



## Childhood Developmental Milestones

The table below summarises and maps the work of Kirby, A. (2012) from The Discovery Centre, University of Wales. Dr. Amanda Kirby is a leading expert in motor co-ordination, dyspraxia and associated conditions.

Considering the age range 4-11 years, Dr. Kirby examines four key areas of development:

- Language and reading
- Physical and motor development
- Social, emotional development
- Cognitive development

She also highlights key red flags to look out for and discuss with parents and other colleagues to confirm observations.

### **Cautionary note in using the milestones chart:**

Children all develop differently. Milestones are designed to provide us with a framework for growth and support. They are not meant to be prescriptive. Some children will exceed these milestones and others may experience delay, followed by possible growth spurts. If a child is not demonstrating age-appropriate milestones, this may not be an area of concern. It is important, however, to look out for chronology of development and consistency over time.

<u>Age Years</u>	<u>Language &amp; Reading Development</u>	<u>Physical &amp; Motor Development</u>	<u>Social &amp; Emotional Development</u>	<u>Cognitive Development</u>	<u>Red flags</u>
4	<ul style="list-style-type: none"> <li>• Uses correct grammar most of the time.</li> <li>• Can recognise rhymes</li> <li>• Can sit and listen to a story for 5 minutes</li> <li>• Infantile substitutions in speech</li> <li>• Understands number/space concepts- e.g. on/over/under</li> </ul>	<u>Gross motor</u> <ul style="list-style-type: none"> <li>• Dressing oneself unaided (except tying shoelaces)</li> <li>• Uses whole body to kick ball forcibly</li> <li>• Catches large ball between extended arms</li> <li>• Jumps vertically with both feet leaving the floor</li> <li>• Goes down stairs one foot per step</li> </ul> <u>Fine motor</u> <ul style="list-style-type: none"> <li>• Can copy and draw a cross, horizontal and vertical line</li> <li>• Can button and unbutton own clothing</li> <li>• Can thread beads</li> <li>• Can cut paper with scissors</li> </ul>	<ul style="list-style-type: none"> <li>• Can play with other children and taking turns</li> <li>• Observing others in play</li> </ul>	<ul style="list-style-type: none"> <li>• Asks lots of questions</li> <li>• Gives first and last name</li> <li>• Can repeat three digits correctly – three times e.g. six-eight-nine</li> <li>• Counts up to 20</li> <li>• Can watch a TV programme or DVD for 10 minutes</li> </ul>	<ul style="list-style-type: none"> <li>➤ No pointing</li> <li>➤ Little or no speech</li> <li>➤ Hard for others to understand speech</li> <li>➤ Difficulty running/climbing</li> <li>➤ Dribbling</li> <li>➤ Difficulty with nursery rhymes</li> </ul>

