

Name	METs	Name	METs
automobile or light truck (not a semi) driving	2.0	conditioning exercise, stair-treadmill ergometer, general	6.0
bakery, general	4.0	conditioning exercise, stretching, hatha yoga	4.0
bathing (sitting)	2.0	conditioning exercise, teaching aerobic exercise class	6.0
bicycling, <10mph, general, leisure, to work or for pleasure	4.0	conditioning exercise, water aerobics, water calisthenics	4.0
bicycling, >20 mph, racing, not drafting	16.0	conditioning exercise, weight lifting (free weight, nautilus or universal type), light or moderate effort	3.0
bicycling, 10-11.9 mph, leisure, slow, light effort	6.0	conditioning exercise, weight lifting (free weight, nautilus or universal type), vigorous effort	6.0
bicycling, 12-13.9 mph, leisure, moderate effort	8.0	conditioning exercise, whirlpool, sitting	1.0
bicycling, 14-15.9 mph, racing or leisure, fast, vigorous effort	10.0	construction, outside, remodeling	5.5
bicycling, 16-19 mph, racing/not drafting	12.0	dancing, aerobic, ballet or modern, twist	6.0
bicycling, BMX or mountain	8.5	dancing, aerobic, general	6.0
book binding	2.3	dancing, aerobic, high impact	7.0
building road (including hauling debris, driving heavy machinery)	6.0	dancing, aerobic, low impact	5.0
building road, directing traffic (standing)	2.0	dancing, ballroom, fast (disco, folk, square)	5.5
carpentry, general	3.5	dancing, ballroom, slow (eg. waltz, foxtrot, slow dancing)	3.0
carrying heavy loads, such as bricks	8.0	dancing, general	4.5
carrying moderate loads up stairs, moving boxes (16-40 pounds)	8.0	digging sandbox	5.0
carrying, loading or stacking wood, loading/unloading or carrying lumber	5.0	digging, spading, filling garden	5.0
chambermaid	2.5	dressing, undressing (standing or sitting)	2.5
chopping wood, splitting logs	6.0	driving heavy truck, tractor, bus	3.0
clearing land, hauling branches	5.0	eating (sitting)	1.5
coal mining, drilling, coal, rock	6.5	electrical work, plumbing	3.5
coal mining, erecting supports	6.5	farming, bailing hay, cleaning barn, poultry work	8.0
coal mining, general	6.0	farming, chasing cattle, nonstrenuous	3.5
coal mining, shoveling coal	7.0	farming, driving harvester	2.5
conditioning exercise, bicycling, stationary, 100 W, light effort	5.5	farming, driving tractor	2.5
conditioning exercise, bicycling, stationary, 150 W, moderate effort	7.0	farming, feeding cattle	4.5
conditioning exercise, bicycling, stationary, 200 W, vigorous effort	10.5	farming, feeding small animals	4.0
conditioning exercise, bicycling, stationary, 250 W, very vigorous effort	12.5	farming, forking straw bales	8.0
conditioning exercise, bicycling, stationary, 50 W, very light effort	3.0	farming, milking by hand	3.0
conditioning exercise, bicycling, stationary, general	5.0	farming, milking by machine	1.5
conditioning exercise, calisthenics (eg. pushups, pullups, situps), heavy, vigorous effort	8.0	farming, shoveling grain	5.5
conditioning exercise, calisthenics, home exercise, light or moderate effort, general	4.5	fire fighter, climbing ladder with full gear	11.0
conditioning exercise, circuit training, general	8.0	fire fighter, general	12.0
conditioning exercise, health club exercise, general	5.5	fire fighter, hauling hoses on ground	8.0
conditioning exercise, rowing, stationary ergometer, general	9.5	fishing from boat, sitting	2.5
conditioning exercise, rowing, stationary, 100 W, moderate effort	7.0	fishing from river bank and walking	5.0
conditioning exercise, rowing, stationary, 150 W, vigorous effort	8.5	fishing from river bank, standing	3.5
conditioning exercise, rowing, stationary, 200W, very vigorous effort	12.0	fishing in stream, in waders	6.0
