

Sample Athlete #7

Basketball · Guard · SPORTOVISION U11

DATE OF BIRTH / AGE	04.05.2016 · 10 years
HEIGHT / WEIGHT	145 cm · 38.5 kg
DOMINANT HAND / FOOT	Right / Right
TEST DATE	12.09.2026 · Saturday 10:00–10:45
PREVIOUS TEST	First measurement — baseline established
REFERENCE	Boys' norms, age 9–10 (Eurofit + youth athlete literature)
CAPTURE	Single camera · 60 fps · height-based calibration

OVERALL ASSESSMENT · 8 DOMAINS

VERTICAL JUMP
22.8 cm
CMJ · norm 19–24 monitor ·
MONITOR

HORIZONTAL POWER
152 cm
SLJ · norm ≥ 150 good ·
GOOD

SPRINT
2.18 s
10 m · norm ≤ 2.20 good ·
GOOD

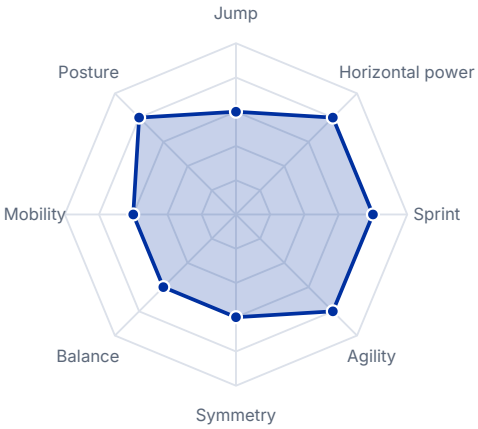
AGILITY
5.74 s
5-10-5 · norm ≤ 5.90 good ·
GOOD

BILATERAL SYMMETRY
7.6%
SLH left–right difference ·
MONITOR

BALANCE
7.8%
Right foot AP sway ·
MONITOR

MOBILITY
33°
Right ankle dorsiflexion ·
MONITOR

POSTURE
2.4°
Shoulder tilt ·
GOOD



PERFORMANCE PROFILE

Band score for the eight domains against age norms (1 priority → 5 excellent). As this is the first measurement there is no comparison line; this profile is the athlete's baseline. Speed and horizontal power are good for his age; vertical jump, right-side symmetry, balance and right ankle mobility are in the monitor band.

12.09.2026

13
TESTS PERFORMED · AGE-APPROPRIATE SET

9–10
VS AGE NORM (BOYS)

4 domains
IN GOOD BAND

4 domains
IN MONITOR BAND

0 domains
IMPROVE / PRIORITY

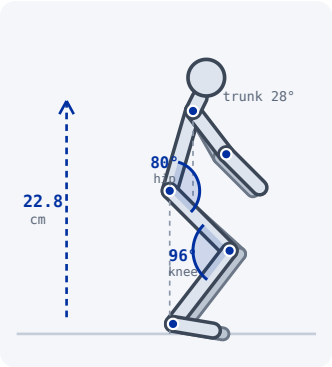
Right
WEAKER SIDE IN SYMMETRY, BALANCE AND MOBILITY

One-sentence summary. Fast and agile for his age; vertical jump is still in the monitor band and in three separate tests the right side lags behind the left (single-leg hop, balance, ankle mobility). At age 10 this difference is not an "injury" but a developmental area to be closed with game-based coordination work; he should be re-measured with the same set after 12 weeks.

1 · JUMPING AND EXPLOSIVE POWER

Vertical and Horizontal Jump

Height is calculated from flight time (h = g·t²/8). Horizontal distance is calibrated from body height (145 cm). Bands are based on norms for boys aged 9–10; adult thresholds were not used.



CMJ · LOWEST POINT

Vertical jump family CMJ · SJ · ABALAKOV

Three tests in one morning, 3 trials each, best taken. Countermovement coordination is still developing in children; a small countermovement was seen in the SJ, result accepted as valid.

