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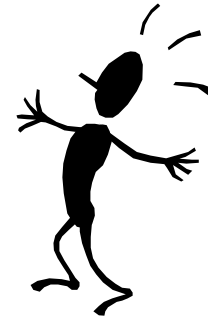
Welcome to...

# *Phonology Day 1 Training*

With **all of us** in mind.

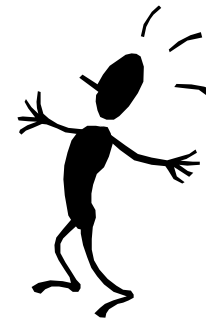
# Aims of the day

- **How** and **when** speech sounds develop
- **Where** sounds are made in the mouth
- **Pure sounds** and **properties** of sounds
- The **Speech Chain**
- Sound screening **assessment**
- **Referral** to Speech and Language Therapy
- General **strategies** to help in the classroom
- **Attention and Listening** levels
- **Quiz**



# Purpose of the training

- To give background knowledge
- Enable you to start and use activities and strategies
- Part of a child's treatment
- Enables you carry out regular practice
- Opportunity to work with hard to reach children



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# Icebreaker

- Have you ever met anyone famous?
- What's something nice that's happened to you this week?
- What's the last thing that made you laugh out loud?

# Speech not language...

## Sounds not letters...

- Speech is how we say things, not what we say.
- We also call speech sounds 'phonology'
- Remember the sounds in words are not always the same as the written word.

# Sounds not letters

## PRACTICAL

What sounds are in the following words....



# Acquisition of Speech Sounds

- Speech development from birth
- Order of speech sound development



# Learning Speech Sounds from Birth



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**When & How**  
Should  
My Baby  
**Babble?**



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# Speech Development from Birth



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- Complex process
- Starts from birth
- Born with 'in-built' abilities
- Cry - range of cries
- Cooing - increase noises
- Babble - experimenting with sounds
- Words - parents model words



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# Order of speech sound development

- **Practical activity** – look at the sounds and decide when they start to emerge for children!!

# Typical errors...

What would a child say for these words...

- red =
- sun =
- four =
- watch =

# Delay or disorder

- **Delay:** Children making common speech errors, e.g. replacing difficult sounds with easier sounds.
- **Disorder:** Children making unusual errors, not typically seen in younger children.

# Speech sound articulation

- Where sounds are made in your mouth
- Articulation places: Teeth, lips, alveolar ridge, hard palate, soft palate
- Tongue is not a place of articulation

**Practical Activity – work out  
where sounds are made in  
your mouth!!**

# Pure Sounds

- The ‘pure forms’ of sounds need to be used
- The ‘pure form’ emphasises the ‘properties’ of a sound

**Practical–  
saying pure sounds!!**

# Pure sounds

Say the following as pure sounds:

P

V

B

S

T

CH

F

J

Practice saying the following using the 'pure form'  
of each sound:

Sat

Book

Jump

Fish

# Properties of Sounds

## Group discussion

- What is the difference between
  - d/g
  - t/s
  - p/b

# Properties of Sounds

The properties of sounds that need to be considered are :-

- Loud or Quiet: whether the sound is voiced or voiceless
- Front or Back: where the sound is made in the mouth
- Long or Short: The length of the sound

# Properties of Sounds

- 1) Long or short?
- 2) Loud or quiet?
- 3) Front or back?

