

Transitioning from early years to primary school education

Nicola Hart



Worries

- Will my child get the support they need?
- Will my child's needs be understood?
- Will my child learn?



Topics

- Down syndrome
- Language and communication development
- Vision and hearing
- Role of the SNA
- Learning support
- Literacy and numeracy



Down Syndrome

Basic information:

- Down syndrome is a chromosomal anomaly. People who have Down syndrome have an extra copy of chromosome 21.
- This is a genetic difference that happens in the very early stages of embryonic development.
- It affects all parts of the body.
- It is not a disease.
- Down syndrome occurs in around 1 out of every 444 births in Ireland.



Language development

- Children learn by listening (if people talk to children, they will learn language)
- Children learn through exploring (if they explore their environment with a responsive adult who adds language, they will listen and learn)
- Children learn by doing (when children attempt communication, adults respond, adding information)



Language development

- Over 80% of children with Down syndrome have difficulty hearing, so may not respond. We often talk less to children who are less responsive, and give them fewer choices.
- Motor skills are slower to develop, so there's less exploration.
- Visual difficulties may mean it's hard to see what people are talking about.
- Most children with Down syndrome need extra time to process and make sense of language.
- Explicit, visual language teaching is needed



Areas to consider

- Overall communication
- Vocabulary
- Linking words: sentences and grammar
- Speech

Likely Issues

- Hearing loss
- Auditory discrimination
- Auditory memory
- Vision issues
- Medical issues
- Opportunity

Communication

Age	Communication	Vocabulary	Grammar	Speech
2-5 years	Initiating joint attention using words, sounds, pointing, signs and gestures. Requesting. Trying again when misunderstood (repair)			
5-7 years	Linking words and ideas, communicating in short phrases maybe just using key words. Learning to sequence ideas together into short stories. Lots of opportunities to communicate. Routines. Turn-taking. Open questions. Retelling favourite stories			

Vocabulary

Age	Communication	Vocabulary	Grammar	Speech
2-5 years		Average vocabulary at 3: 170 words, but range 20-411. Understanding is better than production.		
5-7 years		Vocabulary learning accelerates. Average 300-400 words Explicit visual teaching needed Core vocabulary of first 700-800 words is well studied. Needs to be targeted and taught. Pre-teach words and concepts ahead of topics.		

Grammar

Age	Communication	Vocabulary	Grammar	Speech
2-5 years			50-100 words, start to link words together. 250-300 words, beginning of grammar.	
5-7 years			As vocabulary develops, 2-3 word phrases emerge. Often ‘telegraphic’ Short correct sentences increase. Teach grammar through recasting, reading, and explicit instruction.	

Speech

Age	Communication	Vocabulary	Grammar	Speech
2-5 years				Speech very variable. Often difficult to understand for unfamiliar listeners.
5-7 years				Speech still very variable. As sentence length increases, intelligibility and fluency may temporarily reduce. Making sounds is important: encourage copying, sound play, animal noises, singing, reading aloud, talking, asking and answering questions.

Overall speech and Language

Age	Communication	Vocabulary	Grammar	Speech
2-5 years	Initiating joint attention using words, sounds, pointing, signs and gestures. Requesting. Trying again when misunderstood (repair)	Average vocabulary at 3: 170 words, but range 20-411. Understanding is better than production.	50-100 words, start to link words together. 250-300 words, beginning of grammar.	Speech very variable. Often difficult to understand for unfamiliar listeners.
5-7 years	Linking words and ideas, communicating in short phrases maybe just using key words. Learning to sequence ideas together into short stories. Lots of opportunities to communicate. Routines. Turn-taking. Open questions. Retelling favourite stories	Vocabulary learning accelerates. Average 300-400 words Explicit visual teaching needed Core vocabulary of first 700-800 words is well studied. Needs to be targeted and taught. Pre-teach words and concepts ahead of topics.	As vocabulary develops, 2-3 word phrases emerge. Often 'telegraphic' Short correct sentences increase. Teach grammar through recasting, reading, and explicit instruction.	Speech still very variable. As sentence length increases, intelligibility and fluency may temporarily reduce. Making sounds is important: encourage copying, sound play, animal noises, singing, reading aloud, talking, asking and answering questions.