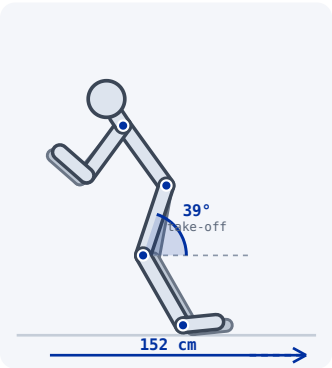
TEST	HEIGHT	FLIGHT	NORM · BOYS 9–10	STATUS
CMJ (hands on hips)	22.8 cm	431 ms	good ≥ 24 · monitor 19–24	MONITOR
Squat Jump (SJ)	20.1 cm	405 ms	good ≥ 21 · monitor 17–21	MONITOR
Abalakov (arms free)	26.4 cm	464 ms	good ≥ 27 · monitor 22–27	MONITOR

ECCENTRIC UTILISATION RATIO
1.13
CMJ ÷ SJ. The stretch-shortening cycle is used well for his age (reference 1.05–1.20, regardless of age).

ARM CONTRIBUTION
+3.6 cm
Abalakov − CMJ = 16%. Arm–leg coordination within the normal range (10–18%).

SQUAT DEPTH
96°
Knee angle at the deepest point. 90–105° is typical in children; no technique issue.

Interpretation. All three vertical jumps are in the **Monitor** band of the age norm and consistent with one another (ratio and arm contribution normal). This picture means "not yet developed", not "weak": at age 10 vertical jump increases by 2–3 cm per year with growth and neuromuscular maturation. The priority is not weight training but jump-and-landing technique games.



SLJ · TAKE-OFF

Horizontal jump SLJ · STANDING LONG JUMP

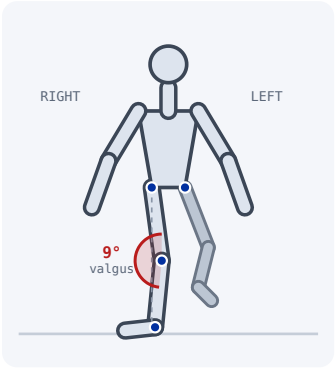
MEASURE	VALUE	NORM · BOYS 9–10	STATUS
Jump distance	152 cm	excellent ≥ 165 · good 150–165 · monitor 135–150	GOOD
Flight time	418 ms	–	INFO
Distance / height	1.05	good ≥ 1.00 (age-independent)	GOOD
Take-off angle	39°	38–45°	GOOD

Interpretation. Horizontal power is in the **Good** band of the age norm, one band ahead of vertical jump. Take-off angle is in the optimal range; the arms contribute well to the jump. A positive sign for first-step quickness and horizontal explosiveness in basketball.

2 · BILATERAL SYMMETRY AND BALANCE

Right–Left Balance and Control

Single-leg tests were filmed separately for left and right. LSI = weaker side ÷ stronger side; thresholds are age-independent (10% monitor, 15% priority). A low-intensity set was used at age 10: SLH and Flamingo only.



SLH · RIGHT LEG LANDING

Single-leg hop SLH · LEFT / RIGHT

TEST	LEFT	RIGHT	LSI	DIFF	STATUS
Single Leg Hop (SLH)	118 cm	109 cm	92.4%	7.6%	MONITOR
Distance / height	0.81	0.75	–	–	INFO
Landing knee valgus	3°	9°	–	6° diff	MONITOR
Result	–	–	92.4%	7.6%	Right weaker

DIRECTIONAL CONSISTENCY

3 / 3

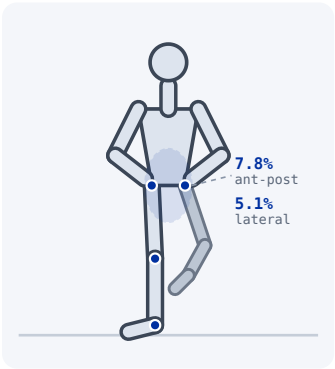
In hop, balance and ankle mobility the weaker side is always the **right**. Not a coincidence; work should be coordination-focused.

AGE CONTEXT

7.6%

At age 10, differences of 5–10% are common; above 10% they are monitored if they persist. Currently below the monitoring threshold.

Interpretation. The right leg is 7.6% behind and the knee collapses inward by 9° on landing (3° on the left). At this age this is a matter of neuromuscular control, not structure: it is expected to close within 12 weeks with single-leg landing games, lateral hops and "quiet landing" drills.



FLAMINGO · RIGHT FOOT · 20 S

Single-leg balance FLAMINGO · 20 S · HANDS ON HIPS

Sway = standard deviation of the hip centre ÷ trunk length × 100. As there is no child norm, the bands are a broad in-report reference (good ≤ 6% · monitor 6–9 · improve 9–13); the left–right difference is meaningful regardless of age.

