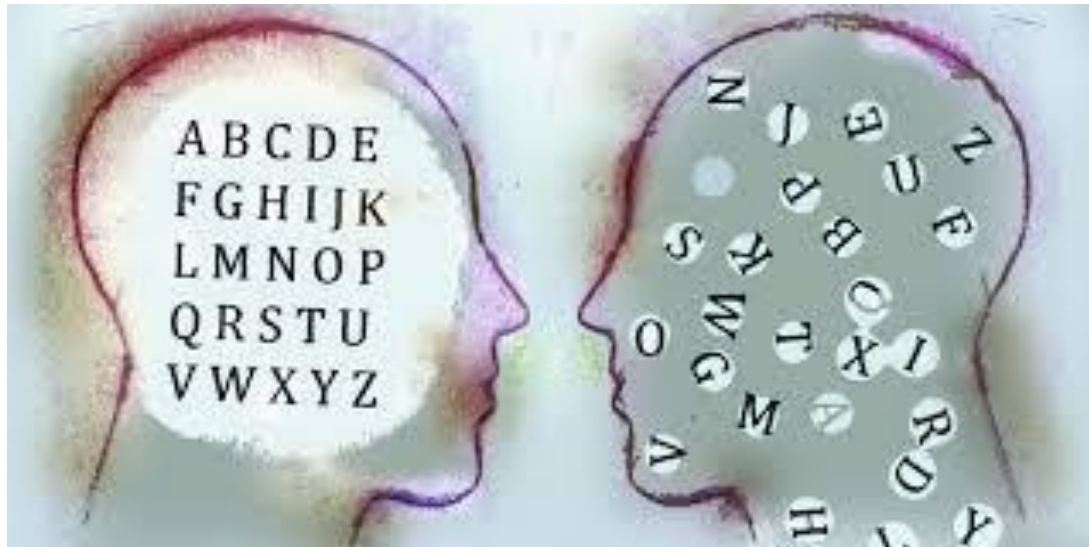


Supporting pupils with Processing difficulties.

Parents workshop



Sue Calveley

The effects of Processing difficulties

Processing difficulties, like auditory processing disorder, visual processing disorder, and sensory processing disorder are caused by a deficiency in a person's ability to effectively use the information gathered by the senses.

Common misconceptions

The issue is not the result of:

- ▶ impaired hearing
- ▶ impaired vision
- ▶ attention disorders
- ▶ intellectual ability cognitive deficit.



If the brain cannot properly process the auditory, visual, and sensory information it receives, a child's ability to learn and thrive in an academic setting is affected, often leading to low self-esteem and social withdrawal.



Fear and Anxiety Affect the Brain Architecture of Learning and Memory

PREFRONTAL CORTEX

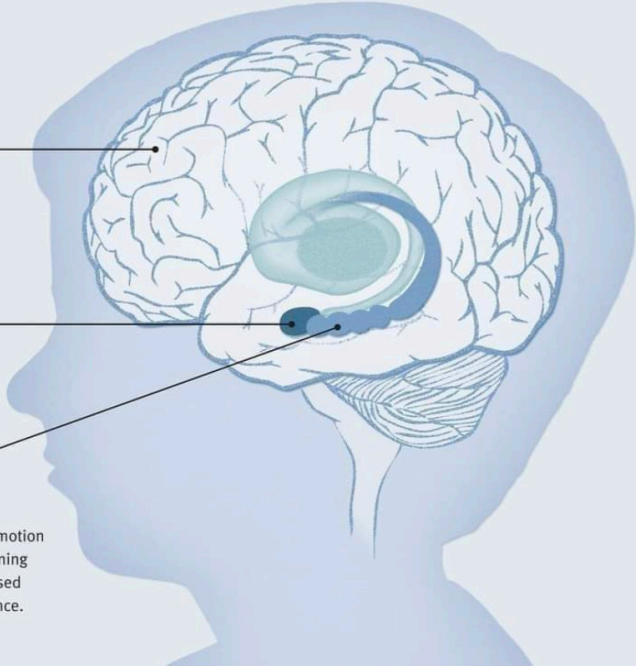
Center of executive functions; regulates thought, emotions, and actions. Especially vulnerable to elevation of brain chemicals caused by stress. Matures later in childhood.

AMYGDALA

Triggers emotional responses; detects whether a stimulus is threatening. Elevated cortisol levels caused by stress can affect activity. Matures in early years of life.

HIPPOCAMPUS

Center of short-term memory; connects emotion of fear to the context in which the threatening event occurs. Elevated cortisol levels caused by stress can affect growth and performance. Matures in early years of life.



Executive Functioning

Working
memory

Remembering
to remember

Initiation

Focusing

Emotional
self control


Hind sight
and foresight



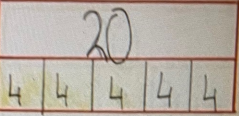
Visual Processing Disorder

is characterized by an abnormality in the brain's ability to process and interpret what the eyes see. A child with visual processing issues may struggle to differentiate between size, shape, and colour of objects, confuse written symbols like those used in calculations, misjudge distance, and experience poor spatial awareness, often resulting in frequent falls or bumping into objects despite normal vision tests.

Show it



Draw it



Explain it

What is $\frac{3}{5}$ of 20?

You Split 20 up into 5 equal Parts. There's four in each part and $\frac{3}{5}$ is 3 of the groups which is 12 Cubes.

