

The table below comes from the 2011 *Medicine and Science in Sports and Exercise* study "2011 Compendium of Physical Activities: A Second Update of Codes and MET Values," by BE Ainsworth, WL Haskell, SD Hermann, N Meckes, DR Basset, Jr., C. Tudor-Locke, JL Greer, J Vezina, MC Whitt-Glover, and AS Leon.

ACTIVITY	SPECIFIC MOTION	METs
inactivity quiet/light	sleeping	0,95
inactivity quiet/light	lying quietly and watching television	1
inactivity quiet/light	meditating	1
miscellaneous	laughing, sitting	1
miscellaneous	sitting, playing traditional video game, computer game	1
inactivity quiet/light	lying quietly, doing nothing, lying in bed awake, listening to music (not talking or reading)	1
home activities	reclining with baby	1,2
conditioning exercise	whirlpool, sitting	1,3
home activities	knitting, sewing, light effort, wrapping presents, sitting	1,3
inactivity quiet/light	sitting quietly and watching television	1,3
inactivity quiet/light	sitting quietly, general	1,3
inactivity quiet/light	sitting, smoking	1,3
inactivity quiet/light	sitting at a desk, resting head in hands	1,3
inactivity quiet/light	standing quietly, standing in a line	1,3
inactivity quiet/light	reclining, writing	1,3
inactivity quiet/light	reclining, talking or talking on phone	1,3
inactivity quiet/light	reclining, reading	1,3
miscellaneous	sitting, reading, book, newspaper, etc.	1,3
miscellaneous	sitting, writing, desk work, typing	1,3
miscellaneous	sitting, studying, general, including reading and/or writing, light effort	1,3
occupation	farming, milking by machine, light effort	1,3
occupation	police, riding in a squad car, sitting	1,3
occupation	typing, electric, manual or computer	1,3
self care	having hair or nails done by someone else, sitting	1,3
sexual activity	passive, light effort, kissing, hugging	1,3
transportation	riding in a car or truck	1,3
transportation	riding in a bus or train	1,3
water activities	boating, power, passenger, light	1,3
religious activities	sitting in church, in service, attending a ceremony, sitting quietly	1,3
religious activities	sitting, reading religious materials at home	1,3
religious activities	standing quietly in church, attending a ceremony	1,3
religious activities	kneeling in church or at home, praying	1,3
religious activities	typing, electric, manual, or computer	1,3
volunteer activities	typing, electric, manual, or computer	1,3
inactivity quiet/light	sitting quietly, fidgeting, general, fidgeting hands	1,5
inactivity quiet/light	sitting, listening to music (not talking or reading) or watching a movie in a theater	1,5
lawn and garden	watering lawn or garden, standing or walking	1,5
miscellaneous	board game playing, sitting	1,5
miscellaneous	card playing, sitting	1,5

miscellaneous	chess game, sitting	1,5
miscellaneous	copying documents, standing	1,5
miscellaneous	sitting, talking in person, on the phone, computer, or text messaging, light effort	1,5
miscellaneous	sitting at a sporting event, spectator	1,5
occupation	sitting tasks, light effort (e.g., office work, chemistry lab work, computer work, light assembly repair, watch repair, reading, desk work)	1,5
occupation	sitting meetings, light effort, general, and/or with talking involved (e.g., eating at a business meeting)	1,5
self care	bathing, sitting	1,5
self care	eating, sitting	1,5
self care	taking medication, sitting or standing	1,5
sports	tai chi, qi gong, sitting, light effort	1,5
religious activities	eating at church	1,5
volunteer activities	sitting, meeting, general, and/or with talking involved	1,5
volunteer activities	sitting, light office work, in general	1,5
fishing and hunting	fishing, jog or line, standing, general	1,8
home activities	wash dishes, standing or in general (not broken into stand/walk components)	1,8
home activities	ironing, sitting	1,8
inactivity quiet/light	sitting, fidgeting feet	1,8
inactivity quiet/light	standing, fidgeting	1,8
miscellaneous	drawing, writing, painting, standing	1,8
miscellaneous	standing, talking in person, on the phone, computer, or text messaging, light effort	1,8
miscellaneous	sitting, in class, general, including note-taking or class discussion	1,8
miscellaneous	standing, reading	1,8
miscellaneous	sitting, arts and crafts, carving wood, weaving, spinning wool, light effort	1,8
miscellaneous	retreat/family reunion activities involving sitting, relaxing, talking, eating	1,8
music playing	accordion, sitting	1,8
music playing	horn, standing	1,8
music playing	trumpet, standing	1,8
music playing	woodwind, sitting	1,8
occupation	engineer (e.g., mechanical or electrical)	1,8
occupation	hairstylist (e.g., plaiting hair, manicure, make-up artist)	1,8
occupation	manager, property	1,8
occupation	tailoring, hand sewing	1,8
self care	sitting on toilet, eliminating while standing or squatting	1,8
sexual activity	general, moderate effort	1,8
sports	horse cart, driving, standing or sitting	1,8
transportation	flying airplane or helicopter	1,8
religious activities	sitting in church, talking or singing, attending a ceremony, sitting, active participation	1,8
religious activities	standing, talking in church	1,8
conditioning exercise	yoga, Nadisodhana	2
fishing and hunting	fishing from boat or canoe, sitting	2
fishing and hunting	fishing, ice, sitting	2

fishing and hunting	hunting large game from a car, plane, or boat	2
fishing and hunting	trapping game, general	2
home activities	cooking or food preparation - standing or sitting or in general (not broken into stand/walk components), manual appliances, light effort	2
home activities	laundry, fold or hang clothes, put clothes in washer or dryer, packing suitcase, washing clothes by hand, implied standing, light effort	2
home activities	scrubbing floors, on hands and knees, scrubbing bathroom, bathtub, light effort	2
home activities	standing, light effort tasks (pump gas, change light bulb, etc.)	2
home activities	standing, holding child	2
home activities	child care, sitting/kneeling (e.g., dressing, bathing, grooming, feeding, occasional lifting of child), light effort, general	2
home activities	breastfeeding, sitting or reclining	2
home repair	sharpening tools	2
home repair	washing and waxing car	2
lawn and garden	planting, potting, transplanting seedlings or plants, light effort	2
miscellaneous	touring/traveling/vacation involving riding in a vehicle	2
music playing	flute, sitting	2
music playing	playing musical instruments, general	2
music playing	organ, sitting	2
music playing	guitar, classical, folk, sitting	2
occupation	bakery, light effort	2
occupation	building road, directing traffic, standing	2
occupation	farming, light effort (e.g., cleaning animal sheds, preparing animal feed)	2
occupation	printing, paper industry worker, standing	2
occupation	shoe repair, general	2
occupation	tailoring, weaving, light effort (e.g., finishing operations, washing, dyeing, inspecting cloth, counting yards, paperwork)	2
occupation	Truck, driving delivery truck, taxi, shuttlebus, school bus	2
occupation	walking on job, less than 2.0 mph, very slow speed, in office or lab area	2
self care	talking and eating or eating only, standing	2
self care	grooming, washing hands, shaving, brushing teeth, putting on make-up, sitting or standing	2
self care	showering, toweling off, standing	2
walking	walking, household	2
walking	walking, less than 2.0 mph, level, strolling, very slow	2
winter activities	ice fishing, sitting	2
winter activities	snowmobiling, passenger	2
religious activities	sitting, playing an instrument at church	2
religious activities	standing, singing in church, attending a ceremony, standing, active participation	2
religious activities	walking in church	2
religious activities	walking, less than 2.0 mph, very slow	2
religious activities	walk/stand combination for religious purposes, usher	2

