



## Skill Guidelines for Building Strong, Useful, Adaptable Athletes

*Introduction by Chris Salvato. Last revised on December 20, 2009.*

In order to succeed in a sport, fitness program, or physical activity, it is necessary to establish a diverse and intelligent strength and conditioning program. To maximize your gains in fitness and apply them to highly sport-specific skills, it helps to track your progress, set goals, and achieve balance in your physical capabilities. *Eat. Move. Improve.* has written an [article](#) on how to set useful goals. The goal of this document is to provide skill guidelines based on useful goals that allow new trainees to gauge milestones and monitor progress over time.

This list of goals was chosen because working these skills will simultaneously improve many of the components of physical fitness. First defined and organized by Dynamax, these components are relevant in all kinds of sports, combat, and physical activities. They are:

1. **Cardiovascular/respiratory endurance** – The ability of body systems to gather, process, and deliver oxygen.
2. **Stamina** – The ability of body systems to process, deliver, store, and utilize energy.
3. **Strength** – The ability of a muscular unit, or combination of muscular units, to apply force.
4. **Flexibility** – The ability to maximize the range of motion at a given joint.
5. **Speed** – The ability to minimize the time cycle of a repeated movement.
6. **Power** – The ability of a muscular unit, or combination of muscular units, to apply maximum force in minimum time.
7. **Coordination** – The ability to combine several distinct movement patterns into one distinct movement.
8. **Agility** – The ability to minimize transition time from one movement pattern to another.
9. **Balance** – The ability to control the placement of the body's center of gravity in relation to its support base.
10. **Accuracy** – The ability to control movement in a given direction or at a certain intensity.

While many resources go over setting goals and even provide a list of goals that may be worthwhile, many people are unfamiliar with what sort of progress to expect. With potential benchmarks and milestones unknown, this leaves the trainee feeling out of control. Lack of knowledge and lack of control often times results in lowered motivation. To address this problem, the following guidelines have been established so that a dedicated trainee will know the sort of progress they can expect with focused, dedicated training.

These guidelines were originally created as a collaborative effort between [Eat. Move. Improve.](#), a fitness resource, and [APEX Movement](#), a Denver, CO based parkour facility. *Eat. Move. Improve.* was represented by Steven Low and Chris Salvato whereas *APEX Movement* was represented by Ryan Ford and Matt Marshall.<sup>2</sup>

**Note well that this set of guidelines is open for critique and feedback.** It was created by the authors over several months of brainstorming, observing, and research in the Olympic Lifting, CrossFit, Parkour, and gymnastics communities with an **open-source, black-box** methodology in mind. A small group of people cannot accomplish as much as a large group - especially bearing in mind that some users and readers of this article may have more experience in certain areas than the authors. Please leave us your comments or contact Chris Salvato ([chris@eatmoveimprove.com](mailto:chris@eatmoveimprove.com)) or Ryan Ford ([coloradoparkour@gmail.com](mailto:coloradoparkour@gmail.com)) with feedback.

## Using the Skill Guidelines

The time frames listed for each level are based on progress that the authors have seen directly through personal experience, coaching experience, and through their involvement with their respective communities. Keep in mind that younger populations tend to progress faster than older populations; those with less stress tend to progress faster than those with more stress; and those with better sleep cycles tend to progress faster than those with poor sleep cycles. **The goals listed below are for young males in the age range of 15-35 at a starting body composition of under 20% body fat.** In future editions of this article, we will include more demographics.

The milestones in this article can be reached within their respective time frames by training 3-4 days per week for the first couple of years. It is advised to keep training diverse, but simple. Focus on only a few feats of strength, skill, and endurance at once. *Eat. Move. Improve.*'s Steven Low recommends that trainees start with and focus on no more than 2 pushing, 2 pulling, and 2 posterior chain strength goals at once. Any endurance training or skill training can easily fit into the preceding strength program.

### **Level One – Healthy Beginner (0-12 months)**

- Level one guidelines are milestones that can be attained by an untrained, sedentary individual within their first 12 months of training (assuming they are free of any serious injuries or health conditions). This level is the minimum standard for a healthy lifestyle and lays the foundation for basic strength gains in the following years. This basic strength will translate over into more rapid increases in capabilities.

### **Level Two – Intermediate Athlete (1-2 years)**

- Level two guidelines can be attained within 1-2 years after level one has been reached. These skills should be considered normal for a healthy athlete that is pursuing increased performance. The translation from one skill to another is still very high here, so working towards a few goals will also help other goals advance towards level three.