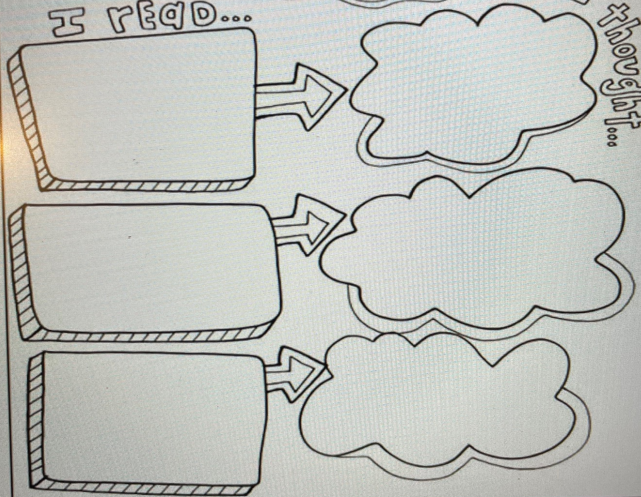
Prove it

$\frac{1}{5}$ of 20 is 4
 $\frac{3}{5}$ of 20 = $3 \times 4 = 12$

Making Connections

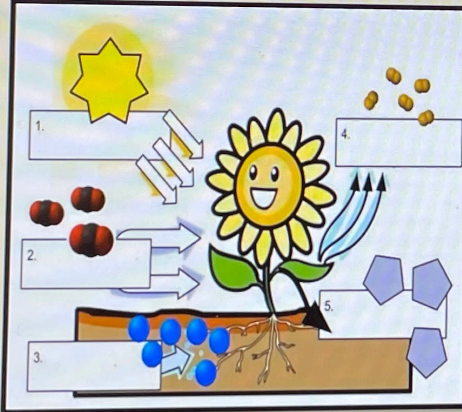
I read...

I thought...



Label It:

Identify key features of a diagram without labels.



Visual representation

Auditory Processing Disorder

(APD)

...is characterized by an inability to process, interpret, and retain what a person hears.

Children with APD may struggle to understand speech in noisy environments, mix up similar speech sounds, fail to follow directions, and misunderstand verbal instruction in the classroom, all of which lead to difficulty in task completion, both at home and at school

Sensory Processing Disorder

Children with hypersensitivity to sensory input may exhibit extreme or fearful responses to touch, textures, noise, crowds, lights, and smells, even when these inputs seem benign to others. Children with hyposensitivity to sensory input may exhibit an under-reaction or high tolerance to pain, may constantly and inappropriately touch or bump into people and objects, be fidgety, and often inadvertently put themselves or others in danger.

Processing difficulties may present as



Working Memory

- ▶ Memory is vital for learning.
- ▶ It is normally divided into short term or ‘working’ memory and long term memory.
- ▶ One example of working memory is trying to recall a phone number or lottery numbers while looking for pen and paper.

WORKING MEMORY AND CONNECTIVITY

Short answer
tasks & free recall
tasks.

Draw a map with
connection
arrows.

ADHD
FOUNDATION
The Neurodiversity Charity

First person
account/ diary/
hot seat/ role
play.

Series of
questions/
statements/
actions that
builds.

Graphic
organiser- key
events-
chronology-
episodic memory.

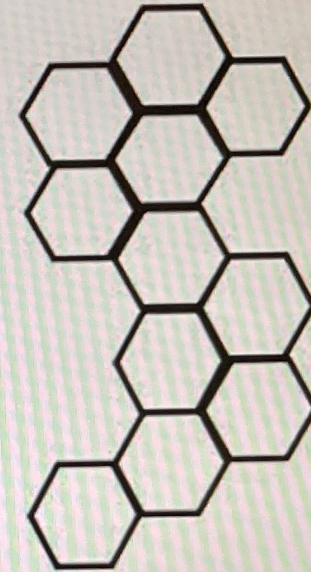
Low Stakes
quizzing (testing)

Chronology
reviews: Last
month we.... Last
week we.... Last
lesson we.....

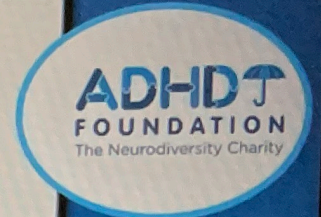
Externalisations.

- 1) Reduce content on slides.
- 2) **Alignment**- text and pictures- clear visual correlation.
- 3) Avoid **visual overload**- too many different fonts, colours.
- 4) **Chunking**- Manageable parts- each section with a clear title.
- 5) **Graphic organisers**- emphasis upon **Connectivity**.
- 6) **Externalisations**: sentence starters to scaffold writing, prompt sheets with specific questions to answer to construct a paragraph, cue cards, closed passages, vocab list.

Hexagon learning: How ideas are linked/connected together, see the bigger picture, not a long chain. Students can provide explanations at the point at which two hexagons meet to indicate how the two ideas are linked- used for spaced retrieval or as a revision tool.



@learningspy



- Use planners, organizers, computers, or timers.
- Pair written directions with spoken instructions and visual models whenever possible.
- If possible, use a daily routine.
- Create checklists and "to do" lists.
- Break long assignments into smaller tasks and assign mini-timelines for
If children become overwhelmed with lists of tasks, share only a few at a
- Use visual calendars or wall planners to keep track of long-term and activities.
- Organize the workspace, and minimize clutter on a weekly basis.

GAMES you can play with your child



▶ Mastermind is a good board game for older pupils.



▶ Kim's Game

▶ 'I went to market and I bought...'

This can be played listing items in alphabetical order.

▶ Matching pairs

▶ Guess who

Big
Elephants
Can
Add
Up
Sums
Easily



Useful websites for homework etc:

www.spellingtraining.com

[Online Pairs memory game:](http://www.helpfulgames.com/subjects/brain-training/memory.html)

<https://www.helpfulgames.com/subjects/brain-training/memory.html>