- Speech and language are delayed relative to cognitive development (don't underestimate!)
- Non verbal communication skills can be a strength (use sign, gesture and visuals)
- Vocabulary can be a strength, but needs to be explicitly taught
- Grammar is often difficult, and child may need lots of support to learn
- Speech is challenging for many children with Down syndrome, and phonological awareness is a particular challenge



How can you prepare?
Visual issues

Defect	Controls	Down's syndrome
Myopia/Hypermétropia	4.5%	42%
Astigmatism	7.7%	28%
Poor accommodation	0%	76%
Strabismus	4-7.5%	29%
Below-normal acuity	0%	100%

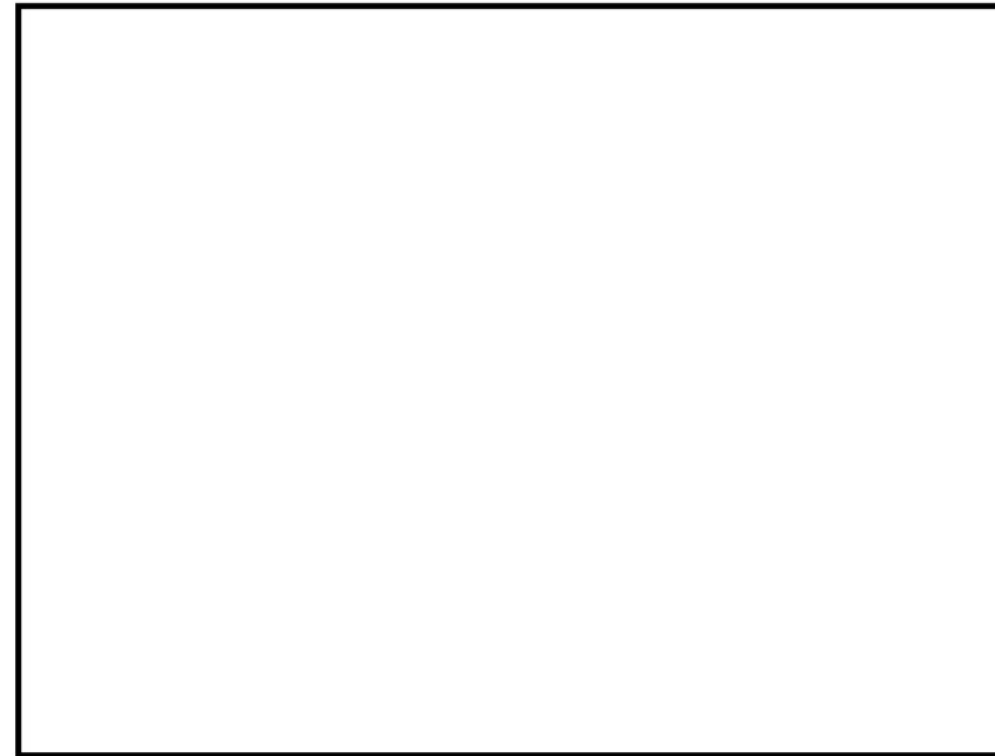
Normal vision:



Feint blue lines.