### **Level Three – Advanced Athlete (2-4 years)**

- Level three guidelines can be reached within 2-4 years after level one has been reached. This is an appropriate level of general fitness for those who would like to perform for long periods of time *and* possess a high level of strength. Taking part in high intensity sports such as parkour, combat, or highly competitive sports while possessing the abilities of level three allows for a higher degree of participation while mitigating the risk of injury. Athletes that possess many level three skills will get the most out of their training as they are able to train continuously with few injuries and work on technique consistently and without interruption. Most individuals can obtain most, if not all, of level three skills with proper programming and dedication.

### **Level Four – Specialized Athlete**

- After reaching level three, some trainees may choose to take certain skills to the next level. Most level four guidelines entail specialized training that will not allow for other goals to be included in the athletes program. For example, pursuing a straddle planche will require consistent, hard training that may make another goal, such as a competitive 5k run, unrealistic to simultaneously pursue. An athlete can work toward level four guidelines without sacrificing level three accomplishments, but usually only a small number of level four skills can be attained for each individual.

### **Level Five – Highly Specialized Athlete**

- To reach level five in many of these skills takes a combination of superior genetics, dedication, and intellect. While level five is not necessarily a world class athlete, most people will not be able to perform many level five skills without sacrificing performance in other domains. By the time the athlete is at level five, thousands of reps/runs/holds will have been performed; years of experience will have been established towards this goal; and the athlete may progress beyond level five towards a world class level. By even striving for a level five skill shows remarkable determination and drive.

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### ***Nomenclature***

KPU	Kipping Pull Ups
DPU	Deadhang Pull Ups
R	Rings
PB	Parallel Bars or Parallettes
G	On Ground
ROM	Range of Motion
RTO	Rings Turned Out
AW	Against Wall
FS	Free Standing
OAH	One Arm Handstand
HSPU	Handstand Push Ups
SL	Straight Legs
SA	Straight Arms
BW	Bodyweight
DH	Dead hang
B	Bar

- **Metabolic conditioning**
  - **Locomotive tests**
    - Run (100m)
      - Level one – 20 sec.
      - Level two – 16 sec.
      - Level three – 13 sec.
      - Level four – 11.5 sec.
      - Level five – 10.5 sec.
      - World Record – 9.58 sec. (Usain Bolt, Jamaica)
    - Run (400m)
      - Level one – 120 sec.
      - Level two – 85 sec.
      - Level three – 60 sec.
      - Level four – 54 sec.
      - Level five – 48 sec.
      - World Record – 43.18 sec. (Michael Johnson, USA)
    - Run (5000m)
      - Level one – 36:00
      - Level two – 24:00
      - Level three – 18:00
      - Level four – 15:40
      - Level five – 14:00
      - World Record – 12:37 (Kenenisa Bekele, Ethiopia)
    - Rowing (500m) <sup>1</sup>
      - Level one – 150 sec.
      - Level two – 110 sec.
      - Level three – 90 sec.
      - Level four – 83 sec.
      - Level five – 80 sec.
      - World Record – 75 sec.
    - Rowing (2000m) <sup>1</sup>
      - Level one – 12:00
      - Level two – 9:00
      - Level three – 7:45
      - Level four – 6:50
      - Level five – 6:20
      - World Record – 5:36.6

- **Bodyweight skills and Gymnastics**
  - **Pushing**
    - Push ups:
      - Level one – 5 push up
      - Level two – 20 push ups (R)
      - Level three – 5 tuck planche push ups (PB)
      - Level four – 5 straddle planche push ups (G)
      - Level five – 1 planche push up (G)
    - Dips (begin some weighted dip work at level two)
      - Level one – 3 (PB)
      - Level two – 10 (PB)
      - Level three – 30 (R, full ROM)
      - Level four – 15 (RTO and held at 45 degrees past parallel)
      - Level five – 15 (RTO and held at 45 degrees past parallel, straight body, leaning forward at 45 degrees)
    - Planche progressions:
      - Level one – 15 sec. (Frog)
      - Level two – 15 sec. (Tuck)
      - Level three – 10 sec. (Advanced Tuck)
      - Level four – 5 sec. (Straddle)
      - Level five – 3 sec. (Lay)
  - **Pulling**
    - Pull ups (begin some weighted pull up work at level two)
      - Level one – 3 KPU (chin over bar)
      - Level two – 20 KPU, 12 DPU (chin over bar)
      - Level three – 40 KPU, 20 DPU (chest to bar, move on to weighted pull ups)
      - Level four – 25 DPU to lower sternum (move on to weighted pull ups)
      - Level five – 25 DPU to belly button (move on to weighted pull ups)
    - One arm pull up/chin up:
      - Level one – n/a
      - Level two – n/a
      - Level three – 10 sec. one arm pull up/chin up negative
      - Level four – 1 (each arm)
      - Level five – 5 (each arm)
    - Back lever:
      - Level one – 1 skin the cat (piked with straight legs)
      - Level two – 10 sec. (advanced tuck)
      - Level three – 12 sec. (half lay)
      - Level four – 10 sec. (lay)
      - Level five – 20 sec. (lay)