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5	<ul style="list-style-type: none"> <li>Engages appropriately in conversations</li> <li>Use “would” or “could” appropriately</li> <li>Able to identify and name all uppercase and lowercase letters</li> <li>Use sentences containing at least 7 or 8 words</li> <li>Use past tense more consistently</li> <li>Describes objects.</li> <li>Speech fluent with few infantile substitutions</li> </ul>	<p><u>Gross motor</u></p> <ul style="list-style-type: none"> <li>Riding a bicycle with training wheels</li> <li>Can walk along a narrow line heel to toe</li> <li>Climbs play equipment</li> <li>Able to jump to a height of about 30cm</li> <li>Can go up and down stairs alternating feet</li> <li>Show improvements in running and jumping</li> <li>Can catch a large ball with their hands</li> <li>Can attend to toilet needs without much help</li> </ul> <p><u>Fine motor</u></p> <ul style="list-style-type: none"> <li>Cutting across a page with scissors</li> <li>Copies their own name</li> <li>Colours within the lines</li> <li>Can hold a pen or pencil in tripod or equivalent grip</li> <li>Can cut and stick</li> <li>Can copy basic 2D shapes (e.g. square, triangle, diamond)</li> <li>Can use a knife to spread jam/butter etc.</li> <li>Brushes teeth, but may need reminding</li> </ul>	<ul style="list-style-type: none"> <li>Choosing friends and co-operating in play</li> <li>Prefer playing in small groups</li> <li>Protect younger children</li> <li>Show respect for other people’s property</li> <li>Play well without the need for constant adult supervision</li> <li>Understand the nature of giving and receiving</li> <li>Can turn take</li> <li>Separates from mother easily.</li> <li>Gives appropriate eye contact- e.g. when being spoken to</li> <li>Sitting at the table for ten minutes</li> </ul>	<ul style="list-style-type: none"> <li>Uses imagination to create stories</li> <li>Can match colours</li> <li>Can listen to a story for ten minutes</li> <li>Can name the 7 days in a week</li> <li>Has a vocabulary of over 2000 words.</li> <li>Can recognise numerals at least 1-5</li> <li>When asked can say their own name and address.</li> </ul>	<ul style="list-style-type: none"> <li>Deterioration in motor function e.g. walking, running</li> <li>Not turn taking, playing with other children</li> <li>Not counting up to 10</li> <li>Not able to do rhyming songs</li> <li>Limited vocabulary</li> <li>Can’t sit still compared with other children of similar age</li> <li>Aggressive behaviour</li> </ul>

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6	<ul style="list-style-type: none"> <li>• Talks fluently</li> <li>• Can understand more complex grammatical rules</li> <li>• Can read and write to some degree</li> <li>• Can learn how to do things through the use of language</li> <li>• Can use language to work through scenarios and problems</li> </ul>	<p><u>Gross motor</u></p> <ul style="list-style-type: none"> <li>• Able to control speed when running and avoid collision</li> <li>• Can jump down several steps</li> <li>• Can kick a football up to 6m away</li> <li>• Can throw a ball with accuracy</li> <li>• Able to stand and balance on one foot for at least 3 seconds.</li> <li>• Walk heel-to-toe in a straight line</li> <li>• Dress and undress without help</li> <li>• Brushes own hair well</li> <li>• Ride a bike without stabilisers</li> <li>• Catch and bounce a small ball 4-6 times</li> </ul> <p><u>Fine motor</u></p> <ul style="list-style-type: none"> <li>• Tying shoelaces</li> <li>• Using a knife and fork correctly</li> <li>• Drawing a diamond</li> <li>• Can draw a person</li> <li>• cuts out shapes well using scissors</li> <li>• Can open and close a zip</li> <li>• Writes their first and last name</li> </ul>	<ul style="list-style-type: none"> <li>• Expresses awareness of others feelings</li> <li>• Enjoys imaginative play with other children</li> <li>• Can be selfish or overly competitive</li> <li>• May still have tantrum behaviours</li> <li>• Gets upset when criticised by others</li> </ul>	<ul style="list-style-type: none"> <li>• Are inquisitive</li> <li>• Have the ability to see other's perspectives</li> <li>• More emphasis on quantity rather than quality of work</li> <li>• Enjoy starting tasks but these are not always completed</li> <li>• Can distinguish reality from something that is made up</li> <li>• Can give reasons</li> <li>• Can follow directions</li> <li>• Can do addition and subtraction of single digits</li> </ul>	<ul style="list-style-type: none"> <li>➤ Can't copy shapes</li> <li>➤ Spelling errors for one syllable words</li> <li>➤ Difficulty turn taking</li> <li>➤ Speech not fluent</li> </ul>