religious activities	preparing food at church	2
religious activities	eating/talking at church or standing eating, American Indian Feast days	2
volunteer activities	sitting, child care, only active periods	2
volunteer activities	walking, less than 2.0 mph, very slow	2
home activities	sitting, playing with child(ren), light effort, only active periods	2,2
home activities	stand, playing with animals, light effort, only active periods	2,2
occupation	farming, driving tasks (e.g., driving tractor or harvester)	2,2
occupation	sitting, teaching stretching or yoga, or light effort exercise class	2,2
conditioning exercise	activity promoting video game (e.g., Wii Fit), light effort (e.g., balance, yoga)	2,3
conditioning exercise	stretching, mild	2,3
conditioning exercise	video exercise workouts, TV conditioning programs (e.g., yoga, stretching), light effort	2,3
fishing and hunting	fishing with a spear, standing	2,3
fishing and hunting	rifle exercises, shooting, lying down	2,3
home activities	cleaning, sweeping, slow, light effort	2,3
home activities	dusting or polishing furniture, general	2,3
home activities	cutting and smoking fish, drying fish or meat	2,3
home activities	food shopping with or without a grocery cart, standing or walking	2,3
home activities	non-food shopping, with or without a cart, standing or walking	2,3
home activities	laundry, putting away clothes, gathering clothes to pack, putting away laundry, implied walking	2,3
home activities	walking and carrying small child, child weighing less than 15 lbs	2,3
home activities	animal care, household animals, general	2,3
home activities	elder care, disabled adult, feeding, combing hair, light effort, only active periods	2,3
home repair	carpentry, home remodeling tasks, light effort	2,3
lawn and garden	gardening, using containers, older adults > 60 years	2,3
music playing	cello, sitting	2,3
music playing	conducting orchestra, standing	2,3
music playing	piano, sitting	2,3
occupation	active workstation, treadmill desk, walking	2,3
occupation	bookbinding	2,3
occupation	custodial work, light effort (e.g., cleaning sink and toilet, dusting, vacuuming, light cleaning)	2,3
occupation	postal carrier, walking to deliver mail	2,3
occupation	tailoring, cutting fabric	2,3
self care	getting ready for bed, general, standing	2,3
walking	carrying 15 lb child, slow walking	2,3
water activities	tubing, floating on a river, general	2,3
volunteer activities	standing, light work (filing, talking, assembling)	2,3
walking	walking, 2.0 mph, level, slow pace, firm surface	2,3
conditioning exercise	yoga, Hatha	2,5
fishing and hunting	hunting, bow and arrow, or crossbow	2,5

fishing and hunting	hunting large game, from a hunting stand, limited walking	2,5
fishing and hunting	hunting, duck, wading	2,5
fishing and hunting	pistol shooting or trap shooting, standing	2,5
fishing and hunting	rifle exercises, shooting, kneeling or standing	2,5
home activities	mopping, standing, light effort	2,5
home activities	cleaning, general (straightening up, changing linen, carrying out trash, light effort	2,5
home activities	wash dishes, clearing dishes from table, walking, light effort	2,5
home activities	serving food, setting table, implied walking or standing	2,5
home activities	cooking or food preparation, walking	2,5
home activities	feeding household animals	2,5
home activities	putting away groceries (e.g. carrying groceries, shopping without a grocery cart), carrying packages	2,5
home activities	watering plants	2,5
home activities	building a fire inside	2,5
home activities	child care, infant, general	2,5
home activities	sit, playing with animals, light effort, only active periods	2,5
home repair	home repair, general, light effort	2,5
lawn and garden	mowing lawn, riding mower (550)	2,5
lawn and garden	operating snow blower, walking	2,5
miscellaneous	casino gambling, standing	2,5
miscellaneous	standing, miscellaneous	2,5
miscellaneous	standing, arts and crafts, sand painting, carving, weaving, light effort	2,5
miscellaneous	camping involving standing, walking, sitting, light-to-moderate effort	2,5
music playing	double bass, standing	2,5
music playing	violin, sitting	2,5
occupation	carpentry, general, light effort	2,5
occupation	cook, chef	2,5
occupation	masonry, concrete, light effort	2,5
occupation	operating heavy duty equipment, automated, not driving	2,5
occupation	police, directing traffic, standing	2,5
occupation	police, driving a squad car, sitting	2,5
occupation	sitting tasks, moderate effort (e.g., pushing heavy levers, riding mower/forklift, crane operation)	2,5
occupation	tailoring, general	2,5
occupation	tailoring, machine sewing	2,5
self care	dressng, undressing, standing or sitting	2,5
self care	hairstyling, standing	2,5
sports	billiards	2,5
sports	darts, wall or lawn	2,5
sports	football or baseball, playing catch	2,5
transportation	automobile or light truck (not a semi) driving	2,5
transportation	truck, semi, tractor, > 1 ton, or bus, driving	2,5
walking	bird watching, slow walk	2,5