- Front lever:
      - Level one – 1 skin the cat (piked with straight legs)
      - Level two – 10 sec. (advanced tuck)
      - Level three – 8 sec. (half lay)
      - Level four – 5 sec. (lay)
      - Level five – 12 sec. (lay)
  - **Handstands**
    - Handstand hold
      - Level one – 60 sec. (AW)
      - Level two – 120 sec. (AW), 15 sec. (FS)
      - Level three – 45 sec. (FS)
      - Level four – 10 sec. (OAH, fingertip assist)
      - Level five – 5 sec. (OAH)
    - HSPU:
      - Level one – n/a
      - Level two – 5 (AW, G)
      - Level three – 2 (full ROM, AW, PB), 15 HSPU (AW, G)
      - Level four – 15 (full ROM, AW, PB), 2 (FS, PB)
      - Level five – 15 (FS, PB)
    - Handstand press
      - Level one – Headstand press (elephant press)
      - Level two – 2 press to handstand (G, any method)
      - Level three – 2 straddle presses to handstand (G, SA, SL)
      - Level four – 5 pike presses to handstand (G, SA, SL), 1 press to handstand (R, any method)
      - Level five – 3 pikes presses to handstand (R, SL)
  - **Seats**
    - L-sit:
      - Level one – 5 sec. tucked L-sit
      - Level two – 25 sec. L-sit
      - Level three – 60 sec. L-sit (G), 10 ft. L-sit walk
      - Level four – 30 ft. L-sit walk
      - Level five – 75 ft. L-sit walk
  - **Legs**
    - Broad Jump:
      - Level one – 6 ft.
      - Level two – 8 ft.
      - Level three – 9 ft.
      - Level four – 10 ft.
      - Level five – 10.5 ft.
      - World Record – 12 ft. 2 in. (Arne Tvervaag, Norway)

- Standing Vertical Jump:
  - Level one – 10 in.
  - Level two – 18 in.
  - Level three – 24 in.
  - Level four – 28 in.
  - Level five – 34 in.
  - World Record – 48-52 in. (Unverified and Speculative)
- Standing Box Jump:
  - Level one – 18 in.
  - Level two – 30 in.
  - Level three – 40 in.
  - Level four – 50 in.
  - Level five – 60 in.
  - World Record – 58-68+ in. (Unverified and Speculative)
- Pistols (each leg):
  - Level one – 5 step ups on 24 in. box
  - Level two – 5 pistols
  - Level three – 5 pistols +25% BW
  - Level four – 5 pistols +50% BW
  - Level five – 5 pistols +75% BW
- Natural leg curls:
  - Level one – n/a
  - Level two – 1 negative – 3-5 sec.
  - Level three – 1 negative – 8-10 sec.
  - Level four – 3 concentric
  - Level five – 10 concentrics with eccentric
- **Combined push/pull**
  - Muscle up:
    - Level one – n/a (work on dips and pull ups)
    - Level two – 1 (DH, R, RTO at top and bottom; symmetrical), 1 (bar; symmetrical)
    - Level three – 10 (strict, DH, B)
    - Level four – 5 +25% BW (R)
    - Level five – 30 in 2.5 min. (R, kipping allowed), 2 x 50% BW (R)

