We do this by first shaping our mouth for the /n/ sound by touching our tongue tip to the roof of the mouth (*alveolar ridge*) then lower the tongue a little.
2. Next, pucker the lips slightly.
3. Allow the airstream to flow over the tongue. Your tongue tip should be not touching any structure and you should feel the top of the tongue touching the upper back teeth. The sound should be a little *windy*.

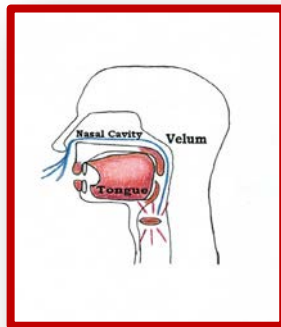
### Script...

1. The /f/ sound can also be moulded and formed from the /s/ sound. We do this by first creating the /s/ sound. (*Demonstrate the /s/ sound*)

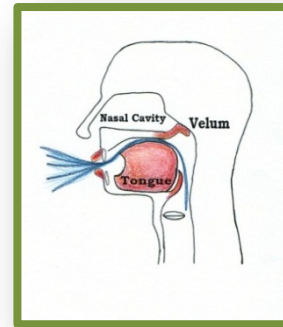
2. Prolong the /s/ sound and slowly reverse the tongue so that it travels gradually to the rear of the mouth. *(This can be demonstrated with your hand representing the tongue and pulling the hand back a little to show the correct movement)*
3. Note that the tongue should be touching the upper back teeth.
4. Pucker the lips slightly.

## Shaping the /ʃ/ sound from the /n/ sound

/n/ sound

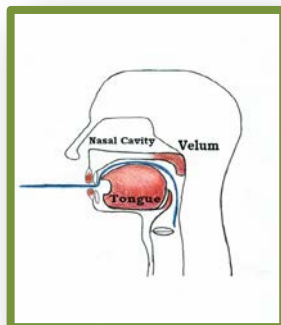


/ʃ/ sound

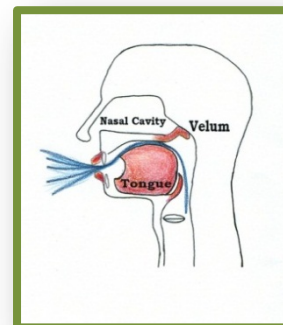


## Shaping the /ʃ/ sound from the /s/ sound

/s/ sound

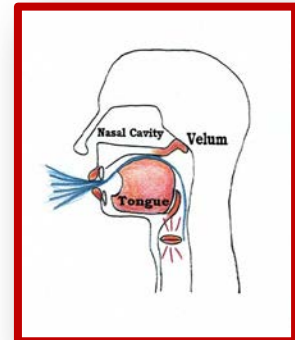


/ʃ/ sound



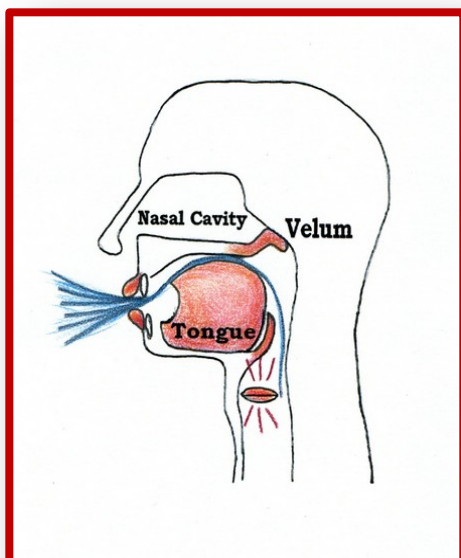
# SOUND PARTNERS

/z/



## How is the /z/ sound produced?

The /z/ (*zh*) sound is the **voiced** twin of the /j/ and is produced similarly. The tongue elevates high within the mouth and touches the upper back teeth. The blade of the tongue retreats to the rear of the oral cavity which helps to form a spacious yet shallow valley down the centre of the tongue. This mouth shape produces a long shallow constriction which begins at the velum (soft palate) at the rear of the oral cavity to the alveolar ridge toward the front of the oral cavity.



