| Name of Learner: |  | Establishment: |  |
| :--- | :--- | :--- | :--- |
| D.O.B: |  | Class Teacher: |  |
| Stage: |  | Date \& Session: |  |

## Scottish Working Definition of Dyscalculia 2022

Dyscalculia can be described as a specific difficulty in understanding number and number processes which persists despite the provision of appropriate learning opportunities. It is distinguishable from other challenges associated with numeracy and mathematics due to the:

- Persistent inability to understand and or retrieve numerical facts from memory
- Use of underdeveloped procedures and processes
- Severity of difficulties with number sense.


## Associated difficulties can include:

- Subitising - immediately recognising quantity without counting
- Estimating
- Ordering, sequencing and directionality
- Recognising and understanding number symbols
- How numbers and amounts relate to each other in their representation
- Learning and recalling basic maths facts and processes
- Applying number skills to solve problems
- Everyday tasks involving number e.g. money, time
- Short-term and working memory.

Select her for further information. Dyscalculia | Learning resources | National Improvement Hub (education.gov.scot)
This checklist has been designed to help identify learners who may have difficulties with Numeracy and Mathematics. It should be used as part of a holistic assessment process to identify areas of strengths and development, not as a diagnostic tool.

| General Mathematics and Numeracy |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Rarely/ <br> Never |  |  |  |  |
| 1 | Has a high level of anxiety around maths |  |  | Comments |  |
| 2 | Slow when performing calculations in comparison <br> to peers |  |  |  |  |
| 3 | Lacks confidence in their own answers |  |  |  |  |
| 4 | Adopts avoidance or diversion tactics during <br> lessons |  |  |  |  |
| 5 | Is reluctant to ask for help even when he/she does <br> not understand |  |  |  |  |
| 6 | Dislikes whole group interactive sessions |  |  |  |  |
| 7 | Finds it difficult to organise written work e.g., <br> columns of numbers not properly lined up |  |  |  |  |
| 8 | Is easily distracted/overloaded by worksheets with <br> lots of calculations |  |  |  |  |
| 9 | Uses maths procedures mechanically without <br> understanding |  |  |  |  |


| Subitising |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | often | Sometimes | Rarely/ <br> Never | Comments |
| 1 | Unable to recognise small quantities without <br> counting e.g. unable to see that 4 objects is 4 |  |  |  |  |
| 2 | Unable to identify the number of objects by <br> partitioning collections into smaller quantities |  |  |  |  |
| 3 | Unable to recognise regular dot patterns |  |  |  |  |
| 4 | Unable to recognise irregular dot patterns |  |  |  |  |

Counting, ordering, sequencing, and directionality

|  | $\begin{array}{l}\text { often }\end{array}$ |  |  |  | Sometimes |
| :--- | :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{l}Rarely/ <br>

Never\end{array}\right)\)

| Place Value |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | often | Sometimes | Rarely / <br> Never | Comments |
| 1 | Is unable to identify the value of digits |  |  |  |  |
| 2 | Misreads/writes numbers 36/63 |  |  |  |  |
| 3 | Has difficulty reading and writing numbers that <br> contain zeros as place holders e.g. 4021 |  |  |  |  |
| 4 | Confuses teen and -ty numbers e.g. 13 and 30 |  |  |  |  |
| 5 | Struggles to link knowledge of place value to $x$ by <br> $10,100,1000$ etc. |  |  |  |  |


| Recognising and understanding number symbols |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Soren <br> Never |  |  |  |  |
| 1 | Does not recognise the commutative law e.g. <br> $7+5 / 5+7,7 \times 3 / 3 \times 7$ |  |  |  | Comments |
| 2 | Does not see the relationship between addition/ <br> subtraction and multiplication/division |  |  |  |  |
| 3 | Confuses mathematical terms e.g. total, sum, <br> equals |  |  |  |  |


| Estimating |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | often | Sometimes | Rarely / <br> Never | Comments |
| 1 | Is unable to estimate answers to simple <br> calculations |  |  |  |  |
| 2 | Is unable to judge whether an answer is <br> reasonable |  |  |  |  |
| 3 | Has difficulty estimating measurements e.g. time, <br> distance, volume |  |  |  |  |


| Language of Maths |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Rarely/ <br> Never |  |  |  |  |
| 1 | Finds it difficult to explain his/her thinking |  |  | Comments |  |
| 2 | Has sound technical reading skills but fails to <br> understand mathematical language |  |  |  |  |


| Learning and recalling basic maths facts and processes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Often | Sometimes | $\begin{gathered} \hline \text { Rarely / } \\ \text { Never } \\ \hline \end{gathered}$ | Comments |
| 1 | Has difficulty recalling number bonds from memory e.g. bonds of 10, doubles |  |  |  |  |
| 2 | Finds it difficult to learn and retain times tables or can only recall the $\times 2, \times 5$ and $\times 10$ table facts |  |  |  |  |
| 3 | Unable to use known table facts to work out other tables e.g. use $2 x$ table to work out $4 x$ table |  |  |  |  |
| 4 | Uses skip counting to recall facts for times tables e.g. $2,4,6,8$... |  |  |  |  |

Short term and working memory

| Short term and working memory |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  |  | often | Sometimes | Rarely / <br> Never | Comments |  |
| 1 | Forgets the questions asked in mental maths |  |  |  |  |  |
| 2 | Loses track of the 'sum' when completing a longer <br> word problem |  |  |  |  |  |
| 3 | Forgets previously mastered procedures |  |  |  |  |  |
| 4 | Loses place/track when counting |  |  |  |  |  |
| 5 | Has difficulty following verbal instructions |  |  |  |  |  |


| Applying number skills to solve problems |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | often | Sometimes | Rarely / <br> Never | Comments |
| 1 | Difficult to applying number skills to solve <br> problems |  |  |  |  |
| 2 | Has difficulty interpreting/choosing the right <br> strategy to unpick a word problem |  |  |  |  |
| 3 | Has difficulty solving problems with 2 or more <br> steps |  |  |  |  |
| 4 | Has difficulty transferring to different contexts |  |  |  |  |
| 5 | Finds it difficult to recognise and apply number <br> skills in other areas of the curriculum |  |  |  |  |

## Everyday tasks involving number

| Everyday tasks involving number |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\begin{array}{l}\text { often }\end{array}$ |  |  |  |  |
| 1 | $\begin{array}{l}\text { Hametimes } \\ \text { confuses value of coins and notes, unable to work } \\ \text { out change, doesn’t know that } £ 3.99 \text { is nearly } £ 4\end{array}$ |  |  |  | Comments |
| Never |  |  |  |  |  |$)$

## Supporting Information

Any further information you would like to add:

You may have ticked several 'yes' boxes - this does not necessarily mean that the learner has dyscalculia. Your responses will contribute towards a range of information which is considered when identifying dyscalculia.

