Not Afraid of Heights: An Introduction to Rock Climbing
Some Basic Terminology

Bouldering

Climbing
Some Basic Terminology

Bouldering

Indoor

Outdoor

Climbing
Some Basic Terminology

Mountaineering (outdoor only)
Some Basic History

As mode of transportation
• Existed for 1000s of years

As sport
• Surprisingly new (late 19th century)

Indoor climbing
• Very recent (1964 in Europe, 1987 in the US)
• Made climbing become a mainstream sport
• Lead to drastic improvements of performance
Equipment

Climbing Shoes
- Sticky rubber sole
- Very tight fit
- Bent slightly downward

Harness
- Falls generate significant forces (up to 5kN)
- Needs to resist impact force and spread it
- Higher price for more comfort or style
Equipment

Climbing Rope
- Needs to be dynamic (stretchable)
- Diameter ranges from 8.9mm to 10.7mm
- Lengths range from 20m (indoor) to 100m (outdoor)

Carabiner
- Special climbing-grade carabiners
- Protected against usage mistakes
Equipment

Belay device
• Dozens of different models
• General trade-off:
  • Higher price/complexity for more comfort and more protection against mistakes

Other devices
• Quickdraws
• Nuts and Hexes
• Braking resistors
• …
Belaying

- Rope is running through belay device
- Belay device is connected to carabiner
- Carabiner is connected to harness

- Climber is directly connected to rope through harness
- End of rope is secured using a special know (e.g. “figure eight knot”)
Top Rope vs Lead Climbing

**Top Rope**
- Rope is already set up at top
- Belayer pulls rope as climber ascends and slowly releases it to let them back down

**Lead Climbing**
- Climber clips rope into quick draws while ascending
- Belayer gives just enough rope for climber to continue but be safe in case of a fall
**Difficulty Grades**

- “Standardized”

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Difficulty Grades

• “Standardized”

• Most common in North America: YDS

  • Two numbers: X.Y
    X = Level of “danger”:
      • 1 = walking
      • 3 = scrambling
      • 5 = climbing

  Y = Difficulty of climb:
      • 5.0-5.7 = rather easy
      • 5.8-5.10 = intermediate
      • 5.11+ = advanced
      • 5.10 and higher have sub-grades with letter suffixes
Record Categories

**On-sight**
- Finish route on first try with no breaks and without any prior knowledge

**Flash**
- Finish route on first try with no breaks

**Redpoint**
- Finish route with no breaks

**Hangdogging**
- Finish route with breaks or after falling
Some Techniques

• Crimping
Some Techniques

• Crimping
• Pinching
Some Techniques

- Crimping
- Pinching
- Crack climbing
Some Techniques

- Crimping
- Pinching
- Crack climbing
- Flagging
Some Techniques

• Crimping
• Pinching
• Crack climbing
• Flagging
• Hooking
Some Techniques

• Crimping
• Pinching
• Crack climbing
• Flagging
• Hooking
• Smearing
Some Techniques

- Crimping
- Pinching
- Crack climbing
- Flagging
- Hooking
- Smearing
- Stemming
Some Techniques

• Crimping
• Pinching
• Crack climbing
• Flagging
• Hooking
• Smearing
• Stemming
• Dynamics (Dynos)
Action Directe (5.14d)
First Redpoint: Wolfgang Güllich (1991)
La Dura Dura (5.15c)
First Redpoint: Adam Ondra (2013)
Silence (aka “Project Hard”, 5.15d)
First Redpoint: Adam Ondra (2017)
Try It Out: Where?

**Indoor Climbing**
- UBC Aviary ($10 per day, free first-time rentals, $25 for whole term)
- Commercial gyms (closest one: Cliffhanger, $19 per day, $10 rentals)

**Indoor Bouldering**
- Commercial gyms (closest one: The Hive, $21 per day, $5 rentals)

**Outdoor Climbing/Bouldering**
- Tons of great spots around Vancouver and Squamish
- Technically free, but often not beginner-friendly
  - Should go with experienced partner or book (commercial) day trip
Try It Out: How?

**Bouldering**
- Technically no course needed, but without (experienced) partner(s) getting started might be rough
  - Commercial gyms offer rather cheap beginner technique courses

**Climbing**
- Needs partner and basic top rope belay knowledge required
  - UBC Aviary offers free lessons
  - Commercial gyms offer rather cheap lessons or belaying by staff
- Typically no techniques covered, but additional courses offered by commercial gyms