conditioning exercise, rowing, stationary, 50W, light effort	3.5	fishing, digging worms, with shovel	4.0
conditioning exercise, ski machine, general	9.5	fishing, general	4.0
conditioning exercise, slimnastics	6.0	fishing, ice, sitting	2.0
		flying airplane	2.0
		forestry, ax chopping, fast	17.0
		forestry, ax chopping, slow	5.0
		forestry, barking trees	7.0
		forestry, carrying logs	11.0
		forestry, felling trees	8.0
		forestry, general	8.0
		forestry, hoeing	5.0
		forestry, planting by hand	6.0
		forestry, sawing by hand	7.0
		forestry, sawing, power	4.5
		forestry, trimming trees	9.0

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forestry, weeding	4.0	home activities, walking - shopping (non-grocery shopping)	2.3
furriery	4.5	home activities, wash dishes - standing or in general	2.3
gardening with heavy power tools, tilling a garden	6.0	home activities, wash dishes: cleaning dishes from table -walking	2.3
gardening, general	5.0	home repair, airplane repair	3.0
home activities, carpet sweeping, sweeping floors	2.5	home repair, automobile body work	4.5
home activities, carrying groceries upstairs	8.0	home repair, automobile repair	3.0
home activities, child care: sitting/kneeling - light effort	3.0	home repair, carpentry, finishing or refinishing cabinets or furniture	4.5
home activities, child care: standing - light effort	3.5	home repair, carpentry, general, workshop	3.0
home activities, cleaning, heavy or major (eg. Wash car, wash windows, mop, clean garage)	4.5	home repair, carpentry, outside house, installing rain gutters	6.0
home activities, cleaning, house or cabin, general	3.5	home repair, carpentry, sawing hardwood	7.5
home activities, cleaning, light (dusting, straightening up, vacuuming, changing linen)	2.5	home repair, caulking, chinking log cabin	5.0
home activities, cooking or food preparation - standing or sitting or in general	2.5	home repair, caulking, except log cabin	4.5
home activities, cooking or food preparation - walking	2.5	home repair, cleaning gutters	5.0
home activities, food shopping, with grocery cart	3.5	home repair, excavating garage	5.0
home activities, implied standing - laundry, fold or hang clothes	2.0	home repair, hanging storm windows	5.0
home activities, implied walking - putting away clothes	2.3	home repair, laying or removing carpet	4.5
home activities, implied walking - putting away household items - moderate effort	3.0	home repair, laying tile or linoleum	4.5
home activities, ironing	2.3	home repair, painting, outside house	5.0
home activities, making bed	2.0	home repair, painting, papering, plastering, scraping, inside house	4.5
home activities, maple syruping/sugar bushing (carrying buckets, carrying wood)	5.0	home repair, put on and removal of tarp - sailboat	3.0
home activities, move household items upstairs, carrying boxes or furniture	9.0	home repair, roofing	6.0
home activities, moving furniture, household	6.0	home repair, sanding floors with a power sander	4.5
home activities, moving household items, carrying boxes	7.0	home repair, scrape and paing sailboat or powerboat	4.5
home activities, putting away groceries	2.5	home repair, spreading dirt with a shovel	5.0
home activities, scrubbing floors	5.5	home repair, wash and wax hull of sailboat, car, powerboat, airplane	4.5
home activities, serving food, setting table - implied walking or standing	2.5	home repair, washing fence	4.5
home activities, sitting - playing with children - light	2.5	home repair, wiring, plumbing	3.0
home activities, sitting, knitting, sewing, light wrapping (presents)	1.5	horse grooming	6.0
