

## How will my child cognitively develop?

- Cognitive development refers to changes in learning, thinking, and remembering. It is the development of mental activities such as acquiring knowledge and problem solving.
- Development of the skills outlined above occur through physical interaction with the environment. This is particularly key from birth to the age of approximately 2 years.
- Between the ages of 2 and 6 years children's abilities to think about how symbols might represent something, such as words representing objects, increases. Language development means the child can follow simple instructions to help them solve problems. Language use is important – passive sentences and double negatives are not understood at this age. Use of simple instructions is key. Children are easily distracted, they can't focus on one thing at a time. Children under 4 years of age also struggle to see a problem from another person's perspective.
- Between the ages of 7 and 11 years children can increasingly think through problems, before acting on it. Children start to be able to mentally reverse their actions, understand numbers and proportions, and realise appearances can be deceptive.
- From 12 years of age this development comes close to adult levels as we see an increase in abstract and complex thinking and problem solving. Children can think through hypothetical scenarios and become aware of complex concepts such as moral values, fairness, and justice.
- Parents should remember that "children and young people look at the world differently" - have patience, it takes time for children to acquire complex thinking and (self) control.

As motor and social skills increase (for example walking and being able to play with other children), children enlarge their world. As a result, they learn to solve problems, think, reason and store new information in a playful manner. The senses (hearing, seeing, feeling, smelling) and the social environment of the child also play an important role in cognitive development. Participation in physical activity and sport can positively influence cognitive development, especially in relation to (self)regulation abilities and readiness to learn.

### Adolescence: Risk taking and self control

The part of the brain that responds to reward and risk matures in early adolescence. The part of the brain that controls impulses and allows for longer-term planning matures later. These different timescales may explain why teens in mid-adolescence take more risks than older teens.

### Changes in the teenage brain

The teen years are often described as a time of 'storm and stress' as the brain develops into its final adult state. Teenagers can be impulsive and sensitive to reward. Try to avoid punishment and focus on positive coaching.

Based on:

Steinberg, L. (2008) A social neuroscience perspective on adolescent risk-taking. *Developmental Review*, 28, 78–106.