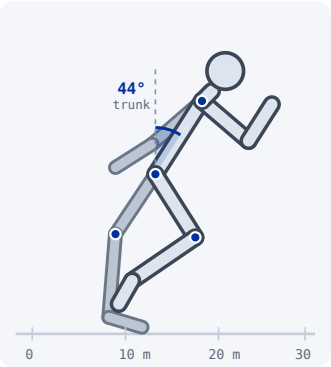
MEASURE	LEFT	RIGHT	DIFF	STATUS
Anteroposterior sway	5.2%	7.8%	+50%	MONITOR
Lateral sway	4.0%	5.1%	+28%	GOOD
Sway path	214%	268%	+25%	MONITOR
Stable time	20.0 s	18.4 s	1 correction on right	MONITOR

Interpretation. Balance on the left foot is good; on the right foot anteroposterior sway is 50% greater and there is one corrective step. Anteroposterior sway depends on the ankle strategy — consistent with the right ankle mobility restriction (next page).

3 · SPRINT AND CHANGE OF DIRECTION

Speed and Agility

Times were calculated by frame marking (60 fps → ±17 ms). The 30 m sprint and 505 were not performed at age 10; 10–20 m and two agility tests are sufficient.



SPRINT · ACCELERATION PHASE

Linear sprint 10 · 20 M

DISTANCE	TIME	SPLIT TIME	SPLIT SPEED	NORM · BOYS 9–10	STATUS
0–10 m	2.18 s	2.18	16.5 km/h	excellent ≤ 2.05 · good 2.05–2.20 monitor 2.20–2.35	GOOD
0–20 m	3.96 s	1.78	20.2 km/h	excellent ≤ 3.75 · good 3.75–4.00 monitor 4.00–4.30	GOOD

ESTIMATED MAX SPEED
20.2 km/h
From the 10–20 m split speed. 19–21 km/h is the typical upper range for boys aged 10.

ACCELERATION PROFILE
55%
Share of the first 10 m in the 20 m time. Strong start; the profile wanted for basketball.

TRUNK LEAN
44°
From vertical in the first steps. Reference 45–50°: starts slightly upright, correctable.

Interpretation. Linear speed is in the **Good** band of the age norm and consistent over both distances. The high share of the first 10 m matches the good horizontal jump result: explosive acceleration is this athlete's strength.

Change of direction 5-10-5 · T-TEST

TEST	TOTAL	PHASE TIMES	DIR. CHANGES	NORM · BOYS 9–10	STATUS
Pro Agility 5-10-5	5.74 s	1.32 · 2.88 · 1.54	2	excellent ≤ 5.50 · good 5.50–5.90 · monitor 5.90–6.30	GOOD
T-Test	13.4 s	–	4	excellent ≤ 12.5 · good 12.5–13.5 · monitor 13.5–14.5	GOOD

LEFT / RIGHT TURN
1.32 / 1.54
5-10-5: first turn is left, last is right — right-foot brake-and-push is 0.22 s slower. Same side as the symmetry page.

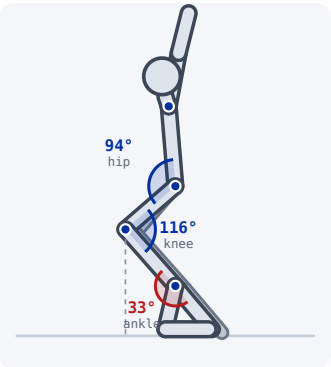
DECELERATION SHARE
50%
The middle phase (2.88 s) is half of the total; braking mechanics mature late in children — normal.

Interpretation. Both agility tests are **Good**; however, turning on the right foot is clearly slower. This is the fourth piece of evidence for the report's main finding (right-side control). Agility training should include right-foot brake-and-push repetitions.

4 · MOVEMENT QUALITY, MOBILITY AND POSTURE

Movement Screening

Overhead squat, posture and sit & reach thresholds are largely age-independent; the norm for boys aged 9–10 was used for sit & reach. The Nordic test is not performed at this age.



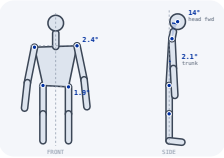
OVERHEAD SQUAT · DEEPEST POINT · RIGHT

Overhead squat screening

ROM · 3 REPS · SIDE VIEW

JOINT	LEFT	RIGHT	ASYM.	REFERENCE	STATUS
Ankle dorsiflexion	36°	33°	3°	≥ 35°	MONITOR
Knee flexion (deepest)	114°	116°	2°	≥ 110°	GOOD
Hip flexion	94°	94°	0°	≤ 95°	GOOD
Trunk lean from vertical		35°	–	≤ 40°	GOOD
Squat depth	hips at knee level		–	full	MONITOR

Interpretation. Right ankle dorsiflexion is 33° — 2° below the reference and 3° less than the left. A small difference on its own; but combined with right-side balance and knee valgus on right landing it forms a consistent chain. In children ankle mobility is gained quickly through play (ankle-circle games, heel-to-toe walks).