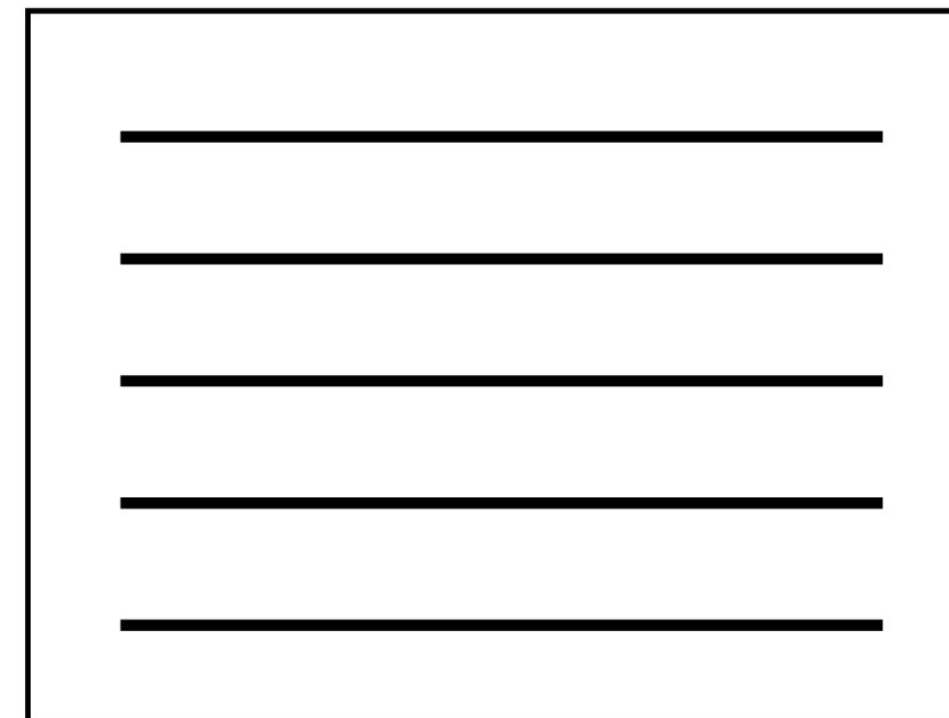
Child with DS sees this:

No lines.

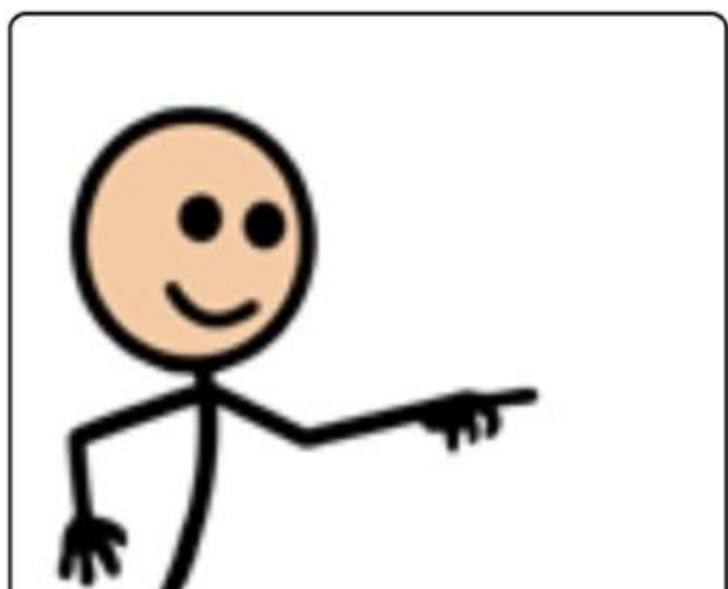
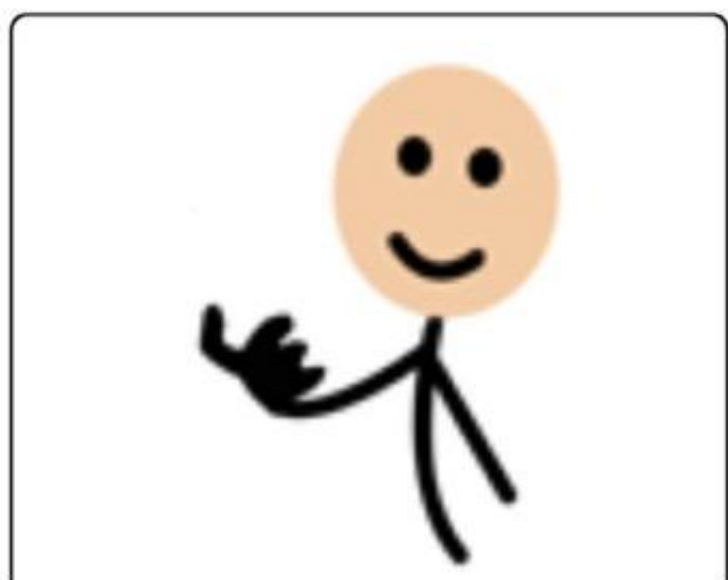
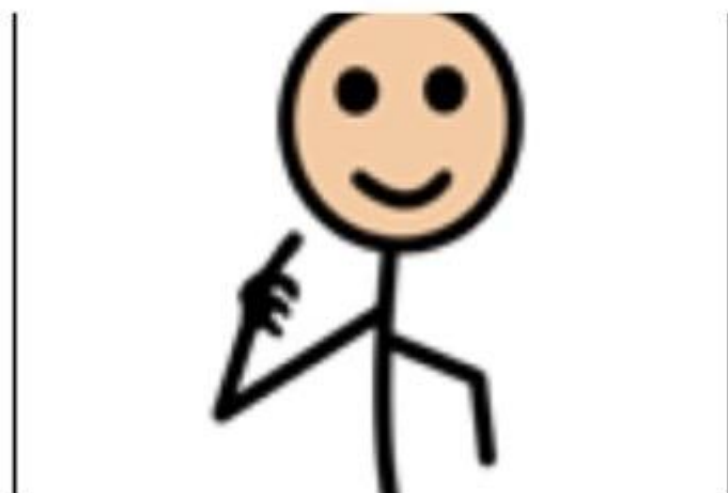