B =

M =

S =

CH =

K =

# Properties of Sounds

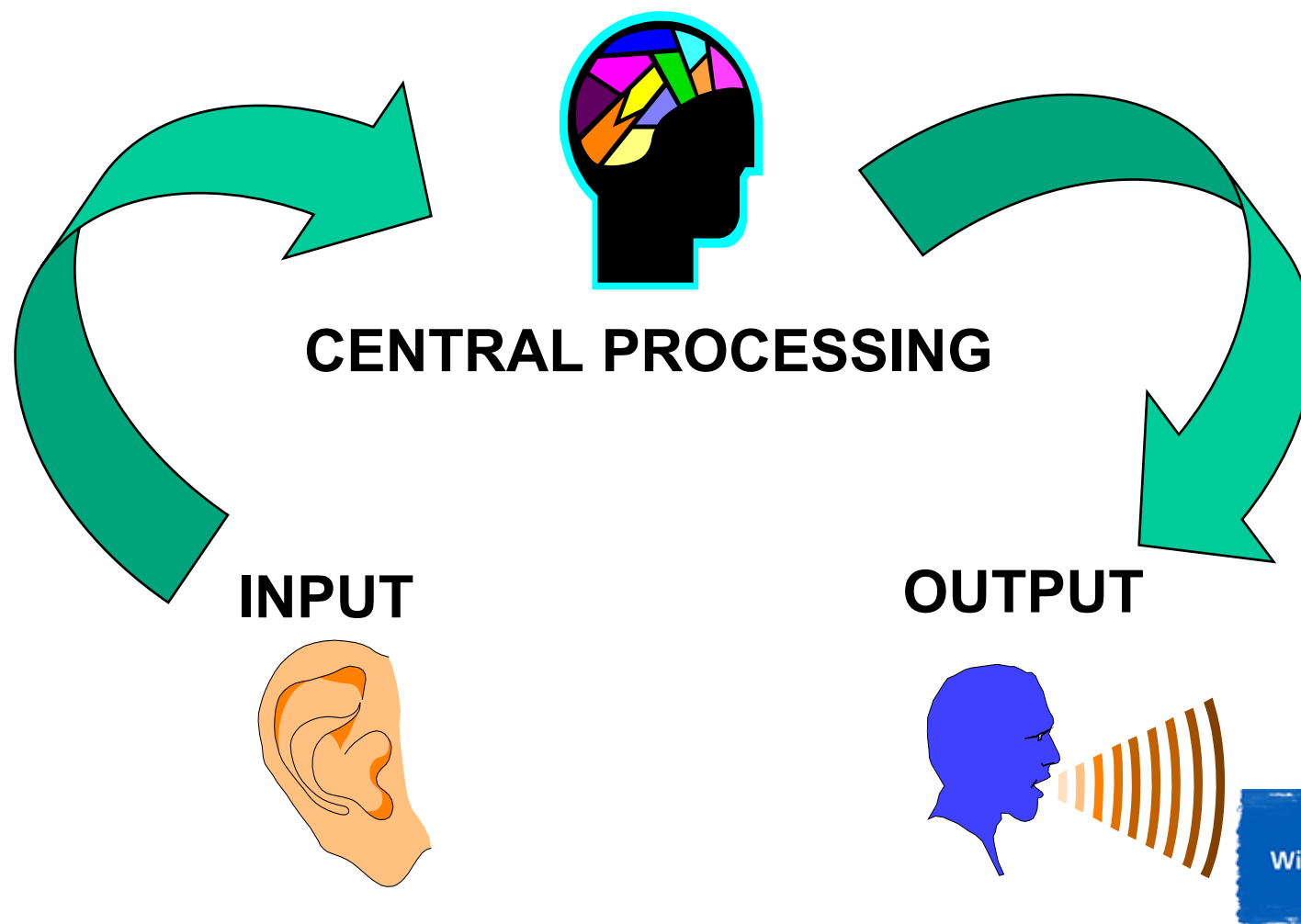
- The properties of different sounds can be emphasised when we use the 'pure form' of a sound

*For example - make an 's' really long, and a 'p' really short*

- Children often confuse properties of sounds

*For example - a child may replace long sounds with short ones e.g. 's'  
→ 't'*

# The Speech Chain...



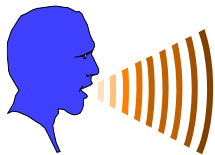
# The Speech Chain



- **INPUT** – Hearing, discrimination, listening



- **CENTRAL** – Knowledge about the word- sound and meaning



- **OUTPUT** – muscles, speech rate, volume
- **Practical– what can go wrong at each of these levels?**