## Cutaway /z/ Diagram

As can be seen in the diagram, the **voiced** airstream passes between a narrow fissure between the velum and the tongue. Note that the vocal folds *vibrate*. The /z/ sound is **voiced**.

# SOUND STIMULATION TECHNIQUES

## Demonstrate correct /z/ production

Demonstrate the characteristics of correct /z/ production to the client.

- For the /z/ sound the blade of the tongue is at the rear of the oral cavity touching the upper back teeth.
- The vocal folds **vibrate**. The sound is **voiced**.
- The **voiced** airstream passes through the centre of the oral cavity over the valley between the tongue and the roof of the mouth.
- The lips stick out slightly like puckering for a kiss.

## Client instruction

Work through the following procedures with your client.

Script...

1. Raise your tongue so that you can feel the upper teeth at the back of the mouth.
2. Touch the tongue tip at the roof of the mouth then *lower* it so that it doesn't touch any structure in the mouth. The tongue should feel like it is in the *middle* of the mouth.
3. Pucker your lips.

4. Allow the **voiced** airstream to flow over the centre or the middle of the tongue. *(Again, try not to use the term **blow** as the client can become confused and attempt to blow the airstream by pursing the lips, which changes the structure of the mouth)*

## Shaping /ʒ/ from similar sound structures

The /ʒ/ sound can be shaped from other sounds which have some similarities to the mouth shape and tongue position of the /ʒ/ sound.

### Script...

1. The /ʒ/ sound can be moulded and formed from the /n/ sound. We do this by first shaping our mouth for the /n/ sound. Touch your tongue tip on the roof of the mouth (*alveolar ridge*) then lower the tongue a little so that it no longer touches the roof of the mouth.
2. Next, pucker the lips slightly.
3. Allow the airstream to flow over the tongue. Your tongue *tip* should be not touching any structure and you should feel the top of the tongue **touching** the upper back teeth. The sound should be a little *windy*.

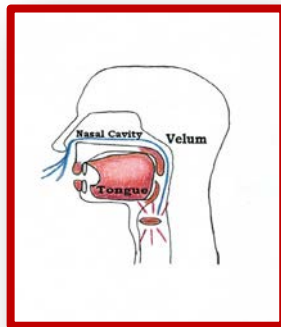
### Script...

1. The /ʒ/ sound can also be moulded and formed from the /s/ sound. We do this by first creating the /s/ sound. *(Demonstrate the /ʒ/ sound)*

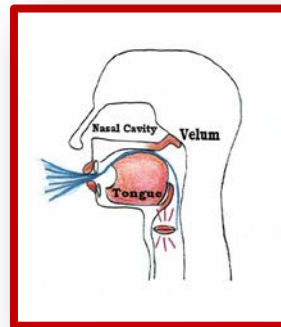
2. Prolong the /s/ sound and slowly retract the tongue so that it travels gradually to the rear of the mouth. *(This can be demonstrated with your hand representing the tongue and pulling the hand back a little to show the correct movement)*
3. Note that the tongue should be touching the upper back teeth.
4. Pucker the lips slightly.