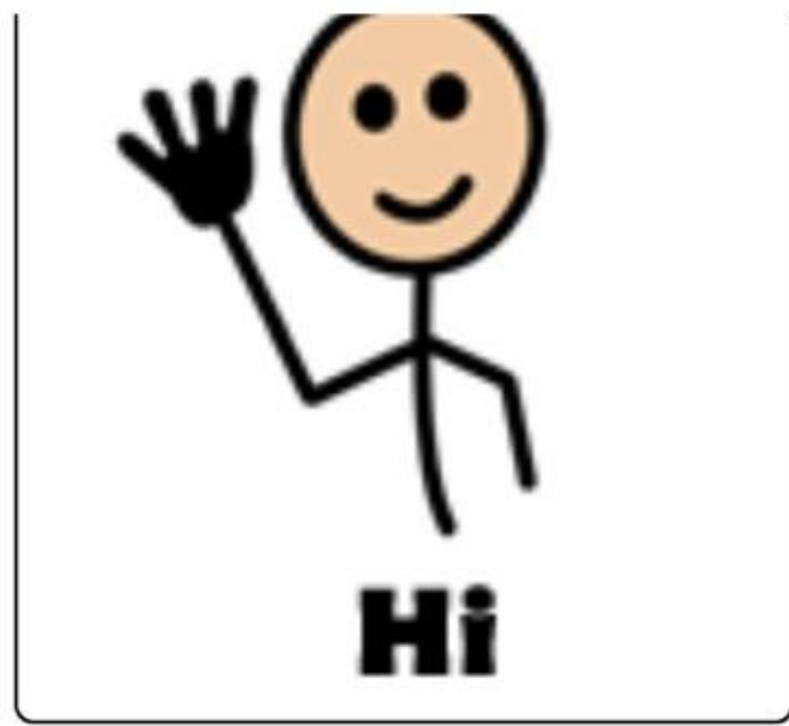
Child with DS needs this:

Lines bold & well spaced.