walking	walking from house to car or bus, from car or bus to go places, from car or bus to and from the worksite	2,5
walking	walking to neighbor's house or family's house for social reasons	2,5
walking	walking, to and from an outhouse	2,5
water activities	boating, power, driving	2,5
water activities	water walking, light effort, slow pace	2,5
winter activities	dog sledding, passenger	2,5
winter activities	snow blower, walking and pushing	2,5
religious activities	serving food at church	2,5
volunteer activities	sitting, moderate work	2,5
conditioning exercise	calisthenics (e.g., situps, abdominal crunches), light effort	2,8
conditioning exercise	therapeutic exercise ball, Fitball exercise	2,8
conditioning exercise	upper body exercise, arm ergometer	2,8
home activities	sewing with a machine	2,9
conditioning exercise	pilates, general	3
dancing	ballroom, slow (e.g., waltz, foxtrot, slow dancing, samba, tango, 19 th century dance, mambo, cha cha)	3
fishing and hunting	fishing, fishing wheel, setting net and retrieving fish, general	3
fishing and hunting	hunting, flying fox, squirrel	3
home activities	butchering animals, small	3
home activities	cooking Indian bread on an outside stove	3
home activities	implied walking, putting away household items, moderate effort	3
home activities	walking and carrying small child, child weighing 15 lbs or more	3
home activities	child care, standing (e.g., dressing, bathing, grooming, feeding, occasional lifting of child), moderate effort	3
home activities	walk/run, playing with animals, general, light effort, only active periods	3
home repair	airplane repair	3
home repair	carpentry, general, workshop (620)	3
home repair	hammering nails	3
home repair	repairing appliances	3
home repair	plumbing, general	3
home repair	put on and removal of tarp - sailboat	3
lawn and garden	riding snow blower	3
lawn and garden	walking, applying fertilizer or seeding a lawn, push applicator	3
lawn and garden	walking, gathering gardening tools	3
lawn and garden	yard work, general, light effort	3
miscellaneous	sitting, arts and crafts, carving wood, weaving, spinning wool, moderate effort	3
miscellaneous	retreat/family reunion activities involving playing games with children	3
music playing	drumming (e.g., bongo, conga, benbe), moderate, sitting	3
music playing	guitar, rock and roll band, standing	3
occupation	airline flight attendant	3
occupation	kitchen maid	3

occupation	locksmith	3
occupation	machine tooling (e.g., machining, working sheet metal, machine fitter, operating lathe, welding) light-to-moderate effort	3
occupation	plumbing activities	3
occupation	standing tasks, light effort (e.g., bartending, store clerk, assembling, filing, duplicating, librarian, putting up a Christmas tree, standing and talking at work, changing clothes when teaching physical education, standing)	3
occupation	standing, light/moderate effort (e.g., assemble/repair heavy parts, welding, stocking parts, auto repair, standing, packing boxes, nursing patient care)	3
occupation	walking, gathering things at work, ready to leave	3
occupation	working in scene shop, theater actor, backstage employee	3
sports	bowling (390)	3
sports	frisbee playing, general	3
sports	golf, miniature, driving range	3
sports	horseshoe pitching, quoits	3
sports	shuffleboard	3
sports	tai chi, qi gong, general	3
sports	volleyball, non-competitive, 6 - 9 member team, general	3
walking	walking the dog	3
walking	walking, 2.5 mph, level, firm surface	3
water activities	diving, springboard or platform	3
water activities	sailing, boat and board sailing, windsurfing, ice sailing, general (235)	3
water activities	surfing, body or board, general	3
water activities	water volleyball	3
volunteer activities	standing, child care, only active periods	3
volunteer activities	standing, light/moderate work (e.g., pack boxes, assemble/repair, set up chairs/furniture)	3
volunteer activities	walk/stand combination, for volunteer purposes	3
home activities	cleaning windows, washing windows, general	3,2
conditioning exercise	yoga, Surya Namaskar	3,3
fishing and hunting	hunting, birds	3,3
fishing and hunting	hunting, pigs, wild	3,3
home activities	cleaning, sweeping carpet or floors, general	3,3
home activities	cleaning, house or cabin, general, moderate effort	3,3
home activities	kitchen activity, general, (e.g., cooking, washing dishes, cleaning up), moderate effort	3,3
home activities	vacuuming, general, moderate effort	3,3
home activities	making bed, changing linens	3,3
home repair	automobile repair, light or moderate effort	3,3
home repair	carpentry, finishing or refinishing cabinets or furniture	3,3
home repair	painting inside house, wallpapering, scraping paint	3,3
home repair	wiring, tapping-splicing	3,3
lawn and garden	carrying, loading or stacking wood, loading/unloading or carrying lumber, light-to-moderate effort	3,3

lawn and garden	implied walking/standing - picking up yard, light, picking flowers or vegetables	3,3
miscellaneous	standing, arts and crafts, sand painting, carving, weaving, moderate effort	3,3
occupation	electrical work (e.g., hook up wire, tapping-splicing)	3,3
occupation	laundry worker	3,3
occupation	painting,house, furniture, moderate effort	3,3
sports	croquet	3,3
sports	lawn bowling, bocce ball, outdoor	3,3
sports	sports spectator, very excited, emotional, physically moving	3,3
walking	walking, 2.5 mph, downhill	3,3
water activities	canoeing, harvesting wild rice, knocking rice off the stalks	3,3
water activities	sailing, Sunfish/Laser/Hobby Cat, Keel boats, ocean sailing, yachting, leisure	3,3
religious activities	washing dishes, cleaning kitchen at church	3,3
religious activities	cleaning church	3,3
bicycling	bicycling, leisure, 5.5 mph	3,5
conditioning exercise	bicycling, stationary, 30-50 watts, very light to light effort	3,5
conditioning exercise	calisthenics, light or moderate effort, general (e.g., back exercises), going up & down from floor (150)	3,5
conditioning exercise	Curves™ exercise routines in women	3,5
conditioning exercise	resistance (weight) training, multiple exercises, 8-15 repetitions at varied resistance	3,5
dancing	Caribbean dance (Abakua, Beguine, Bellair, Bongo, Brukin's, Caribbean Quadrills, Dinki Mini, Gere, Gumbay, Ibo, Jonkonnu, Kumina, Oreisha, Jambu)	3,5
fishing and hunting	fishing, general	3,5
fishing and hunting	fishing from river bank, standing (660)	3,5
fishing and hunting	fishing, dip net, setting net and retrieving fish, general	3,5
home activities	cleaning, heavy or major (e.g. wash car, wash windows, clean garage), moderate effort	3,5
home activities	cleaning, mopping, standing, moderate effort	3,5
home activities	multiple household tasks all at once, moderate effort	3,5
home activities	cooking or food preparation, moderate effort	3,5
home activities	scrubbing floors, on hands and knees, scrubbing bathroom, bathtub, moderate effort	3,5
home activities	standing, packing/unpacking boxes, occasional lifting of lightweight household items, loading or unloading items in car, moderate effort	3,5
home activities	walking, moderate effort tasks, non-cleaning (readying to leave, shut/lock doors, close windows, etc.)	3,5
home activities	walking/running, playing with child(ren), moderate effort, only active periods	3,5
home activities	standing, bathing dog	3,5
lawn and garden	clearing light brush, thinning garden, moderate effort	3,5
lawn and garden	digging, spading, filling garden, composting, light-to-moderate effort	3,5
lawn and garden	trimming shrubs or trees, power cutter, using leaf blower, edge, moderate effort	3,5