home activities, standing - light (pumping gas, change light bulb, etc)	2.5	horse racing, galloping	8.0
home activities, standing - packing/unpacking boxes, occasional lifting of household items	3.5	horse racing, trotting	6.5
home activities, standing - playing with children - light	2.8	horse racing, walking	2.6
home activities, standing - shopping (non-grocery shopping)	2.0	hunting, bow and arrow or crossbow	2.5
home activities, sweeping garage, sidewalk or outside of house	4.0	hunting, deer, elk, large game	6.0
home activities, walk/run - playing with children - moderate	4.0	hunting, duck, wading	2.5
home activities, walk/run - playing with children - vigorous	5.0	hunting, general	5.0
home activities, walking - light, noncleaning (ready to leave, shut/lock doors, close windows)	3.0	hunting, pheasants or grouse	6.0
		hunting, pistol shooting or trap shooting, standing	2.5
		hunting, rabbit, squirrel, prairie chick, raccoon, small game	5.0
		implied walking/standing - picking up yard, light	3.0
		laying crushed rock	5.0
		laying sod	5.0
		locksmith	3.5
		lying quietly, reclining (watch television)	0.9
		machine tooling, machining, working sheet metal	2.5
		machine tooling, operating lathe	3.0
		machine tooling, operating punch press	5.0
		machine tooling, tapping and drilling	4.0
		machine tooling, welding	3.0
		masonry, concrete	7.0
		masseur, masseuse (standing)	4.0
		motor scooter, motor cycle	2.5

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moving, pushing heavy objects, 75 pounds or more (desks, moving van work)	7.0	running, training, pushing wheelchair, marathon wheeling	8.0
mowing lawn, general	5.5	running, wheeling, general	3.0
mowing lawn, riding mower	2.5	sacking grass, leaves	4.0
mowing lawn, walk, hand mower	6.0	sexual activity, active, vigorous effort	1.5
mowing lawn, walk, power mower	4.5	sexual activity, general, moderate effort	1.3
music playing, accordion	1.8	sexual activity, passive, light effort, kissing, hugging	1.0
music playing, cello	2.0	shoe repair, general	2.5
music playing, conducting	2.5	shoveling snow, by hand	6.0
music playing, drums	4.0	shoveling, digging ditches	8.5
music playing, flute (sitting)	2.0	shoveling, heavy (more than 16 pounds per minute)	9.0
music playing, guitar, classical, folk (sitting)	2.0	shoveling, light (less than 10 pounds per minute)	6.0
music playing, guitar, rock and roll band (standing)	3.0	shoveling, moderate (10-15 pounds per minute)	7.0
music playing, horn	2.0	showering, toweling off (standing)	4.0
music playing, marching band, drum major (walking)	3.5	sitting - light office work, in general	1.5
music playing, marching band, playing an instrument, baton twirling, walking	4.0	sitting - meetings, general, and/or with talking involved	1.5
music playing, piano or organ	2.5	sitting - moderate (heavy levers, riding mower/forklift, crane operation)	2.5
music playing, trombone	3.5	sitting - reading, book, newspaper, etc.	1.3
music playing, trumpet	2.5	sitting - studying, general, including reading and/or writing	1.8
music playing, violin	2.5	sitting - talking or talking on the phone	1.5
music playing, woodwind	2.0	sitting - writing, desk work	1.8
operating heavy duty equipment/automated, not driving	2.5	sitting on toilet	1.0
operating snow blower, walking	4.5	sitting or standing - grooming	2.5
orange grove work	4.5	sitting quietly (riding in a car, watch television or a movie)	1.0
planting seedlings, shrubs	4.0	sitting, card playing, playing board games	1.5
planting trees	4.5	sitting-in class, general, including note-taking or class discussion	1.8
police, directing traffic (standing)	2.5	sleeping	0.9
