

Fitness Zones for Recommended and Optional Test Items Boys With Visual Impairment (Blindness)

Age (yr.)	PACER (20 m laps)		1-mile run (VO ₂ MAX)		TAMT (pass/fail)		Percent body fat ^c			Triceps and calf skinfold ^d (mm)
	NI ^a	HFZ ^b	NI	HFZ ^a	NI	HFZ ^d	Very lean	HFZ	NI	NI (health risk)
10	≤12	13–16	≤38.9	39.0–40.1	F	P	≤8.8	8.9–22.4	22.5	≥33.2
11	≤15	16–19	≤38.9	39.0–40.1	F	P	≤8.7	8.8–23.6	23.7	≥35.4
12	≤19	20–22	≤39.0	39.1–40.2	F	P	≤8.3	8.4–23.6	23.7	≥35.9
13	≤24	25–28	≤39.8	39.9–41.0	F	P	≤7.7	7.8–22.8	22.9	≥35.0
14	≤31	32–35	≤41.1	41.2–42.4	F	P	≤7.0	7.1–21.3	21.4	≥33.2
15	≤37	38–41	≤42.2	42.3–43.5	F	P	≤6.5	6.6–20.1	20.2	≥31.5
16	≤42	43–46	≤42.7	42.8–44.0	F	P	≤6.4	6.5–20.1	20.2	≥31.6
17	≤45	46–49	≤42.8	42.9–44.1	F	P	≤6.6	6.7–20.9	21.0	≥33.0

Age (yr.)	Body mass index ^c			Flexed-arm hang (sec.)		Push-up (# completed)		Pull-up (# completed)		Modified pull-up (# completed)		Curl-up (# completed)	
	Very lean	HFZ	NI	NI (health risk)	NI	HFZ ^c	NI	NI	HFZ ^e	NI	HFZ ^c	NI	HFZ ^c
10	≤14.4	14.5–19.7	19.8	≥22.7	≤3	≥4	≤6	≥7	≥1	0	≥5	≤11	≥12
11	≤14.8	14.9–20.5	20.6	≥23.7	≤5	≥6	≤7	≥8	≥1	0	≥6	≤14	≥15
12	≤15.2	15.3–21.3	21.4	≥24.7	≤9	≥10	≤9	≥10	≥1	0	≥7	≤17	≥18
13	≤15.7	15.8–22.2	22.3	≥25.6	≤11	≥12	≤11	≥12	≥1	0	≥8	≤20	≥21
14	≤16.3	16.4–23.0	23.1	≥26.5	≤14	≥15	≤13	≥14	≥2	≤1	≥9	≤23	≥24
15	≤16.8	16.9–23.7	23.8	≥27.2	≤14	≥15	≤15	≥16	≥3	≤2	≥10	≤23	≥24
16	≤17.4	17.5–24.5	24.6	≥27.9	≤14	≥15	≤17	≥18	≥5	≤4	≥12	≤23	≥24
17	≤18.0	18.1–24.9	25.0	≥28.6	≤14	≥15	≤17	≥18	≥5	≤4	≥14	≤23	≥24

Age (yr.)	Trunk lift (in.)		Shoulder stretch (pass/fail)		Sit-and-reach (in.)	
	NI	HFZ ^c	NI	HFZ ^c	NI	HFZ ^c
10	≤8	9–12	F	P	≤7	8
11	≤8	9–12	F	P	≤7	8
12	≤8	9–12	F	P	≤7	8
13	≤8	9–12	F	P	≤7	8
14	≤8	9–12	F	P	≤7	8
15	≤8	9–12	F	P	≤7	8
16	≤8	9–12	F	P	≤7	8
17	≤8	9–12	F	P	≤7	8

- NI and AFZ lap counts from Winnick and Short, 2014, developed with an equation provided by The Cooper Institute (2013). AFZ lap range represents a 3 percent reduction from VO₂max standard for the general population. Where appropriate, youngsters with visual impairment should pursue standards for the HFZ.
- Reprinted, by permission, from The Cooper Institute, 2014, *Goal setting chart for aerobic capacity and PACER test*
- Reprinted, by permission, from The Cooper Institute, 2013, *Fitnessgram/Activitygram test administration manual*, updated 4th ed. (Champaign, IL: Human Kinetics), 61.
- Based on data from Project Target (1998).
- Based on data from The Cooper Institute (1999).
- The Cooper Institute, 2013, *Fitnessgram/Activitygram test administration manual*, updated 4th ed. (Champaign, IL: Human Kinetics), 65, 101.

From J. Winnick and F. Short, 2014, *Brockport physical fitness test manual: A health-related assessment for youngsters with disabilities* (Champaign, IL: Human Kinetics).