lawn and garden	weeding, cultivating garden, light-to-moderate effort	3,5
lawn and garden	picking fruit off trees, picking fruits/vegetables, moderate effort	3,5
miscellaneous	standing, arts and crafts, sand painting, carving, weaving, vigorous effort	3,5
miscellaneous	touring/traveling/vacation involving walking	3,5
music playing	trombone, standing	3,5
music playing	marching band, drum major, walking	3,5
occupation	farming, feeding small animals	3,5
occupation	farming, milking by hand, cleaning pails, moderate effort	3,5
occupation	fishing, commercial, light effort	3,5
occupation	standing, moderate effort, intermittent lifting 50 lbs, hitch/twisting ropes	3,5
occupation	tailoring, pressing	3,5
occupation	walking on job, 3.0 mph, in office, moderate speed, not carrying anything	3,5
occupation	walking on job, 2.5 mph, slow speed and carrying light objects less than 25 lbs	3,5
occupation	walking, pushing a wheelchair	3,5
sports	golf, using power cart (070)	3,5
sports	hang gliding	3,5
sports	skydiving, base jumping, bungee jumping	3,5
sports	trampoline, recreational	3,5
transportation	motor scooter, motorcycle	3,5
transportation	walking for transportation, 2.8-3.2 mph, level, moderate pace, firm surface	3,5
walking	loading /unloading a car, implied walking	3,5
walking	descending stairs	3,5
walking	walking for pleasure (010)	3,5
walking	walking, 2.8 to 3.2 mph, level, moderate pace, firm surface	3,5
walking	walking, for pleasure, work break	3,5
water activities	canoeing, rowing, for pleasure, general (250)	3,5
water activities	swimming, treading water, moderate effort, general	3,5
winter activities	snowmobiling, driving, moderate	3,5
religious activities	walking, 3.0 mph, moderate speed, not carrying anything	3,5
religious activities	standing, moderate effort (e.g., lifting heavy objects, assembling at fast rate)	3,5
volunteer activities	walk/run play with children, moderate, only active periods	3,5
volunteer activities	standing, moderate (lifting 50 lbs., assembling at fast rate)	3,5
volunteer activities	walking, 3.0 mph, moderate speed, not carrying anything	3,5
volunteer activities	walking, 2.5 mph slowly and carrying objects less than 25 lbs	3,5
home activities	multiple household tasks all at once, light effort	3,8
conditioning exercise	activity promoting video game (e.g., Wii Fit), moderate effort (e.g., aerobic, resistance)	3,8
conditioning exercise	calisthenics (e.g., push ups, sit ups, pull-ups, lunges), moderate effort	3,8

conditioning exercise	home exercise, general	3,8
fishing and hunting	fishing, set net, setting net and retrieving fish, general	3,8
home activities	cleaning, sweeping, slow, moderate effort	3,8
home repair	carpentry, outside house, building a fence	3,8
home repair	laying tile or linoleum, repairing appliances	3,8
lawn and garden	raking lawn or leaves, moderate effort	3,8
lawn and garden	gardening, general, moderate effort	3,8
music playing	drums, sitting	3,8
occupation	custodial work, moderate effort (e.g., electric buffer, feathering arena floors, mopping, taking out trash, vacuuming)	3,8
occupation	farming, rice, planting, grain milling activities	3,8
occupation	horse racing, walking	3,8
occupation	walking, 2.5 mph, slow speed, carrying heavy objects more than 25 lbs	3,8
sports	bowling, indoor, bowling alley	3,8
sports	gymnastics, general	3,8
sports	horseback riding, walking	3,8
walking	pushing a wheelchair, non-occupational	3,8
bicycling	bicycling, <10 mph, leisure, to work or for pleasure (115)	4
conditioning exercise	video exercise workouts, TV conditioning programs (e.g., cardio-resistance), moderate effort	4
conditioning exercise	yoga, Power	4
fishing and hunting	fishing, catching fish with hands	4
fishing and hunting	fishing from river bank and walking	4
fishing and hunting	hunting large marine animals	4
home activities	tanning hides, general	4
home activities	laundry, hanging wash, washing clothes by hand, moderate effort	4
home activities	sweeping garage, sidewalk or outside of house	4
home activities	walk/run, playing with animals, moderate effort, only active periods	4
home activities	elder care, disabled adult, bathing, dressing, moving into and out of bed, only active periods	4
home repair	automobile body work	4
home repair	carpentry, home remodeling tasks, moderate effort	4
lawn and garden	irrigation channels, opening and closing ports	4
lawn and garden	raking lawn (600)	4
lawn and garden	raking roof with snow rake	4
lawn and garden	sacking grass, leaves	4
lawn and garden	trimming shrubs or trees, manual cutter	4
lawn and garden	yard work, general, moderate effort	4
music playing	marching band, baton twirling, walking, moderate pace, general	4
occupation	bakery, general, moderate effort	4
occupation	chambermaid, hotel housekeeper, making bed, cleaning bathroom, pushing cart	4
occupation	construction, outside, remodeling, new structures (e.g., roof repair, miscellaneous)	4
occupation	garbage collector, walking, dumping bins into truck	4
occupation	lawn keeper, yard work, general	4

occupation	massage therapist, standing	4
occupation	police, making an arrest, standing	4
occupation	tailoring, weaving, moderate effort (e.g., spinning and weaving operations, delivering boxes of yarn to spinners, loading of warp beam, pinwinding, conewinding, warping, cloth cutting)	4
sports	coaching, football, soccer, basketball, baseball, swimming, etc.	4
sports	curling	4
sports	football, touch, flag, light effort	4
sports	hacky sack	4
sports	high ropes course, multiple elements	4
sports	juggling	4
sports	moto-cross, off-road motor sports, all-terrain vehicle, general	4
sports	rodeo sports, general, light effort	4
sports	softball, practice	4
sports	softball, officiating	4
sports	table tennis, ping pong (410)	4
sports	volleyball (400)	4
sports	track and field (e.g., shot, discus, hammer throw)	4
walking	pushing or pulling stroller with child or walking with children, 2.5 to 3.1 mph	4
walking	stair climbing, slow pace	4
walking	walking, to work or class (015)	4
water activities	canoeing, on camping trip (270)	4
water activities	paddle boat	4
religious activities	general yard work at church	4
conditioning exercise	circuit training, moderate effort	4,3
conditioning exercise	upper body exercise, stationary bicycle - Airdyne (arms only) 40 rpm, moderate	4,3
fishing and hunting	fishing related, digging worms, with shovel	4,3
home activities	multiple household tasks all at once, vigorous effort	4,3
lawn and garden	planting seedlings, shrub, stooping, moderate effort	4,3
lawn and garden	planting crops or garden, stooping, moderate effort	4,3
occupation	carpentry, general, moderate effort	4,3
occupation	farming, feeding cattle, horses	4,3
occupation	farming, hauling water for animals, general hauling water, farming, general hauling water	4,3
occupation	horse, feeding, watering, cleaning stalls, implied walking and lifting loads	4,3
occupation	masonry, concrete, moderate effort	4,3
occupation	walking on job, 3.5 mph, in office, brisk speed, not carrying anything	4,3
sports	archery, non-hunting	4,3
sports	golf, walking, carrying clubs	4,3
sports	horse chores, feeding, watering, cleaning stalls, implied walking and lifting loads	4,3
walking	walking, 3.5 mph, level, brisk, firm surface, walking for exercise	4,3
winter activities	skiing, downhill, alpine or snowboarding, light effort, active time only	4,3
religious activities	walking, 3.5 mph, brisk speed, not carrying anything	4,3

