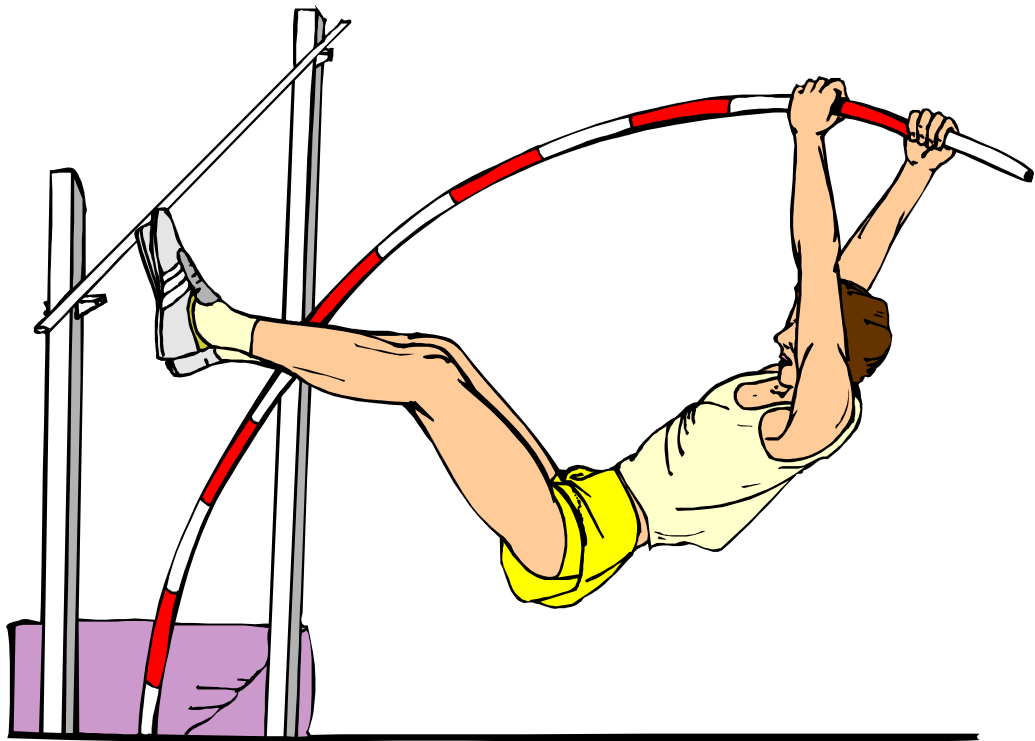



# Pole Vault



USA Track & Field  
Level 1  
Coaching School



# What you need to know

- **Safety**
- **The Technique**
- **Drills**
- **Poles**
- **Vaulter identification**
- **Extras**
- **Questions...**



# Safety

- **Coach creates environment**
- **Warn athletes and parents**
  - of the inherent dangers of the event
  - the dangers of using improper technique
  - the dangers of using improper equipment
- **Demand an attitude of responsibility for safety**
- **Demand proper progression skills**
- **Demand safe landings**
- **provide proper instruction**
- **provide adequate supervision..**



# Safety

- **Provide safe equipment**
  - Hard unyielding surfaces
  - Helmets?
  - Equipment care--Athlete responsibility
- **Demand rules of the event be followed**
- **Develop and keep on file a written training program**
- **Teach tells**
- **Coach creates environment..**



# Technique:

- **The Goal**
- **Approach**
  - **Grip and Carry**
  - **Pole Drop**
- **Plant**
  - **Take Off**
- **Swing**
- **Rockback**
- **Pull-Turn Release..**



Basic Technique:

# The Goal

- **Get the pole to vertical**
- **Get the vaulter on top of the vertical pole**
- **get the vaulter over the bar..**



Basic Technique:

# The Pole Grip and Carry

- **Place pole on shoulders**
  - Grab pole with both hands
- **Hands approximately an arms length apart**
- **Pole should be carried so that:**
  - back elbow is high
  - pole tip (eye level or higher)
  - front hand in front of chest
  - weight of pole rests in the gap between index fingers and thumb
  - pole is slightly across body..