## Shaping the /z/ sound from the /n/ sound

/n/ sound

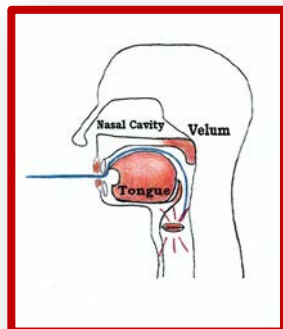


/z/ sound

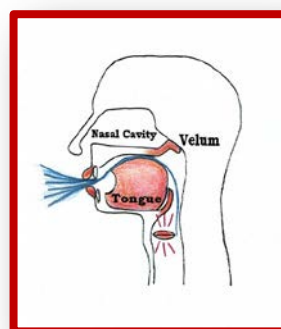


## Shaping the /z/ sound from the /s/ sound

/z/ sound

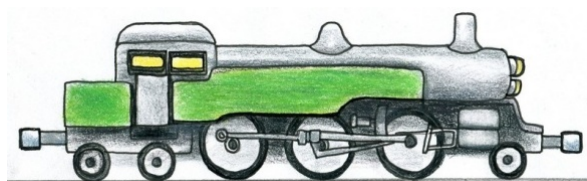


/z/ sound



# PART 2

## GENERAL SPEECH THERAPY TIPS AND TECHNIQUES



# SPEECH THERAPY TIPS

- **Practice regularly.** Try to keep speech therapy sessions to 15-20 minutes at least three times a week for best results.
- Make sure the therapy area is quiet, with little or no distractions.
- Mix things up a bit. Don't always do the same type of therapy or play the same game over and over. Keep the session interesting to both yourself and your child.
- Be always positive with your feedback. Don't say, '*no that's wrong*,' try instead, '*you've nearly got it, but try it with your tongue....*' (give detailed instructions)
- Provide good models of the target sound, or target syllable or word. Make certain your instructions are specific.
- Make sure the way you and your child are seated and oriented is optimum. Position yourself about a meter away from your child, preferably sitting across a table. Try to keep the same eye level as your child when doing speech therapy. For taller people this may include sitting in a smaller chair so that you don't tower over the child while seated.



# SOUND ELICITATION TECHNIQUES

**Imitation:** Imitation is a useful technique when teaching a child any new speech sound. Imitation requires the child to copy the clinician's correct model of a speech sound. For instance, the clinician first engages the child's full attention and then produces a clear /s/ sound. The clinician is then silent and the child is encouraged to copy exactly the sound the clinician has produced.

In many cases of course the child will struggle to accurately reproduce the sound. This is fine, because the child's inability to correctly reproduce a clear target sound gives the clinician a good understanding of how the child's speech error is occurring.

**Phonetic Placement:** This is perhaps the most popular method of unearthing new and correct speech sounds in young children. Essentially the clinician demonstrates to the child how to correctly place their tongue, teeth and lips - their articulators, in order to produce the correct speech sound.

# Speech Therapy - Contingency Continuum



## Isolated Sound Level

- Model the target sound, child then copies the sound.
- Once child is producing target sound 80% - 90% of the time, try syllable level.

## Syllable Level (Nonsense Syllable) cv (consonant - vowel)

- Model correct sound + vowel.
- Once child is producing target 80% - 90% of the time, move on to familiar syllables.

## Syllable Level (Familiar Syllables) cv (consonant - vowel)

- Model correct sound + vowel.
- Once child is producing target 80% of time, move on to target sound in words.

## Word Level cvc (consonant -vowel -consonant)

- Model correct sound in target word.
- Once child is producing target sound 80% of the time, at word level, in many different words, move onto phrase level.

## Phrase Level 1

- Model correct sound in short phrases.
- Child copies your model.
- Once child is producing target sound 80% of the time at phrase level, move on to multiple sounds in phrase.

## Phrase Level 2 (Multiple sounds)

- Model multiple target sound (2 or more) in longer phrases.
- Child copies your model. Move on to sentence level.
- Sentence Level →

## Speech Therapy - Contingency Continuum (*Example*)

### Isolated Sound Level

- Clinician models target sound to child. The sound is /s/.
- Child, with many prompts, can maintain accurate /s/ 80% - 90% of the time.

### Syllable Level (Nonsense Syllable) cv (consonant - vowel)

- Clinician models the /s/ in nonsense syllables – ‘soo, sar, soi,’ etc
- The child, with much practice, is able to produce the target 80% - 90% of the time

### Syllable Level (Familiar Syllables) cv (consonant - vowel)

- Clinician models the /s/ in familiar syllables – ‘so, saw, say,’ etc
- Once child is producing target 80% of time, move on to target sound in words.

### Word Level cvc (consonant –vowel -consonant)

- Clinician models the /s/ in short cvc words – ‘sun, seed, said, sat,’ etc.
- Once child is producing target sound 80% of the time, at word level, in many different words, move onto phrase level.

### Phrase Level 1

- Clinician models target in short phrases – ‘my son, her son, the saw, my saw.’
- Child copies the model.
- Once child is producing target sound 80% of the time at phrase level, move on to multiple sounds in phrase.