volunteer activities	walking, 3.5 mph, brisk speed, not carrying anything	4,3
dancing	ethnic or cultural dancing (e.g., Greek, Middle Eastern, hula, salsa, merengue, bamba y plena, flamenco, belly, and swing)	4,5
fishing and hunting	fishing, crab fishing	4,5
home activities	polishing floors, standing, walking slowly, using electric polishing machine	4,5
home repair	caulking, except log cabin	4,5
home repair	home repair, general, moderate effort	4,5
home repair	laying or removing carpet	4,5
home repair	painting, (630)	4,5
home repair	sanding floors with a power sander	4,5
home repair	scraping and painting sailboat or powerboat	4,5
home repair	washing and waxing hull of sailboat or airplane	4,5
home repair	washing fence, painting fence, moderate effort	4,5
lawn and garden	chopping wood, splitting logs, moderate effort	4,5
lawn and garden	mowing lawn, power mower, light or moderate effort (590)	4,5
lawn and garden	planting trees	4,5
lawn and garden	weeding, cultivating garden (580)	4,5
lawn and garden	picking fruit off trees, gleaning fruits, picking fruits/vegetables, climbing ladder to pick fruit, vigorous effort	4,5
occupation	farming, taking care of animals (e.g., grooming, brushing, shearing sheep, assisting with birthing, medical care, branding), general	4,5
occupation	forestry, moderate effort (e.g., sawing wood with power saw, weeding, hoeing)	4,5
occupation	furriery	4,5
occupation	manual or unskilled labor, general, moderate effort	4,5
occupation	orange grove work, picking fruit	4,5
occupation	standing, moderate effort, lifting items continuously, 10 – 20 lbs, with limited walking or resting	4,5
occupation	standing, moderate/heavy tasks (e.g., lifting more than 50 lbs, masonry, painting, paper hanging)	4,5
occupation	walking, 3.0 mph, moderately and carrying light objects less than 25 lbs	4,5
running	jogging, on a mini-tramp	4,5
sports	basketball, shooting baskets	4,5
sports	saddling, cleaning, grooming, harnessing and unharnessing horse	4,5
sports	tennis, doubles	4,5
sports	trampoline, competitive	4,5
walking	marching, moderate speed, military, no pack	4,5
walking	walking, normal pace, plowed field or sand	4,5
water activities	sailing, in competition	4,5
water activities	water walking, moderate effort, moderate pace	4,5
religious activities	Standing, moderate-to-heavy effort, manual labor, lifting ? 50 lbs, heavy maintenance	4,5
volunteer activities	standing, moderate/heavy work	4,5
volunteer activities	walking, 3.0 mph moderately and carrying objects less than 25 lbs, pushing something	4,5

home activities	standing, playing with child(ren) light effort, only active periods	4,8
conditioning exercise	bicycling, stationary, 51-89 watts, light-to-moderate effort	4,8
conditioning exercise	rowing, stationary, general, moderate effort	4,8
dancing	tap	4,8
home activities	organizing room	4,8
occupation	farming, moderate effort (e.g., feeding animals, chasing cattle by walking and/or horseback, spreading manure, harvesting crops)	4,8
occupation	walking, 3.5 mph, briskly and carrying objects less than 25 lbs	4,8
sports	cricket, batting, bowling, fielding	4,8
sports	golf, general	4,8
walking	walking, grass track	4,8
walking	walking, for exercise, 3.5 to 4 mph, with ski poles, Nordic walking, level, moderate pace	4,8
water activities	swimming, backstroke, recreational	4,8
volunteer activities	walking, 3.5 mph, briskly and carrying objects less than 25 lbs	4,8
bicycling	unicycling	5
conditioning exercise	army type obstacle course exercise, boot camp training program	5
conditioning exercise	Elliptical trainer, moderate effort	5
conditioning exercise	resistance (weight) training, squats , slow or explosive effort	5
conditioning exercise	health club exercise classes, general, gym/weight training combined in one visit	5
dancing	ballet, modern, or jazz, general, rehearsal or class	5
dancing	aerobic, low impact	5
fishing and hunting	hunting, general	5
fishing and hunting	hunting, rabbit, squirrel, prairie chick, raccoon, small game (690)	5
home activities	maple syruping/sugar bushing (including carrying buckets, carrying wood)	5
home activities	moving, lifting light loads	5
home activities	walk/run, playing with animals, vigorous effort, only active periods	5
home repair	caulking, chinking log cabin	5
home repair	cleaning gutters	5
home repair	excavating garage	5
home repair	hanging storm windows	5
home repair	hanging sheet rock inside house	5
home repair	painting, outside home (650)	5
home repair	spreading dirt with a shovel	5
lawn and garden	digging sandbox, shoveling sand	5
lawn and garden	digging, spading, filling garden, compositing, (590)	5
lawn and garden	laying sod	5
lawn and garden	mowing lawn, walk, power mower, moderate or vigorous effort	5
lawn and garden	weeding, cultivating garden, using a hoe, moderate-to-vigorous effort	5
occupation	coal mining, erecting supports	5