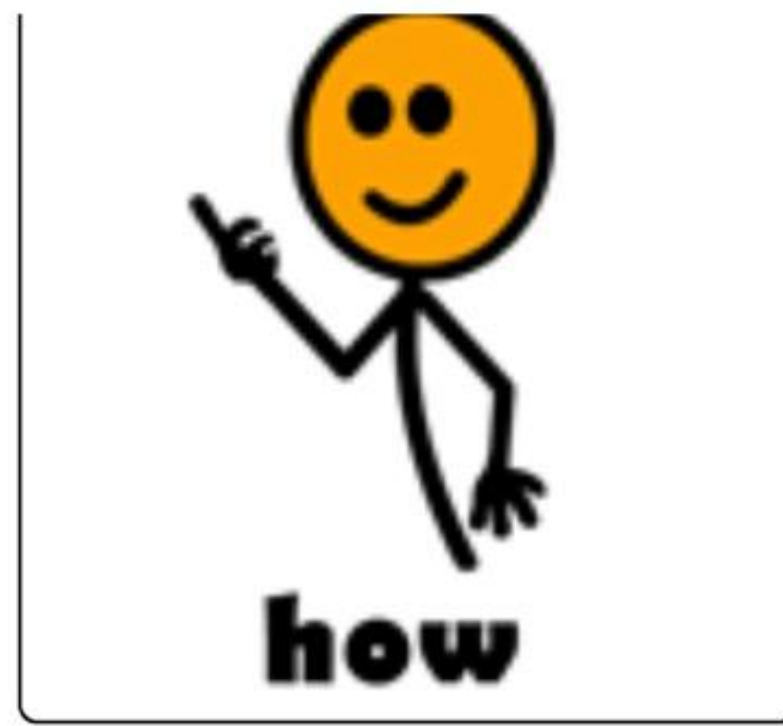


- Make sure glasses are worn and clean (and that prescriptions are up to date)
- If child is signing, ensure that people are Lámh trained
- Label everything!
- Make books of key people and places and favourite things
- Link visuals to activities and objects (pictures and words)
- Use visuals to transition from one activity to the next
- Don't forget to teach visuals