# More about central processing



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**Phonological representation of the word** – sounds in the words  
(beginning, middle and end) syllables, rhyme group

*e.g. pen = 'p' to start, 'e' middle sound, 1 syllable, rhymes with ten*

**Semantic representation** - word meaning

*e.g. pen = stationery, use for writing, plastic, long, has ink*

**Grammatical representation**- type of word, where in sentence

*e.g. pen = noun, plural is pens*

**Orthographic representation** – how the word is written remember  
sounds and letters are not always the same

**Motor programming sequence** - instructions to send to your mouth on  
how to say the word *e.g. 'p' (front, short, quiet) > 'e' (vowel) > 'n' (front,  
long, loud)*

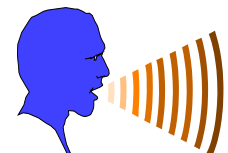
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# Possible Causes of Breakdown



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- **INPUT** – poor attention, glue ear, permanent hearing loss, poor discrimination (refer to the glossary)
- **CENTRAL** – learning difficulties, poor phonological awareness, slow processing / poor memory, localised brain trauma in language centres in the brain, poor sound programming (*dyspraxia*)
- **OUTPUT** – immaturity, developmental delay, cleft lip/palate, weak muscles (*dysarthria*) poor co-ordination of muscles, poor under developed dentition, prolonged dummy and bottle use



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# Speech Sound Screening Tool

- Identify children with speech sound difficulties
- Supports referrals
- Monitor progress
- Can be repeated

**Practical– speech screen practise!!**

# Using the screening tool

- Each picture links to 1 sound in at the beginning or end of a word.
- *Pig* = 'p' initial                      *Cup* = 'p' final
- *Monkey* = 'm' initial              *Drum* = 'm' final
- NB. Nine = listen for both 'n' initial and final on this
- Don't need to listen for 'w' final, 'ng' initial, 'h' final, 'r' final, 'y' final. Not part of our local speech system.
- Tick if you hear the sound clearly. If not write in the sound you think the child used.
- If the sound is missing use symbol

# Mia 2,6 years

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Child 1 - Mia



## Mia 2;6 years

- **Stopping** – z>d, f>p, s>t, sh>t, v>b (but some sounds are emerging eg. f, s, v in final word position)
- **Gliding** – l/r>w sound
- **Cluster reduction** – sw>w, dr>d, br>b
- **Another pattern** is sh>s (very typical in children)
- Refer back to speech norms
- Mia is falling into normal limits for her talking as between 2-3 years s, f sounds are still developing.
- Sounds t, d, k, g, p, b, n, m, w, h in place.
- Showing signs that f, s, and even v, z are developing.
- No need to refer Mia.

# Erin 4,6 years

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Child 2 - Erin



# Erin 4;6 years

- **Fronting:** Erin is replacing back sounds with front sounds. k - t  
tea (key) tot (sock), g - d **d**irl (girl) **dod** (dog)
- **Voicing errors:** d -t wet (red)
- **Stopping:** Erin is using short sounds for long ones f - p, v - b, s  
-t.
- **Final Consonant Deletion:** cheese> tee, five > bye
- Refer back to speech norms Erin has a speech delay
- Needs to be referred to the SLT department but the likelihood is that with some help she will make progress.
- Likely that Erin will need advice and some practise in a short episode of care.

