

Table 1 - Typical development of pre-writing skills

Age	Mark making	Grasps (including pencil)	Hand preference / dominance
12 - 18 Months	Bangs crayon on paper and scribbles.	Mainly whole hand grasp in palm. Some use of thumb and index finger emerging. Fisted grasp of pencil with wrist slightly flexed and palm rotated upwards 	May show a preference. Swaps often. Transfers objects from one hand to the other.
2 - 3 Years	Imitates circular scribble, horizontal and vertical marks.	Increasing control and movement of fingers for more precise pincer grasp and manipulation of tools. May extend fingers along shaft of pencil with palm facing downwards. 	May show a preference. Swaps often. Uses hands cooperatively, one hand leads the other assists.
3 - 4 Years	Copies circle, horizontal and vertical marks. Starts tracing around shapes - initially poor accuracy with corners.	Precision and strength developing for manipulation and control of tools. Thumb, index and middle finger grasp pencil. Fingers mainly static with whole arm movements. 	Starts to stabilise paper with one hand when mark making with other. Preference becoming more consistent.
4 - 6 Years	Copies cross, square, triangle. By age 5-6 years copies intersecting diagonal cross X.	Precision and strength continue to develop. Efficient and mature pencil grasp developing e.g. dynamic tripod. 	Strong preference shown, dominance may be established although some children may still swap.
6 - 8 Years	Writes most letters with correct formation, orientation and spacing.	Efficient and mature pencil grasp usually established e.g. dynamic tripod. Endurance and stamina developing.	Consistently uses the same hand and dominance established. Consistently reaches across midline of body with dominant hand. Some children still undecided until age 9.

Imitates = observes someone doing the action and attempts.

Copies = looks at a shape and attempts.

Preference = favouring of one hand over the other for the skilled part of an activity.

Dominance = established consistent and more proficient use of one hand in functional skilled tasks.

Adapted by W. Cumines from: Schneck & Amundson (2010); Henderson & Pehoski (2006); Beery et al (2010); Erhardt (1982).

Illustrations from Handwriting Motorway, Cardiff UHB and LA 2010