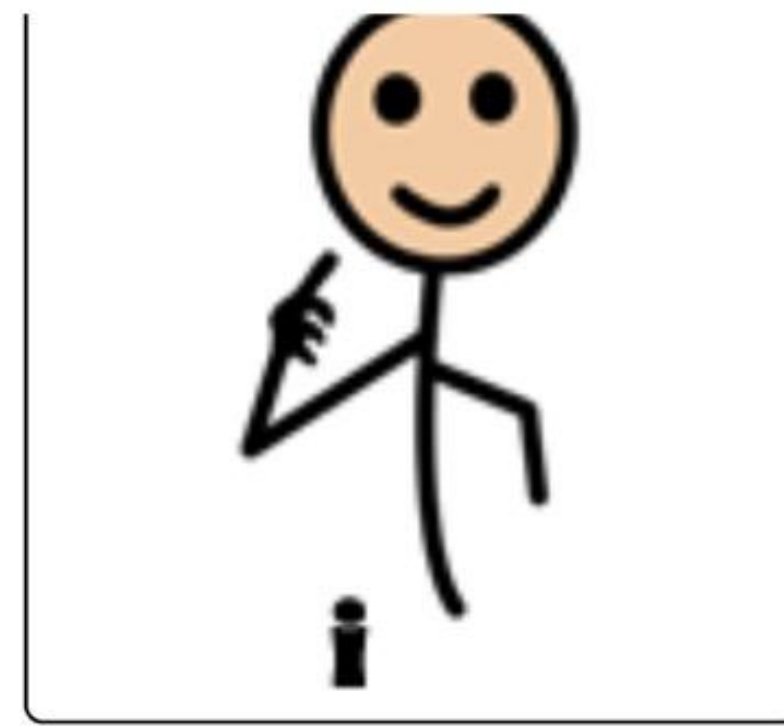




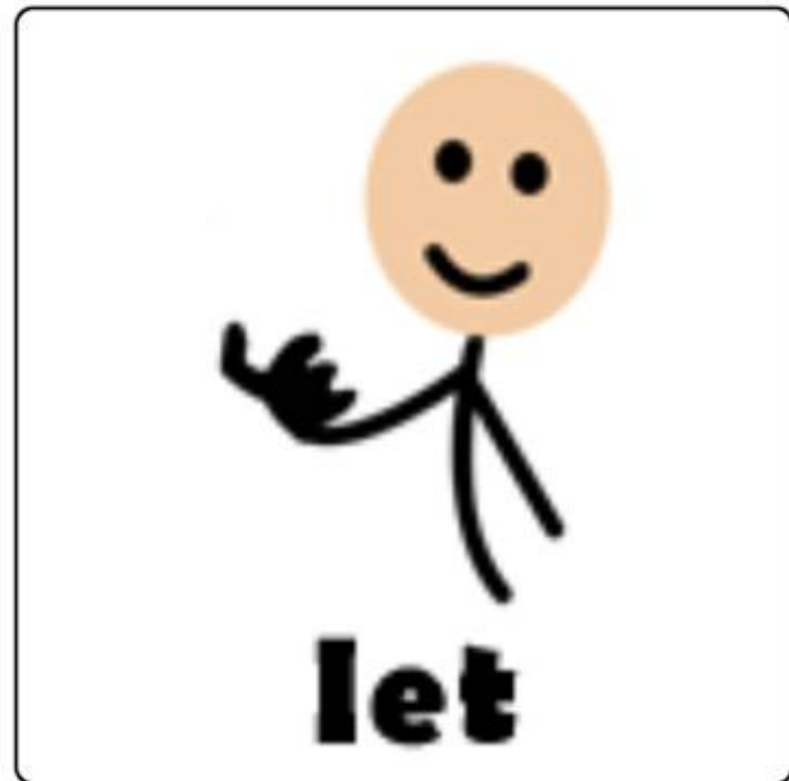
Hi



How



I