occupation	fishing, commercial, moderate effort	5
occupation	forestry, ax chopping, slow, 1.25 kg axe, 19 blows/min, moderate effort	5
occupation	Machine tooling, operating punch press, moderate effort	5
occupation	shoveling, less than 10 lbs/minute, moderate effort	5
occupation	walking or walk downstairs or standing, carrying objects about 25 to 49 lbs	5
sports	rock climbing, rappelling	5
sports	skateboarding, general, moderate effort	5
sports	softball or baseball, fast or slow pitch, general (440)	5
sports	tennis, hitting balls, non-game play, moderate effort	5
walking	carrying 15 pound load (e.g. suitcase), level ground or downstairs	5
walking	carrying 1 to 15 lb load, upstairs	5
walking	using crutches	5
walking	walking, 4.0 mph, level, firm surface, very brisk pace	5
water activities	kayaking, moderate effort	5
water activities	snorkeling (310)	5
water activities	surfing, body or board, competitive	5
water activities	whitewater rafting, kayaking, or canoeing	5
water activities	windsurfing, not pumping for speed	5
religious activities	praise with dance or run, spiritual dancing in church	5
conditioning exercise	water aerobics, water calisthenics, water exercise	5,3
conditioning exercise	native New Zealander physical activities (e.g., Haka Powhiri, Moteatea, Waita Tira, Whakawatea, etc.), general, moderate effort	5,3
lawn and garden	felling trees, small-medium size	5,3
lawn and garden	shoveling snow, by hand, moderate effort	5,3
occupation	coal mining, drilling coal, rock	5,3
occupation	steel mill, moderate effort (e.g., fettling, forging, tipping molds)	5,3
sports	golf, walking, pulling clubs	5,3
sports	martial arts, different types, slower pace, novice performers, practice	5,3
walking	hiking or walking at a normal pace through fields and hillsides	5,3
walking	walking, 2.9 to 3.5 mph, uphill, 1 to 5% grade	5,3
water activities	swimming, breaststroke, recreational	5,3
winter activities	skiing, downhill, alpine or snowboarding, moderate effort, general, active time only	5,3
winter activities	snow shoeing, moderate effort	5,3
winter activities	snow shoveling, by hand, moderate effort	5,3
conditioning exercise	health club exercise, general (160)	5,5
dancing	aerobic, step, with 4-inch step	5,5
dancing	ballroom, fast (125)	5,5
dancing	Anishinaabe Jingle Dancing	5,5
lawn and garden	carrying, loading or stacking wood, loading/unloading or carrying lumber	5,5
lawn and garden	mowing lawn, general	5,5
lawn and garden	shoveling dirt or mud	5,5
lawn and garden	wheelbarrow, pushing garden cart or wheelbarrow	5,5

music playing	marching band, playing an instrument, walking, brisk pace, general	5,5
occupation	coal mining, general	5,5
sports	Alaska Native Games, Eskimo Olympics, general	5,5
sports	badminton, social singles and doubles, general	5,5
sports	boxing, punching bag	5,5
sports	horseback riding, general	5,5
sports	rodeo sports, general, moderate effort	5,5
water activities	water aerobics, water calisthenics	5,5
winter activities	skating, ice, 9 mph or less	5,5
lawn and garden	driving tractor	5,8
bicycling	bicycling, on dirt or farm road, moderate pace	5,8
bicycling	bicycling, leisure, 9.4 mph	5,8
home activities	moving furniture, household items, carrying boxes	5,8
home activities	walking/running, playing with child(ren), vigorous effort, only active periods	5,8
lawn and garden	gardening with heavy power tools, tilling a garden, chain saw	5,8
occupation	horse racing, trotting	5,8
sports	children's games, adults playing (e.g., hopscotch, 4-square, dodgeball, playground apparatus, t-ball, tetherball, marbles, arcade games), moderate effort	5,8
sports	horseback riding, trotting	5,8
sports	rock climbing, ascending or traversing rock, low-to-moderate difficulty	5,8
water activities	canoeing, rowing, 4.0-5.9 mph, moderate effort	5,8
water activities	swimming laps, freestyle, front crawl, slow, light or moderate effort	5,8
volunteer activities	walk/run play with children, vigorous, only active periods	5,8
conditioning exercise	resistance training (weight lifting, free weight, nautilus or universal), power lifting or body building, vigorous effort (210)	6
conditioning exercise	rowing, stationary ergometer, general, vigorous effort	6
conditioning exercise	slimnastics, jazzercise	6
conditioning exercise	video exercise workouts, TV conditioning programs (e.g., cardio-resistance), vigorous effort	6
fishing and hunting	fishing in stream, in waders (670)	6
fishing and hunting	hunting, deer, elk, large game (170)	6
fishing and hunting	hunting, pheasants or grouse (680)	6
home activities	butchering animal, large, vigorous effort	6
home repair	carpentry, outside house, installing rain gutters (640),carpentry, outside house, building a fence	6
home repair	carpentry, sawing hardwood	6
home repair	home repair, general, vigorous effort	6
home repair	roofing	6
lawn and garden	mowing lawn, walk, hand mower (570)	6
lawn and garden	shoveling snow, by hand (610)	6
lawn and garden	yard work, general, vigorous effort	6
occupation	building road, driving heavy machinery	6
running	jog/walk combination (jogging component of less than 10 minutes) (180)	6

running	Running, 4 mph (13 min/mile)	6
sports	basketball, non-game, general (480)	6
sports	cheerleading, gymnastic moves, competitive	6
sports	drag racing, pushing or driving a car	6
sports	fencing	6
sports	paddleball, casual, general (460)	6
sports	skateboarding, competitive, vigorous effort	6
sports	softball,pitching	6
sports	tennis, doubles (430)	6
sports	volleyball, competitive, in gymnasium	6
sports	wrestling (one match = 5 minutes)	6
sports	track and field (e.g., high jump, long jump, triple jump, javelin, pole vault)	6
transportation	pushing plane in and out of hangar	6
walking	carrying 16 to 24 lb load, upstairs	6
walking	hiking, cross country (040)	6
walking	walking, backwards, 3.5 mph, level	6
water activities	skiing, water or wakeboarding (220)	6
water activities	paddle boarding, standing	6
water activities	swimming, lake, ocean, river (s 280, 295)	6
water activities	swimming, leisurely, not lap swimming, general	6
winter activities	moving ice house, set up/drill holes	6
lawn and garden	chopping wood, splitting logs, vigorous effort	6,3
lawn and garden	clearing brush/land, undergrowth, or ground, hauling branches, wheelbarrow chores, vigorous effort	6,3
lawn and garden	laying crushed rock	6,3
occupation	coal mining, shoveling coal	6,3
occupation	using heavy power tools such as pneumatic tools (e.g., jackhammers, drills)	6,3
sports	rugby, touch, non-competitive	6,3
transportation	pulling rickshaw	6,3
walking	climbing hills, no load	6,3
home activities	scrubbing floors, on hands and knees, scrubbing bathroom, bathtub, vigorous effort	6,5
occupation	manual or unskilled labor, general, vigorous effort	6,5
occupation	shoveling, 10 to 15 lbs/minute, vigorous effort	6,5
occupation	truck driving, loading and unloading truck, tying down load, standing, walking and carrying heavy loads	6,5
occupation	walking or walk downstairs or standing, carrying objects about 50 to 74 lbs	6,5
sports	basketball, general	6,5
walking	climbing hills with 0 to 9 lb load	6,5
walking	race walking	6,5
occupation	manual or unskilled labor, general, light effort	6,8
bicycling	bicycling, to/from work, self selected pace	6,8
bicycling	bicycling, 10-11.9 mph, leisure, slow, light effort	6,8
conditioning exercise	bicycling, stationary, 90-100 watts, moderate to vigorous effort	6,8
conditioning exercise	ski machine, general	6,8
conditioning exercise	teaching exercise class (e.g., aerobic, water)	6,8