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7	<ul style="list-style-type: none"> <li>• Can describe points of similarity between two objects</li> <li>• Should understand opposite analogies easily (e.g. black-white, big-small, beginning-end)</li> <li>• Should be able to read aloud to some extent</li> <li>• Able to use an increasing number of words and understand more concepts</li> </ul>	<p><u>Gross motor</u></p> <ul style="list-style-type: none"> <li>• Is able to ride a bicycle without training wheels</li> <li>• Can walk along a thin line</li> <li>• Can do a somersault or forward roll</li> <li>• Able to catch skilfully using one hand</li> <li>• Able to throw skilfully using one hand</li> <li>• Able to plan movements</li> <li>• Has an awareness of direction and distance</li> <li>• Shows improvements in hand-eye coordination</li> </ul> <p><u>Fine motor</u></p> <ul style="list-style-type: none"> <li>• Is able to cut using a knife</li> <li>• Is able to draw a diagonal line</li> </ul>	<ul style="list-style-type: none"> <li>• Can wait their turn during an activity</li> <li>• Desires to be perfect and is self-critical</li> <li>• Starts to look for independence</li> <li>• Moods can fluctuate</li> <li>• Have more of an awareness of their own emotions.</li> <li>• Worries about not being liked by others</li> <li>• Tends to complain more often</li> <li>• Shows strong emotional reactions</li> <li>• Worries more - may have low self-confidence</li> <li>• Is a better loser and is less likely to place blame on others</li> </ul>	<ul style="list-style-type: none"> <li>• Is able to understand the rules of a game</li> <li>• Has a reasonable attention span (20 minutes)</li> <li>• Uses serious logical thinking - can be thoughtful and reflective</li> <li>• Can tell the time (including quarter of an hour) with ease</li> <li>• Knows the days, months and seasons.</li> <li>• Able to solve more complex problems</li> <li>• Is able to understand the difference between right and wrong</li> <li>• Can understand at least 3 separate instructions within a command</li> <li>• Can remember which hand is left and which is right</li> <li>• Knows of and can explain the uses of a number of objects</li> <li>• Has a short-term memory repetition of at least 3 numbers</li> </ul>	<ul style="list-style-type: none"> <li>➤ Not reading aloud to others with fluency.</li> <li>➤ Not able to do syllable breakdown</li> <li>➤ Obsessional behaviour</li> <li>➤ Limited interaction with other children</li> <li>➤ Difficulty with motor tasks- gross or fine motor- not catching/ throwing accurately/ not copying shapes accurately</li> </ul>

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8	<ul style="list-style-type: none"> <li>• Can converse at an almost adult level</li> <li>• Can read with confidence and fluency</li> <li>• Reading may be a major interest</li> <li>• Can use complex sentences with ease</li> <li>• Has established all sounds used in speech</li> <li>• Have control over aspects of reading aloud such as rate, pitch and volume</li> <li>• Can follow more complex commands</li> </ul>	<p><u>Gross motor</u></p> <ul style="list-style-type: none"> <li>• Can bathe themselves</li> <li>• Can pour a drink without spilling</li> <li>• Need to be physically active every day (approx. 30 mins)</li> </ul> <p><u>Fine motor</u></p> <ul style="list-style-type: none"> <li>• Use a ruler</li> </ul>	<ul style="list-style-type: none"> <li>• Emotions change quickly</li> <li>• Impatient - finds waiting for special events torturous</li> <li>• Makes friends easily; develops close friends of same sex</li> <li>• Favours group play, clubs and team sports - wants to feel part of a group</li> <li>• More influenced by peer pressure</li> <li>• Has a strong need for love and understanding - especially from mother figure</li> <li>• Can be helpful, cheerful and pleasant as well as rude, bossy, and selfish</li> <li>• May be quite sensitive and overly dramatic</li> <li>• Can be obsessed with and motivated by money</li> <li>• Can keep secrets</li> <li>• Can articulate their feelings</li> <li>• Usually enjoy school – don't enjoy being absent from school</li> <li>• Is possessive of their belongings</li> </ul>	<ul style="list-style-type: none"> <li>• Can sit and concentrate for 15-20 minutes</li> <li>• Seeks to understand the reasons for things</li> <li>• Begins to feel competent in skills and have preferences for some activities and subjects</li> <li>• Thinking is organised and logical</li> <li>• Begins to recognise concept of reversibility (<math>4 + 2 = 6</math> and <math>6 - 2 = 4</math>)</li> <li>• Can do some simple division and multiplication</li> </ul>	<ul style="list-style-type: none"> <li>➤ Difficulties using scissor/rulers</li> </ul>