police, driving a squad car (sitting)	2.0	sports, archery (nonhunting)	3.5
police, making an arrest (standing)	8.0	sports, badminton, competitive	7.0
police, riding in a squad car (sitting)	1.3	sports, badminton, social singles and doubles, general	4.5
printing (standing)	2.3	sports, basketball, game	8.0
pushing plane in and out of hanger	6.0	sports, basketball, nongame, general	6.0
raking lawn	4.0	sports, basketball, officiating	7.0
raking roof with snow rake	4.0	sports, basketball, shooting baskets	4.5
reclining - reading	1.0	sports, basketball, wheelchair	6.5
reclining - talking or talking on phone	1.0	sports, billiards	2.5
reclining - writing	1.0	sports, bowling	3.0
riding snow blower	3.0	sports, boxing, in ring, general	12.0
running, 10 mph (6 minute mile)	16.0	sports, boxing, punching bag	6.0
running, 10.9 mph (5.5 minute mile)	18.0	sports, boxing, sparring	9.0
running, 5 mph (12 minute mile)	8.0	sports, broomball	7.0
running, 5.2 mph (11.5 minute mile)	9.0	sports, children's games (hopscotch, 4-square, dodgeball, playground apparatus)	5.0
running, 6 mph, (10 minute mile)	10.0	sports, coaching: football, soccer, basketball, baseball, swimming, etc.	4.0
running, 6.7mph (9 minute mile)	11.0	sports, cricket (batting, bowling)	5.0
running, 7 mph (8.5 minute mile)	11.5	sports, croquet	2.5
running, 7.5 mph (8 minute mile)	12.5	sports, curling	4.0
running, 8 mph (7.5 minute mile)	13.5	sports, darts, wall or lawn	2.5
running, 8.6 mph (7 minute mile)	14.0	sports, drag racing, pushing or driving a car	6.0
running, 9 mph (6.5 minute mile)	15.0	sports, fencing	6.0
running, cross country	9.0	sports, football or baseball, playing catch	2.5
running, general	8.0	sports, football, competitive	9.0
running, in place	8.0		
running, jog/walk combination (jogging component of less than 10 minutes)	6.0		
running, jogging, general	7.0		
running, on a track, team practice	10.0		
running, stairs up	15.0		

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sports, football, touch, flag, general	8.0	sports, wrestling (one match = 5 minutes)	6.0
sports, frisbee playing, general	3.0	standing - drawing (writing), casino gambling	2.0
sports, frisbee, ultimate	3.5	standing - getting ready for bed, in general	2.5
sports, golf, carrying clubs	5.5	standing - reading	1.8
sports, golf, general	4.5	standing - talking or talking on the phone	1.8
sports, golf, miniature, driving range	3.0	standing quietly (standing in a line)	1.2
sports, golf, pulling clubs	5.0	standing: light (bartending, store clerk, assembling, filing, xeroxing)	2.5
sports, golf, using power cart	3.5	standing: light/moderate (welding, stocking, auto repair, patient care)	3.0
sports, gymnastics, general	4.0	standing: moderate (assembling at fast rate, lifting 50 pounds)	3.5
sports, hacky sack	4.0	standing: moderate/heavy (lifting more than 50 pounds, masonry)	4.0
sports, handball, general	12.0	steel mill, fettling	5.0
sports, handball, team	8.0	steel mill, forging	5.5
sports, hang gliding	3.5	steel mill, hand rolling	8.0
sports, hockey, field	8.0	steel mill, merchant mill rolling	8.0
sports, hockey, ice	8.0	steel mill, removing slag	11.0
sports, horseback riding, general	4.0	steel mill, tending furnace	7.5
sports, horseback riding, saddling horse	3.5	steel mill, tipping molds	5.5
sports, horseback riding, trotting	6.5	steel mill, working in general	8.0
sports, horseback riding, walking	2.5	tailoring, cutting	2.5
sports, horseshoe pitching, quoits	3.0	tailoring, general	2.5
sports, jai alai	12.0	tailoring, hand sewing	2.0
sports, judo, jujitsu, karate, kick boxing, tae kwon do	10.0	tailoring, machine sewing	2.5
sports, juggling	4.0	tailoring, pressing	4.0