conditioning exercise	native New Zealander physical activities (e.g., Haka, Taiahab), general, vigorous effort	6,8
dancing	ballet, modern, or jazz, performance, vigorous effort	6,8
occupation	fire fighter, rescue victim, automobile accident, using pike pole	6,8
walking	walking, for exercise, with ski poles, Nordic walking, uphill	6,8
water activities	water walking, vigorous effort, brisk pace	6,8
winter activities	skiing, cross country, 2.5 mph, slow or light effort, ski walking	6,8
conditioning exercise	bicycling, stationary, general	7
conditioning exercise	rowing, stationary, 100 watts, moderate effort	7
occupation	carpentry, general, heavy or vigorous effort	7
occupation	fishing, commercial, vigorous effort	7
running	jogging, general	7
sports	badminton, competitive (450)	7
sports	basketball, officiating (500)	7
sports	broomball	7
sports	kickball	7
sports	racquetball, general (470)	7
sports	rodeo sports, general, vigorous effort	7
sports	skating, roller (360)	7
sports	soccer, casual, general (540)	7
sports	wallyball, general	7
walking	backpacking (050)	7
walking	walking, 4.5 mph, level, firm surface, very, very brisk	7
water activities	canoeing, portaging	7
water activities	jet skiing, driving, in water	7
water activities	skindiving, scuba diving, general (310)	7
water activities	swimming, sidestroke, general	7
winter activities	skating, ice, general (360)	7
winter activities	ski jumping, climb up carrying skis	7
winter activities	skiing, general	7
winter activities	sledding, tobogganing, bobsledding, luge (370)	7
conditioning exercise	activity promoting video/arcade game (e.g., Exergaming, Dance Dance Revolution), vigorous effort	7,2
dancing	aerobic, general	7,3
dancing	aerobic, high impact	7,3
occupation	horse grooming, including feeding, cleaning stalls, bathing, brushing, clipping, longeing and exercising horses	7,3
occupation	horse racing, galloping	7,3
sports	horseback riding, canter or gallop	7,3
sports	squash, general	7,3
sports	tennis, general	7,3
walking	climbing hills with 10 to 20 lb load	7,3
bicycling	bicycling, general	7,5
dancing	aerobic, step, with 6 - 8 inch step	7,5
home activities	carrying groceries upstairs	7,5
lawn and garden	shoveling snow, by hand, vigorous effort	7,5

occupation	moving, carrying or pushing heavy objects, 75 lbs or more, only active time (e.g., desks, moving van work)	7,5
occupation	walking or walk downstairs or standing, carrying objects about 75 to 99 lbs	7,5
sports	rock climbing, ascending rock, high difficulty	7,5
sports	rollerblading, in-line skating, 14.4 km/h (9.0 mph), recreational pace	7,5
winter activities	dog sledding, mushing	7,5
winter activities	snow shoveling, by hand, vigorous effort	7,5
sexual activity	active, vigorous effort	7,8
conditioning exercise	health club exercise, conditioning classes	7,8
dancing	general dancing (e.g., disco, folk, Irish step dancing, line dancing, polka, contra, country)	7,8
lawn and garden	digging, spading, filling garden, composting, vigorous effort	7,8
occupation	farming, vigorous effort (e.g., baling hay, cleaning barn)	7,8
occupation	shoveling, digging ditches	7,8
sports	basketball, wheelchair	7,8
sports	boxing, sparring	7,8
sports	hockey, field	7,8
walking	backpacking, hiking or organized walking with a daypack	7,8
bicycling	bicycling, 12-13.9 mph, leisure, moderate effort	8
conditioning exercise	calisthenics (e.g., push ups, sit ups, pull-ups, jumping jacks), vigorous effort	8
conditioning exercise	circuit training, including kettlebells, some aerobic movement with minimal rest, general, vigorous intensity	8
occupation	carrying heavy loads (e.g., bricks, tools)	8
occupation	carrying moderate loads up stairs, moving boxes 25-49 lbs	8
occupation	fire fighter, general	8
occupation	fire fighter, raising and climbing ladder with full gear, simulated fire suppression	8
occupation	forestry, ax chopping, fast, 1.25 kg axe, 35 blows/min, vigorous effort	8
occupation	forestry, vigorous effort (e.g., barking, felling, or trimming trees, carrying or stacking logs, planting seeds, sawing lumber by hand)	8
occupation	using heavy tools (not power) such as shovel, pick, tunnel bar, spade	8
running	jogging, in place	8
running	running, (200)	8
running	running, training, pushing a wheelchair or baby carrier	8
sports	basketball, game (490)	8
sports	coaching, actively playing sport with players	8
sports	football, competitive	8
sports	football, touch, flag, general (510)	8
sports	frisbee, ultimate	8
sports	handball, team	8