- **Parkour Specific Movements<sup>3</sup>**
  - Climb up (climb up from a hanging position on the wall)
    - Level one – Beginner climb up (by any means necessary)
    - Level two – Intermediate climb up (symmetrical arms, distinct pull up and dip motions)
    - Level three – Advanced climb up (symmetrical and straight arms, appears to be one fluid motion)
    - Level four – 10 clapping advanced climb up (symmetrical and straight arms, appears to be one fluid motion) & 5 advanced climb ups with 15% BW
    - Level five – One-up climb up (from hanging position to vault up and onto the wall in one fluid motion) – **OR** – One arm climb up (on a flat wall, no overgrip)
  - Wall run vertical (subtract standing reach from wall run reach)
    - Level one – 22 in.
    - Level two – 40 in.
    - Level three – 52 in.
    - Level four – 62 in.
    - Level five – 70 in.
  - Vault exit distance (max exit distance over a 3 ft. wall; any type of vault)
    - Level one – 4 ft.
    - Level two – 8 ft.
    - Level three – 10 ft.
    - Level four – 11.5 ft.
    - Level five – 12.5 ft.
- **Weight training**
  - **Strength**
    - Weighted dip (PB)
      - Level one – 3 reps at BW
      - Level two – 1.4x BW
      - Level three – 1.7x BW
      - Level four – 1.9x BW
      - Level five – 2x BW
    - Weighted pull up
      - Level one – BW
      - Level two – 1.4x BW
      - Level three – 1.7x BW
      - Level four – 1.9x BW
      - Level five – 2x BW
    - Bench press
      - Level one – .85x BW
      - Level two – 1.2x BW
      - Level three – 1.5x BW
      - Level four – 1.75x BW
      - Level five – 1.9x BW

- Press
  - Level one – .5x BW
  - Level two – .75x BW
  - Level three – .95x BW
  - Level four – 1.1x BW
  - Level five – 1.2x BW
- Deadlift
  - Level one – 1.5x BW
  - Level two – 2x BW
  - Level three – 2.4x BW
  - Level four – 2.75x BW
  - Level five – 3x BW
- Back squat
  - Level one – 1.25x BW
  - Level two – 1.75x BW
  - Level three – 2.15x BW
  - Level four – 2.4x BW
  - Level five – 2.6x BW
- Overhead squat
  - Level one – .65x BW
  - Level two – .85x BW
  - Level three – 1x BW
  - Level four – 1.1x BW
  - Level five – 1.2x BW
- **Power**
  - Clean and Jerk
    - Level one – .75 x BW
    - Level two – 1.25 x BW
    - Level three – 1.6 x BW
    - Level four – 1.85 x BW
    - Level five – 2x BW
  - Snatch
    - Level one – .6x BW
    - Level two – 1x BW
    - Level three – 1.3x BW
    - Level four – 1.45x BW
    - Level five – 1.65x BW

<sup>1</sup>Based on C2 rankings for all weight classes and genders.

<sup>2</sup>The idea was originally inspired by a set of standards put forward by CrossFit North several years ago. Many of the ideas in the introduction are influenced as such. A copy of their skill standards can be found [here](#).

### **<sup>3</sup>Reaching Your Potential in Parkour**

Parkour is a diverse conglomerate of countless other physical skills. A well rounded parkour athlete ascends obstacles with the upper body strength of a rock climber, flips and contorts their body with the grace and coordination of a gymnast, and is as dynamic and well rounded as a decathlete. Parkour and freerunning athletes should not only train to overcome obstacles with technique, speed, endurance, and power, they should also train with the discipline, creativity, and self expression of a martial artist or dancer. With all these athletic and technical components to a single physical activity, it is common to see glaring weaknesses in a practitioner's set of skills. Usually, these weaknesses become apparent by way of injury, avoidance, or flat out failure to accomplish a certain task.

Technique training will only get you so far. An elite gymnast, runner, lifter, or climber did not achieve elite status because they simply practiced their skills more than any other competitor. In fact, training like this often leads to overuse injuries, plateaus, and frustration. People who are strong, flexible, powerful, and adaptable not only learn skills faster, they continue to practice them with a lower risk of injury than their weaker, less athletic counterparts.

Without a solid strength and conditioning program, it is impossible for a parkour athlete to maximize their potential. Without a solid list of sport specific goals, it is impossible to yield maximum results from your strength and conditioning program. The goals and progressions laid out here are lofty, but useful and relevant to all practitioners. It is in the best interest of anyone who is serious about doing parkour at a high level for a long time to aim for Level Three guidelines across the board. With at least several years of training, these Level Three goals are within reach for anyone who trains smart, hard, and diversely. Guideline levels beyond Level Three will take your parkour ability toward an elite level, but will require extra specialization, dedication, and tenacity to accomplish.

– Ryan Ford

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