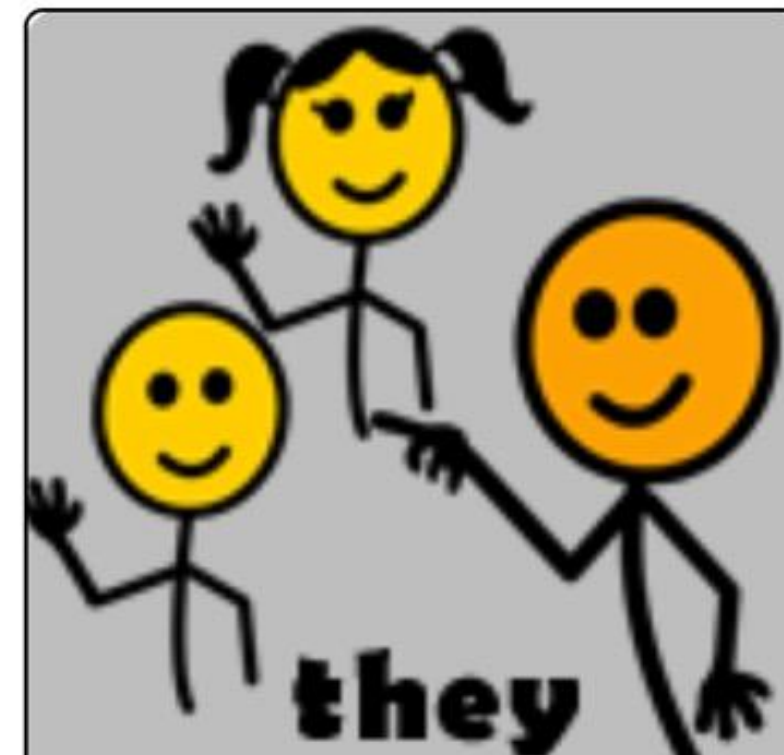
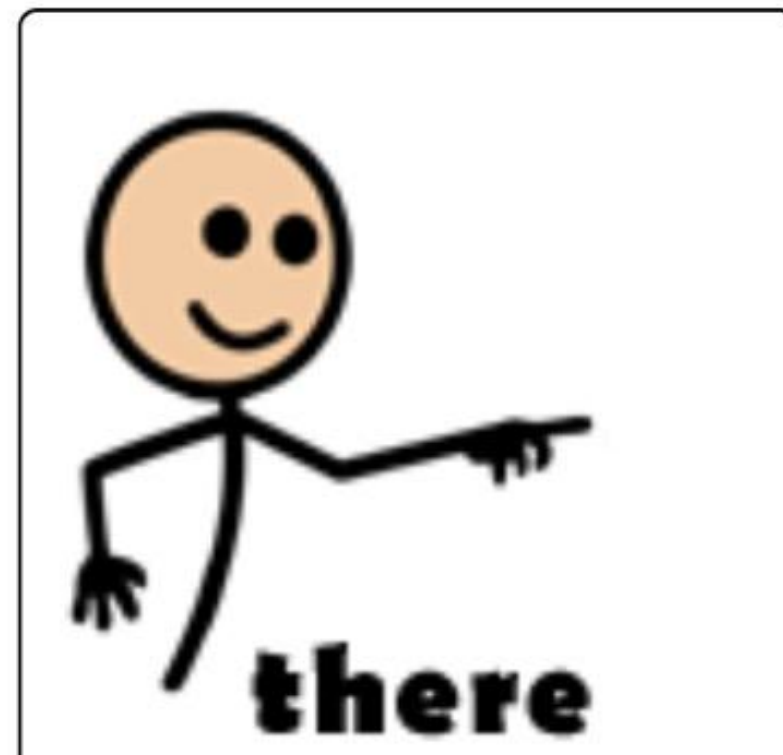
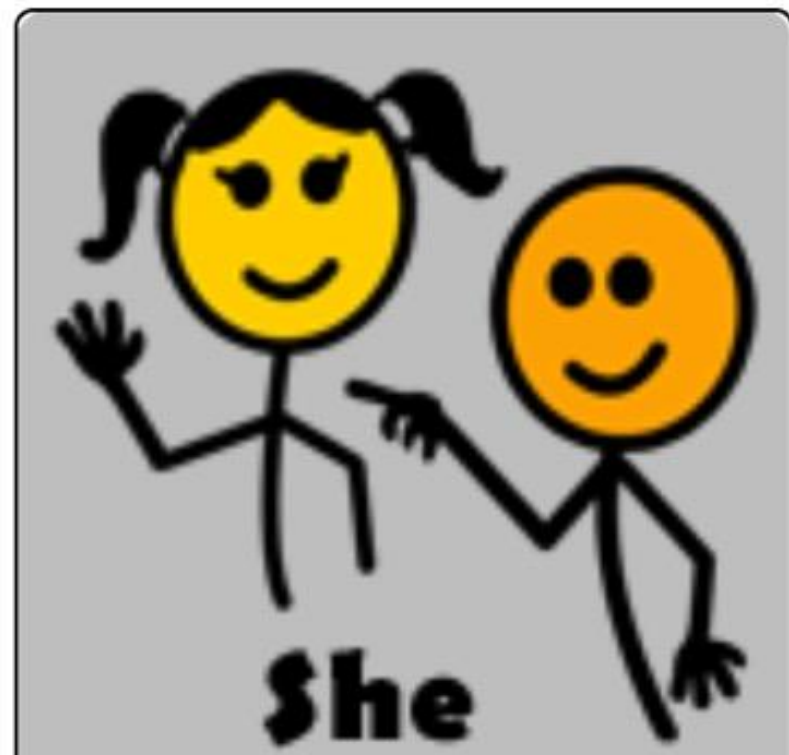
Let



