

# NF1: AN OVERVIEW FOR TEACHERS

## NEUROFIBROMATOSIS TYPE 1 (NF1) ...



is a genetic disorder that affects approximately 1 in 3,000 children



is caused by genetic mutations along chromosome 17



causes benign tumors to grow inside the body or under the skin



typically presents at birth, during early childhood, or latest before the child is 10 years old

## COMMON CONSIDERATIONS IN NF1 INCLUDE...



an **optic glioma** (tumor) that grows on the optic nerve which can impact vision



**bone density deficiencies** which can lead to a bowed lower leg or scoliosis



**short stature** and **larger head size** due to increased volume of brain



**learning difficulties** in reading, writing, and/or using numbers

## LEARNING DIFFICULTIES



**Visual Perception** - Children with NF1 often have difficulties processing visual information which can be evident as a child having trouble copying info down, reading a map, understanding that "w" and "m" have different functions and sounds, or remembering how to get to school from their house.

**Language** - Children with NF1 can display problems with language - receptive, expressive, comprehension, and/or verbal working memory. These difficulties can present as a child not understanding what is spoken to them, communicating their thoughts, and/or sorting letter sounds and putting them together to form a word.



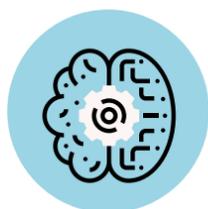
**Motor Skills** - Approximately 1/3 to 1/2 of children with NF1 also exhibit motor problems such as difficulties with fine and/or gross motor function. Such fine motor difficulties can be evidenced as a child having difficulty writing/holding a pencil while gross motor problems can look as if a child is being clumsy or bumping into things.

**Attention** - Though the presence of ADHD is greater in children with NF1, attention problems can still be evident even without hyperactive tendencies or an ADHD diagnosis. Children with NF1 can have trouble paying attention to a topic or shifting their attention from various topics.



**Social Skills** - Children with NF1 can often have difficulties interacting and socializing with others. Social skill deficits can be attributed to problems with visual perception - not accurately perceiving and interpreting social cues like gestures or facial expressions.

**Emotions/Behavior** - Mental health may be a concern as children with NF1 can typically experience depression and anxiety. They can also be hyperactive, impulsive, and/or inflexible to change.



**Executive Function** - Individuals with NF1 often struggle with tasks requiring executive functioning skills like figuring out how much time to spend on an assignment or difficulty getting organized.