### Phrase Level 2 (Multiple sounds)

- Clinician models multiple target in longer phrases – ‘my sad son, the silly old sack, the super sailboat.’
- Child copies and then generates own phrases. Move to sentence level.
- Sentence Level →

# TARGET SOUNDS AND SYLLABLES

Once the client is able to produce the target sound about 80% of the time, it's best to move onto the next stage. The goal here is for your child to produce the target sound with a vowel - consonant+vowel, **cv**.

A nonsense syllable is useful because it allows the child to practice the new phoneme in a variety of phonetic contexts. An advantage is that the new sound can be practiced without the child automatically producing the long established sound error. The old sound error often intrudes when the child attempts the *new* sound in familiar words.

Nonsense syllables contain the target consonant sound plus a vowel. The target sound is practiced with the vowel in different positions. So for the target sound /s/ we may see

**Initial Position:**    (*beginning sound*)        sar    soo    sai    see    sow

**Final Position**    (*last sound*)                oos    ees    ais    ows    eis

**Medial Position**   (*middle sound*)        eesee        oosoo        aysa

**Sequence:** Say the sound with the vowel and have the child copy your model. It's ok to elongate the target sound too, so that the child hears it clearly. For instance, **ssseeeee**. Your child then copies the sound combination: **ssseeeee**, etc.

If the child has difficulty producing the sound + vowel you may need to separate the *target sound* and *vowel*. This occurs because the established sound error attempts to intrude. For example, for the /s/ phoneme the child may produce *see* as the voiced stop *sdee*. The old sound error isn't ready to release its hold. The voiced stopping process of /d/ has a strong neural connection. The goal is to replace the old sound process /d/ with the new sound /s/.

A simple technique is to use a picture of a train and carriage. Glue the pictures onto card or laminate them so they can be moved about. Gradually move the two cards closer until they (the target sound + vowel) are joined together while modelling the target sound with the vowel.



ssss .....eee



sss...eee



ssssee

# References

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# Appendix

## Sound Tree

Each time your child produces a correct sound then he/she gets to stick a leaf on the sound tree. You can mix it up a little also. So, once your child is becoming confident with the new sound, then after 5 correct sounds they get to place a leaf on the tree.





## Sound Tree – Leaves

**Instructions:** Photocopy and cut out the leaves and paste them onto the Sound Tree every time your child produces the correct target phoneme.

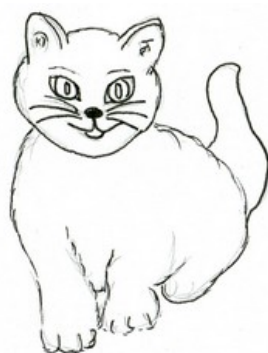
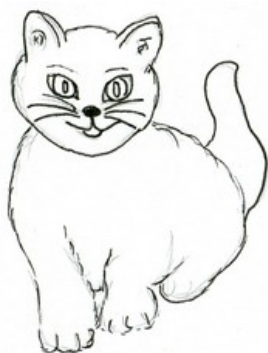
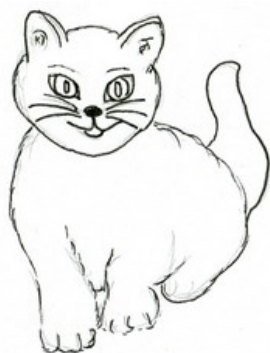
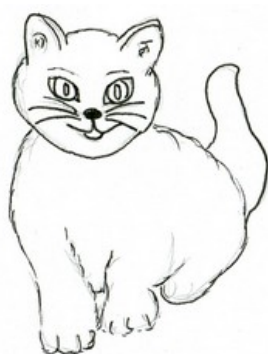
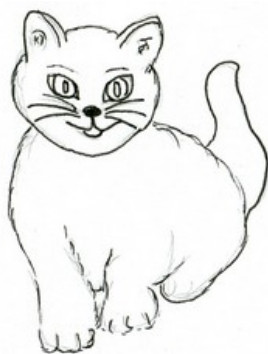
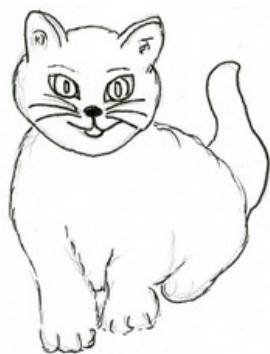
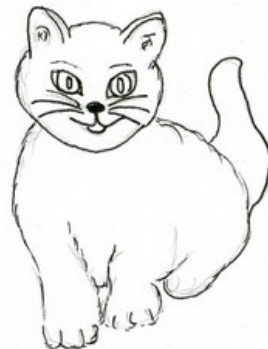
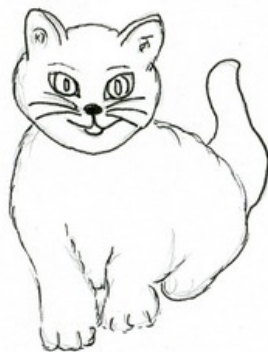
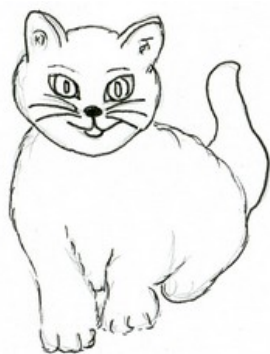
**Photocopiable**