# Rosie 4;6 years

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Child 3 - Rosie



# Rosie 4;6 years

- 'd' substitution for a wide range of sounds – k,g, s,f, sh, v, z, j, ch
- Significant final consonant deletion
- Severe intelligibility issues as many words sound the same and there are fewer contrasts between words
- Initial sound deletion – initial 't'
- Vowel errors e>a and air>ar
- Rosie has a speech sound (phonological disorder)
- She would need a referral

# Episodes of Care



**Initial telephone  
appointment  
with parents**



**School visit**

**Individual  
clinic**

**Training**



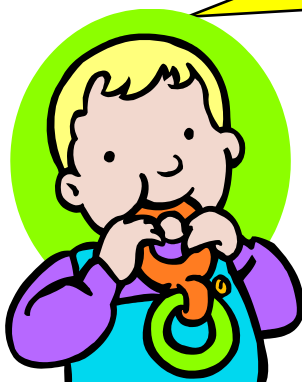
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# Tour of our website

[www.barnsleyspeechtherapy.co.uk](http://www.barnsleyspeechtherapy.co.uk)

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# Golden rule!!



- Model word back accurately
- Do not correct:  
*'it's not tat it's cat, say cat'*



# Are children just lazy?

## Practical

1) Replace 't' with a 'k' in the following sentence: *I went to a party*

2) Replace 's' with a 'd' in the following sentence: *On Saturday we are doing swimming*

Now try replacing 't' with a 'k' in...

- Your full name, age, address, job
- Your favourite film, song, food

# General Strategies

Repetition of  
words and sounds

Younger children  
Blame self when not  
understood

Attention and  
Listening

**Golden Rule!**  
Model not correct

Older Children  
Acknowledge you  
have not understood

Pace tasks and  
own talking

Encourage natural  
eye contact

Close liaison  
Parent-staff

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# Attention and listening

- **Attention and listening skills are crucial for speech sound development**
- **Need to be able to listen to discriminate sounds (hear the difference between sounds)**
- **May need to work on attention and listening before you can work directly on speech sounds**
- **There is a developmental order of development which we use.**

# Order of development

**Stage 1 (0-1 year):** extreme distractibility, listens to the most dominant auditory stimulus

**Stage 2 (1-2 years):** concentrates on a concrete task of his own choosing, not tolerate any intervention by an adult (whether verbal or visual).

**Stage 3 (2-3 years):** Listening skills are single channelled as he cannot listen to an adult's direction whilst he is playing.

**Stage 4 (3-4 years):** still single channelled but child is able to shift his own attention from doing to listening

**Stage 5 (4-5 years):** Listening now become part of a two-channelled process, child can simultaneously listening and do

**Stage 6 (5-6 years):** Listening is multi-sensory system in which a child can listen well whilst doing another activity.  
(Available on handout)

# Practical – match the strategy to the stage



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Give child time to complete  
own choice of activity  
Use the child's name and/or a  
physical prompt to gain their  
attention

Find out what motivates the child  
Use the child's interests and  
incorporate these into play

Say the child's name before giving  
any instructions or expecting a  
response

Use an introductory phrase or  
gesture  
Give information in a clear  
order  
Praise good listening

Use visual prompts to gain  
attention  
Tell the child it is time to listen  
Encourage the child to carry on  
working whilst listening to you e.g.  
practice this using colouring activity

Encourage active listening and  
processing of information

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# Attention and Listening: What can we do to help?

- Sound CD's
- Simon Says
- Listening walks
- Listening to instruments
- Stop/go activities
- Copying rhythms
- Apps

# Attention and listening



Quiet



Good sitting



Good Looking



Hand up before  
Speaking



Good listening



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# Quiz

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# Summary

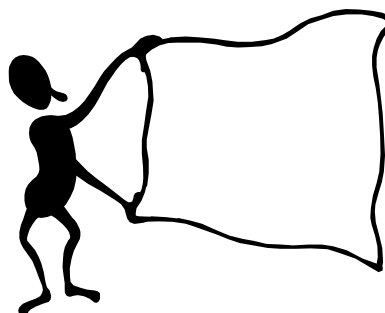
Sound development

Articulation

Pure Sounds

Properties of Sounds

Speech Chain



Screening Tool

Website and referral to  
service

Classroom Strategies