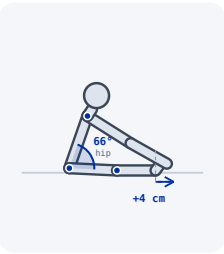
FRONT + SIDE

Posture

FRONT + SIDE · 5 S HOLD

MEASURE	VALUE	REFERENCE	STATUS
Shoulder tilt	2.4° (right ↓)	≤ 3°	GOOD
Pelvic tilt	1.9°	≤ 3°	GOOD
Forward head position	14°	≤ 15°	GOOD
Forward trunk lean	2.1°	≤ 5°	GOOD

Posture angles are not a diagnosis. Forward head position is close to the threshold (14°); ask about screen time and school-bag load, and re-check after 3 months.



SIT & REACH

Flexibility

SIT & REACH

MEASURE	VALUE	NORM · BOYS 9–10	STATUS
Reach (relative to toes)	+4 cm	good ≥ +3 · monitor −2…+3	GOOD
Hip flexion (min)	66°	–	INFO

Calibrated from body height (145 cm). Hamstring flexibility is good for his age; a drop during the growth spurt (ages 12–14) is normal and it should be re-measured then.

5 · FIRST MEASUREMENT ASSESSMENT · 12.09.2026

Single Measurement, Compared with Age Norms

DOMAIN	MEASUREMENT	NORM · BOYS 9–10	BAND	NOTE
Vertical jump	22.8 cm (CMJ)	good ≥ 24	Monitor	Should rise with age; technique games
Horizontal power	152 cm (SLJ)	good ≥ 150	Good	Strength
Sprint	2.18 s (10 m)	good ≤ 2.20	Good	Strength
Agility	5.74 s (5-10-5)	good ≤ 5.90	Good	Right turn slow
Symmetry	7.6% diff (SLH)	< 10%	Monitor	Right weaker, 3/3 consistent
Balance	7.8% (right AP)	≤ 6%	Monitor	Right foot
Mobility	33° (right ankle)	≥ 35°	Monitor	Right ankle
Posture	2.4° shoulder	≤ 3°	Good	Monitor forward head 14°

COACH ASSESSMENT AND DECISION-SUPPORT NOTE

Overall. Against the age-10 norm he shows a **fast and agile** guard profile: 10 m, 20 m, 5-10-5 and T-test are all four in the good band, as is the horizontal jump. Vertical jump is in the monitor band; this is expected at this age and improves through jump-and-landing technique games, not weight training.

One finding under a single heading. In four separate tests (single-leg hop, balance, ankle mobility, right turn in agility) the weaker side is the **right**. At age 10 this is not a structural problem but a difference in neuromuscular control and mobility; yet because it is consistent it should not be ignored. As landing and change-of-direction loads in basketball will increase in adolescence, now is the cheapest time to close it.

Next 12 weeks (game-based, 2 × 15 min per week). (1) Single-leg landing games: "quiet landing", hop-and-stop, lateral hops — right foot first. (2) Ankle mobility: heel-to-toe walks, knee-to-wall ankle touches, 3 min daily. (3) Right-foot brake-and-push: short version of the 5-10-5 (5-5), right-turn repetitions. (4) Jump technique: arm-swing jump games; no weights, no maximal repetitions.

Re-test. After 12 weeks (December 2026), the same 13-test set. Success criteria: SLH difference < 5%, right ankle dorsiflexion ≥ 35°, right foot anteroposterior sway ≤ 6%, CMJ ≥ 24 cm. If height has increased by more than 3 cm, results are read together with the growth effect.

All measurements were produced from a single camera using skeleton tracking; jump heights are calibrated from flight time (60 fps, ±8 ms) and distances from the athlete's height. The bands are **approximate** thresholds for boys aged 9–10 compiled from Eurofit and the youth athlete literature; they are not a definitive norm table and will be calibrated with club data. Tests not performed due to age restrictions: Nordic control, RSI 10/5, BOSCO, triple/crossover hop, 505, 30 m sprint, pupillary reflex.