sports	hockey, ice, general	8
sports	lacrosse	8
sports	polo, on horseback	8
sports	rock or mountain climbing (470) (Formerly code = 17120)	8
sports	tennis, singles (420)	8
sports	volleyball, beach, in sand	8
walking	carrying 25 to 49 lb load, upstairs	8
walking	marching rapidly, military, no pack	8
walking	stair climbing, using or climbing up ladder (030)	8
walking	walking, 2.9 to 3.5 mph, uphill, 6% to 15% grade	8
walking	walking, backwards, 3.5 mph, uphill, 5% grade	8
water activities	swimming, synchronized	8
winter activities	skiing, downhill, vigorous effort, racing	8
lawn and garden	felling trees, large size	8,3
occupation	steel mill, vigorous effort (e.g., hand rolling, merchant mill rolling, removing slag, tending furnace)	8,3
running	running, 5 mph (12 min/mile)	8,3
sports	rugby, union, team, competitive	8,3
walking	carrying load upstairs, general	8,3
walking	climbing hills with 21 to 42 lb load	8,3
walking	walking, 5.0 mph, level, firm surface	8,3
water activities	swimming, crawl, medium speed, ~50 yards/minute, vigorous effort	8,3
bicycling	bicycling, BMX	8,5
bicycling	bicycling, mountain, general	8,5
bicycling	bicycling, 12 mph, seated, hands on brake hoods or bar drops, 80 rpm	8,5
conditioning exercise	bicycling, stationary, RPM/Spin bike class	8,5
conditioning exercise	rowing, stationary, 150 watts, vigorous effort	8,5
dancing	bench step class, general	8,5
occupation	walking or walk downstairs or standing, carrying objects about 100 lbs or more	8,5
sports	auto racing, open wheel	8,5
water activities	canoeing, rowing, 2.0-3.9 mph, light effort	8,8
conditioning exercise	bicycling, stationary, 101-160 watts, vigorous effort	8,8
occupation	shoveling, more than 16 lbs/minute, deep digging, vigorous effort	8,8
sports	rope jumping, slow pace, < 100 skips/min, 2 foot skip, rhythm bounce	8,8
walking	stair climbing, fast pace	8,8
bicycling	bicycling, 12 mph, standing, hands on brake hoods, 60 rpm	9
conditioning exercise	stair-treadmill ergometer, general	9
home activities	moving household items upstairs, carrying boxes or furniture	9
occupation	fire fighter, hauling hoses on ground, carrying/hoisting equipment, breaking down walls etc., wearing full gear	9
running	running, 5.2 mph (11.5 min/mile)	9
running	running, cross country	9
sports	horseback riding, jumping	9

sports	orienteering	9
walking	climbing hills with 42+ lb load	9
winter activities	skating, ice, rapidly, more than 9 mph, not competitive	9
winter activities	skiing, cross country, 4.0-4.9 mph, moderate speed and effort, general	9
sports	basketball, drills, practice	9,3
dancing	aerobic, step, with 10 - 12 inch step	9,5
fishing and hunting	hunting, hiking with hunting gear	9,5
walking	walking, for exercise, 5.0 mph, with ski poles, Nordic walking, level, fast pace	9,5
water activities	swimming, backstroke, general, training or competition	9,5
running	running, 6 mph (10 min/mile)	9,8
sports	rollerblading, in-line skating, 17.7 km/h (11.0 mph), moderate pace, exercise training	9,8
walking	walking, 5.0 mph, uphill, 3% grade	9,8
water activities	swimming laps, freestyle, fast, vigorous effort	9,8
water activities	swimming, treading water, fast, vigorous effort	9,8
water activities	water jogging	9,8
bicycling	bicycling, 14-15.9 mph, racing or leisure, fast, vigorous effort	10
dancing	aerobic dance wearing 10-15 lb weights	10
running	running, on a track, team practice	10
sports	hockey, ice, competitive	10
sports	paddleball, competitive	10
sports	racquetball, competitive	10
sports	soccer, competitive	10
sports	track and field (e.g., steeplechase, hurdles)	10
walking	carrying 50 to 74 lb load, upstairs	10
water activities	swimming, crawl, fast speed, ~75 yards/minute, vigorous effort	10
water activities	water polo	10
winter activities	snow shoeing, vigorous effort	10
sports	martial arts, different types, moderate pace (e.g., judo, jujitsu, karate, kick boxing, tae kwan do, tai-bo, Muay Thai boxing)	10,3
water activities	swimming, breaststroke, general, training or competition	10,3
running	running, 6.7 mph (9 min/mile)	10,5
conditioning exercise	bicycling, stationary, 161-200 watts, vigorous effort	11
conditioning exercise	slide board exercise, general	11
running	running, 7 mph (8.5 min/mile)	11
water activities	windsurfing or kitesurfing, crossing trial	11
dancing	ballroom dancing, competitive, general	11,3
fishing and hunting	hunting large game, dragging carcass	11,3
running	running, 7.5 mph (8 min/mile)	11,5
running	running, 8 mph (7.5 min/mile)	11,8
sports	rope jumping, moderate pace, 100-120 skips/min, general, 2 foot skip, plain bounce	11,8
water activities	skindiving, moderate	11,8
bicycling	bicycling, 16-19 mph, racing/not drafting or > 19 mph drafting, very fast, racing general	12

conditioning exercise	rowing, stationary, 200 watts, very vigorous effort	12
occupation	skindiving or SCUBA diving as a frogman, Navy Seal	12
sports	handball, general (520)	12
sports	jai alai	12
sports	squash (530)	12
walking	carrying > 74 lb load, upstairs	12
water activities	canoeing, rowing, in competition, or crew or sculling (260)	12
conditioning exercise	rope skipping, general	12,3
running	running, 8.6 mph (7 min/mile)	12,3
sports	rope jumping, fast pace, 120-160 skips/min	12,3
sports	rollerblading, in-line skating, 21.0 to 21.7 km/h (13.0 to 13.6 mph), fast pace, exercise training	12,3
water activities	canoeing, rowing, kayaking, competition, >6 mph, vigorous effort	12,5
winter activities	skiing, cross country, 5.0-7.9 mph, brisk speed, vigorous effort	12,5
winter activities	skiing, roller, elite racers	12,5
running	running, 9 mph (6.5 min/mile)	12,8
sports	boxing, in ring, general	12,8
running	running, marathon	13,3
winter activities	skating, speed, competitive	13,3
winter activities	skiing, cross-country, skating	13,3
water activities	windsurfing, competition, pumping for speed	13,5
winter activities	skiing, cross-country, biathlon, skating technique	13,5
water activities	swimming, butterfly, general	13,8
bicycling	bicycling, mountain, uphill, vigorous	14
conditioning exercise	bicycling, stationary, 201-270 watts, very vigorous effort	14
sports	rollerblading, in-line skating, 24.0 km/h (15.0 mph), maximal effort	14
winter activities	skating, ice dancing	14
running	running, 10 mph (6 min/mile)	14,5
running	running, stairs, up	15
winter activities	skiing, cross country, >8.0 mph, elite skier, racing	15
winter activities	skiing, cross country, hard snow, uphill, maximum, snow mountaineering	15,5
bicycling	bicycling, > 20 mph, racing, not drafting	15,8
water activities	skindiving, fast	15,8
bicycling	bicycling, mountain, competitive, racing	16
running	running, 11 mph (5.5 min/mile)	16
occupation	forestry, ax chopping, very fast, 1.25 kg axe, 51 blows/min, extremely vigorous effort	17,5
running	running, 12 mph (5 min/mile)	19
running	running, 13 mph (4.6 min/mile)	19,8
running	running, 14 mph (4.3 min/mile)	23