## Sound Kitten

**Instructions:** Each time your child produces a correct target sound, or 5 correct target sounds, then they get to colour in one of the kittens.

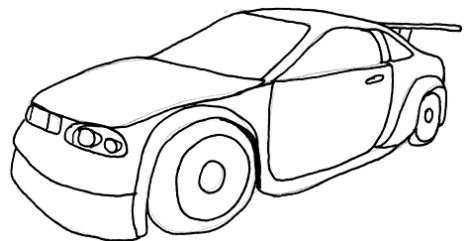
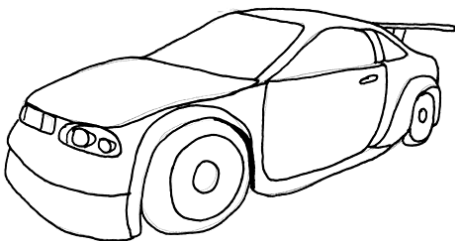
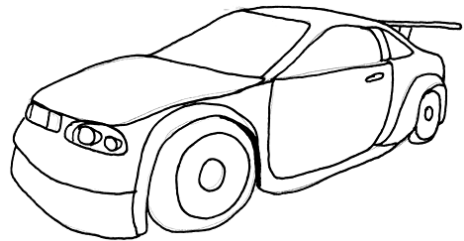
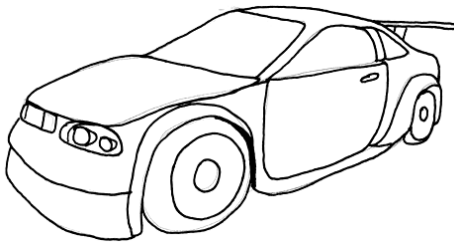
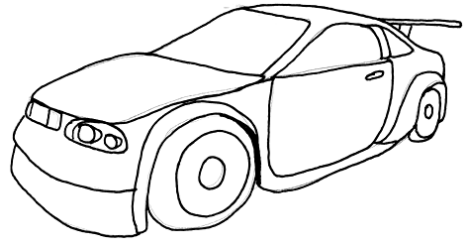
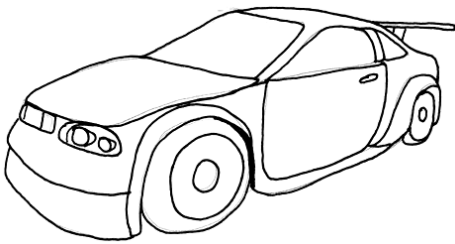
**Photocopiable**



## Sound Car

**Instructions:** Each time your child produces a correct target sound, or 5 correct target sounds, then they get to colour in one of the cars.

**Photocopiable**



## Consonant - Vowel Visual Stimulus

Photocopy and cut out the train and carriage to demonstrate to your child the separation between consonant and vowel. Gradually move the train and the carriage closer until they touch while reducing the distance between consonant and vowel sounds. **Photocopiable**