No



Please



first

next



talking

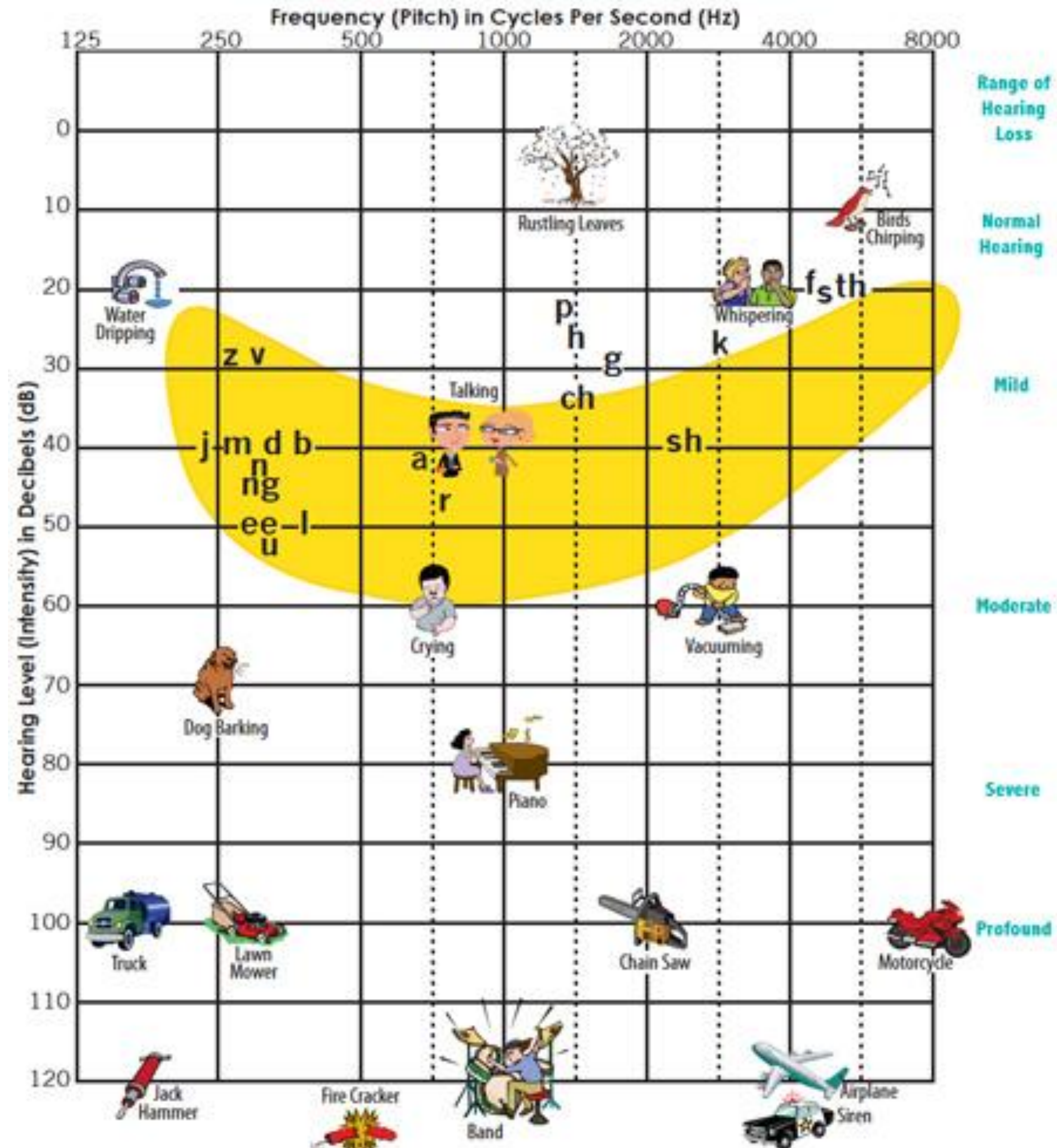


listening

Visual scheduling



Audiogram of Familiar Sounds



How can you prepare?

Hearing

Hearing

- Regular hearing checks and active management
- Ensure that hearing aids are worn and working
- Reduce background noise
- Amplify if needed
- Get attention before communicating
- Teach new vocabulary with visuals in quiet spaces
- Teach written words early



Focus on reading, because:

- Visual discrimination is better than auditory discrimination
- Early reading seems to have a qualitatively different effect on later language- neuroplasticity
- In a population with fluctuating hearing and poor auditory memory, visual input is essential
- It is an evidence based method of improving language outcomes

Useful Links

- Vision information:
- https://youtu.be/HKAv1V_kAvU
- <https://www.cardiff.ac.uk/downs-syndrome-vision-research-unit/get-advice/for-teachers>
- DSI emails:
 - Nicola@downsyndrome.ie Member Support Team Leader
 - Claire@downsyndrome.ie Early Years Specialist
 - Fidelma@downsyndrome.ie Head of Education