sports, kickball	7.0	talking and eating or eating only (standing)	2.0
sports, lacrosse	8.0	trimming shrubs or trees, manual cutter	4.5
sports, moto-cross	4.0	trimming shrubs or trees, power cutter	3.5
sports, orienteering	9.0	truck driving, loading and unloading truck (standing)	6.5
sports, paddleball, casual, general	6.0	typing, electric, manual or computer	1.5
sports, paddleball, competitive	10.0	unicycling	5.0
sports, polo	8.0	using heavy power tools such as pneumatic tools (jackhammers, drills, etc)	6.0
sports, racketball, casual, general	7.0	using heavy tools (not power) such as shovel, pick, tunnel bar, spade	8.0
sports, racquetball, competitive	10.0	walking on job, 3 mph, in office, moderate speed, not carrying anything	3.5
sports, rock climbing, ascending rock	11.0	walking on job, 3.5 mph, in office, brisk speed, not carrying anything	4.0
sports, rock climbing, rappelling	8.0	walking on job, less than 2 mph (in office or lab area), very slow	2.0
sports, rope jumping, fast	12.0	walking or walk downstairs or standing, carrying objects 100 pounds +	8.5
sports, rope jumping, moderate general	10.0	walking or walk downstairs or standing, carrying objects about 25-49 pounds	5.0
sports, rope jumping, slow	8.0	walking or walk downstairs or standing, carrying objects about 50-74 pounds	6.5
sports, rugby	10.0	walking or walk downstairs or standing, carrying objects about 75-99 pounds	7.5
sports, shuffleboard, lawn bowling	3.0	walking, < 2 mph, level ground, strolling, household walking, very slow	2.0
sports, skateboarding	5.0	walking, 2 mph, level, slow pace, firm surface	2.5
sports, skating, roller	7.0	walking, 2.5 mph, downhill	3.0
sports, sky diving	3.5	walking, 2.5 mph, firm surface	3.0
sports, soccer, casual, general	7.0	walking, 2.5 mph, slowly and carrying light objects less than 25 pounds	3.0
sports, soccer, competitive	10.0	walking, 3 mph, level, moderate pace, firm surface	3.5
sports, softball or baseball, fast or slow pitch, general	5.0		
sports, softball, officiating	4.0		
sports, softball, pitching	6.0		
sports, squash	12.0		
sports, table tennis, ping pong	4.0		
sports, tai chi	4.0		
sports, tennis, doubles	6.0		
sports, tennis, general	7.0		
sports, tennis, singles	8.0		
sports, trampoline	3.5		
sports, volleyball, beach	8.0		
sports, volleyball, competitive, in gymnasium	4.0		
sports, volleyball, noncompetitive; 6-9 member team, general	3.0		
sports, wallyball, general	7.0		

Name	METs	Name	METs
walking, 3 mph, moderately and carrying light objects less than 25 pounds	4.0	water activities, skindiving, scuba diving, general	7.0
walking, 3.5 mph, briskly and carrying objects less than 25 pounds	4.5	water activities, snorkeling	5.0
walking, 3.5 mph, level, brisk, firm surface	4.0	water activities, surfing, body or board	3.0
walking, 3.5 mph, uphill	6.0	water activities, swimming laps, freestyle, fast, vigorous effort	10.0
walking, 4 mph, level, firm surface, very brisk pace	4.0	water activities, swimming laps, freestyle, slow, moderate or light effort	8.0
walking, 4.5 mph, level, firm surface, very very brisk	4.5	water activities, swimming, backstroke, general	8.0
walking, applying fertilizer or seeding a lawn	2.5	water activities, swimming, breaststroke, general	10.0
walking, backpacking, general	7.0	water activities, swimming, butterfly, general	11.0
walking, carrying 1-15 pound load, upstairs	5.0	water activities, swimming, crawl, fast (75 yards per minute), vigorous effort	11.0
walking, carrying 16-24 pound load, upstairs	6.0	water activities, swimming, crawl, slow (50 yards per minute/mile), moderate or light effort	8.0