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9	<ul style="list-style-type: none"> <li>likes to talk and share ideas</li> </ul>	<u>Gross motor</u> <ul style="list-style-type: none"> <li>Can help make a snack or drink for him or herself</li> </ul> <u>Fine motor</u> <ul style="list-style-type: none"> <li>Can use a computer keyboard</li> </ul>	<ul style="list-style-type: none"> <li>Has a best friend</li> <li>May experience wide mood swings</li> <li>May be critical of self and others</li> <li>often dislikes the opposite sex intensely</li> <li>Puts great importance on fairness - for self and others</li> <li>Responsible - can be depended upon and trusted</li> </ul>	<ul style="list-style-type: none"> <li>Writes stories</li> <li>May use physical complaints to avoid unpleasant tasks</li> </ul>	<ul style="list-style-type: none"> <li>➤ Finds writing difficult</li> </ul>

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10	<ul style="list-style-type: none"> <li>Reads to learn (rather than learning to read)</li> </ul>	<p><u>Gross motor</u></p> <ul style="list-style-type: none"> <li>Interested in own strength - boys enjoy wrestling</li> <li>Has both skill and stamina for gross motor activities such as biking, skating, and team sports</li> </ul> <p><u>Fine motor</u></p> <ul style="list-style-type: none"> <li>Can use a can opener</li> <li>Capable of fine hand and finger movements</li> <li>Draws with great detail</li> <li>Uses tools, such as a hammer or small garden tools, fairly well</li> </ul>	<ul style="list-style-type: none"> <li>Still certain that own beliefs are correct and are universally shared.</li> <li>Disposition is generally happy, sometimes silly</li> <li>Respectful and affectionate toward both parents</li> <li>Fears which were previously bothersome are now minimal</li> <li>May anger quickly but expression of anger</li> <li>differs according to the situation</li> <li>Friendships are quite important - friends are of the same sex</li> <li>Enjoys socialising in clubs and group activities</li> </ul>	<ul style="list-style-type: none"> <li>Can buy something in a shop and handle money</li> <li>Has a strong desire to complete tasks may persist with an activity until exhausted</li> <li>Memorises and recites facts - but may not show deep understanding</li> <li>Keeps train of thought and will continue work even after interruptions</li> <li>Able to use a dictionary</li> <li>Critical thinking starting to emerge</li> <li>Developing a conscience but not yet consistently able to tell right from wrong</li> <li>Aware of time but needs help to plan time in a practical way</li> <li>Can do percentages</li> </ul>	<ul style="list-style-type: none"> <li>Writing not fluent, and easy for others to read</li> <li>Frequent spelling errors</li> <li>Difficulty remaining in seat in class</li> <li>Aggression to others in unstructured settings</li> <li>Few friends</li> </ul>

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11	<ul style="list-style-type: none"> <li>• Good keyboard skills on computer</li> </ul>	<ul style="list-style-type: none"> <li>• Can make a snack</li> </ul>	<ul style="list-style-type: none"> <li>• Self-care, wash &amp; brush teeth</li> <li>• Help lay and clear the table</li> <li>• Starts to realise that others may hold beliefs different from own</li> <li>• Displays anger physically-fights, slams doors, kicks</li> <li>• Away from home, behaviour is well mannered and quite helpful</li> <li>• Friendships are still important but with more quarrels than before</li> <li>• May have one “best friend”</li> </ul>	<ul style="list-style-type: none"> <li>• Can write a story competently beginning to be aware of right and wrong (versus good and bad)</li> <li>• Can sits at the table for 30 minutes</li> <li>• Can work independently doing homework</li> <li>• Able to use logic in arguments and apply logic to specific, concrete situations</li> <li>• Combines oral, visual, and written material in school reports</li> <li>• Shows improvements in ability to make decisions-</li> <li>• Can do simple word maths problems</li> <li>• Can understand concept of fractions- whole/half/quarter</li> <li>• Can start to combine two shapes to make a new shape</li> </ul>	