walking, carrying 25-49 pound load, upstairs	8.0	water activities, swimming, lake, ocean, river	6.0
walking, carrying 50-74 pound load, upstairs	10.0	water activities, swimming, leisurely, not lap swimming, general	6.0
walking, carrying 74+ pound load, upstairs	12.0	water activities, swimming, sidestroke, general	8.0
walking, carrying infant or 15 pound load (eg., suitcase), level ground or downstairs	3.5	water activities, swimming, synchronized	8.0
walking, carrying load upstairs, general	9.0	water activities, swimming, treading water, fast vigorous effort	10.0
walking, climbing hills with 0-9 pound load	7.0	water activities, swimming, treading water, moderate effort, general	4.0
walking, climbing hills with 10-20 pound load	7.5	water activities, water polo	10.0
walking, climbing hills with 21-42 pound load	8.0	water activities, water volleyball	3.0
walking, climbing hills with 42+ pound load	9.0	water activities, whitewater rafting, kayaking or canoeing	5.0
walking, downstairs	3.0	watering lawn or garden, standing or walking	1.5
walking, for pleasure, work break, walking the dog	3.5	weeding, cultivating garden	4.5
walking, grass track	5.0	winter activities, moving ice house (set up/drill holes, etc.)	6.0
walking, hiking, cross country	6.0	winter activities, skating, ice, 9 mph or less	5.5
walking, marching, rapidly, military	6.5	winter activities, skating, ice, general	7.0
walking, pushing or pulling stroller with child	2.5	winter activities, skating, ice, rapidly, more than 9 mph	9.0
walking, race walking	6.5	winter activities, skating, speed, competitive	15.0
walking, rock or mountain climbing	8.0	winter activities, ski jumping (climb up carrying skis)	7.0
walking, to work or class	4.0	winter activities, skiing, cross-country, >8 mph, racing	14.0
walking, upstairs, using or climbing ladder	8.0	winter activities, skiing, cross-country, 2.5 mph, slow or light effort, ski walking	7.0
walking, using crutches	4.0	winter activities, skiing, cross-country, 4.0-4.9 mph, moderate speed and effort, general	8.0
water activities, boating, power	2.5	winter activities, skiing, cross-country, 5.0-7.9 mph, brisk speed, vigorous effort	9.0
water activities, canoeing, on camping trip	4.0	winter activities, skiing, cross-country, hard snow, uphill, maximum	16.5
water activities, canoeing, portaging	7.0	winter activities, skiing, downhill, light effort	5.0
water activities, canoeing, rowing, >6 mph, vigorous effort	12.0	winter activities, skiing, downhill, moderate effort, general	6.0
water activities, canoeing, rowing, 2.0 - 3.9 mph, light effort	3.0	winter activities, skiing, downhill, vigorous effort, racing	8.0
water activities, canoeing, rowing, 4.0 - 5.9 mph, moderate effort	7.0	winter activities, skiing, general	7.0
water activities, canoeing, rowing, for pleasure, general	3.5	winter activities, sledding, tobogganing, bobsledding, luge	7.0
water activities, canoeing, rowing, in competition, or crew or sculling	12.0	winter activities, snow shoeing	8.0
water activities, diving, springboard or platform	3.0	winter activities, snowmobiling	3.5
water activities, kayaking	5.0	working in scene shop, theater actor, backstage, employee	3.0
water activities, paddleboat	4.0		
water activities, sailing, boat and board sailing, windsurfing, ice sailing, general	3.0		
water activities, sailing, in competition	5.0		
water activities, sailing, sunfish/laser/hobby cat, keel boats, ocean sailing, yachting	3.0		
water activities, skiing, water	6.0		
water activities, skimobiling	7.0		
water activities, skindiving or scuba diving as frogman	12.0		
water activities, skindiving, fast	16.0		
water activities, skindiving, moderate	12.5		