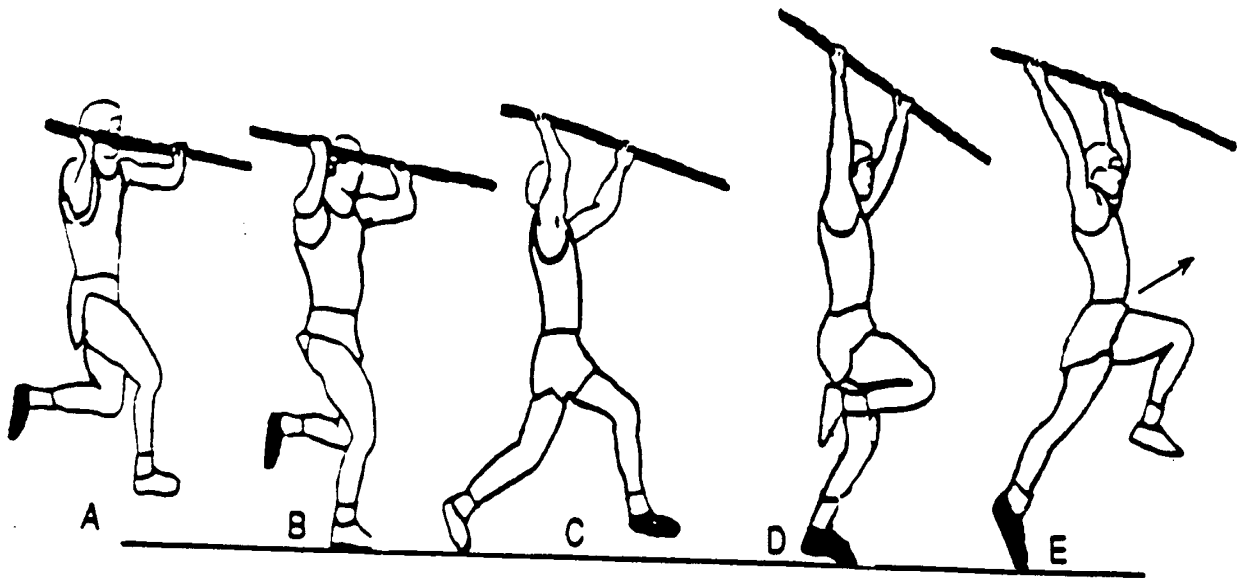
## Basic Technique: Approach

- **First steps:**
  - pole is close to chest
  - Pole nearly vertical
- **Middle steps:**
  - the pole tip is lowered throughout the run until it is eye-level
- **Three steps out:**
  - Pole tip continues to drop uniformly so the pole is parallel to ground when the plant is initiated..

## Basic Technique:

# The Pole Plant

- The plant begins as the vaulter moves into penultimate step
- Both hands move aggressively upward so that hands are as high as possible at take off..



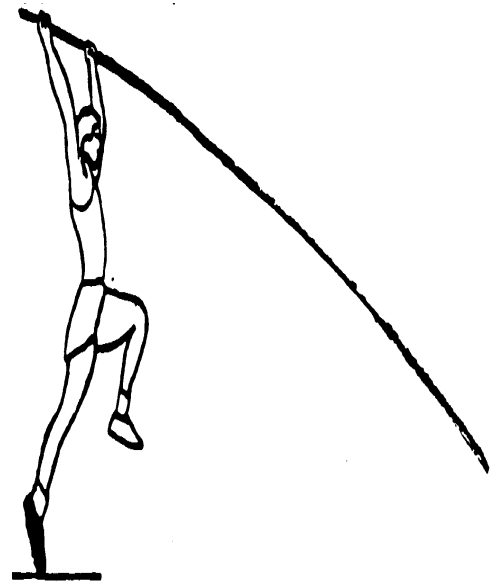
## Basic Technique:

# The Pole Plant

The shoulders should be *parallel* to the cross bar prior to take off

Run Speed must be conserved as the plant takes place (no brake step)

Pole speed should also be conserved, the dropping of the pole tip should blend smoothly into the plant..

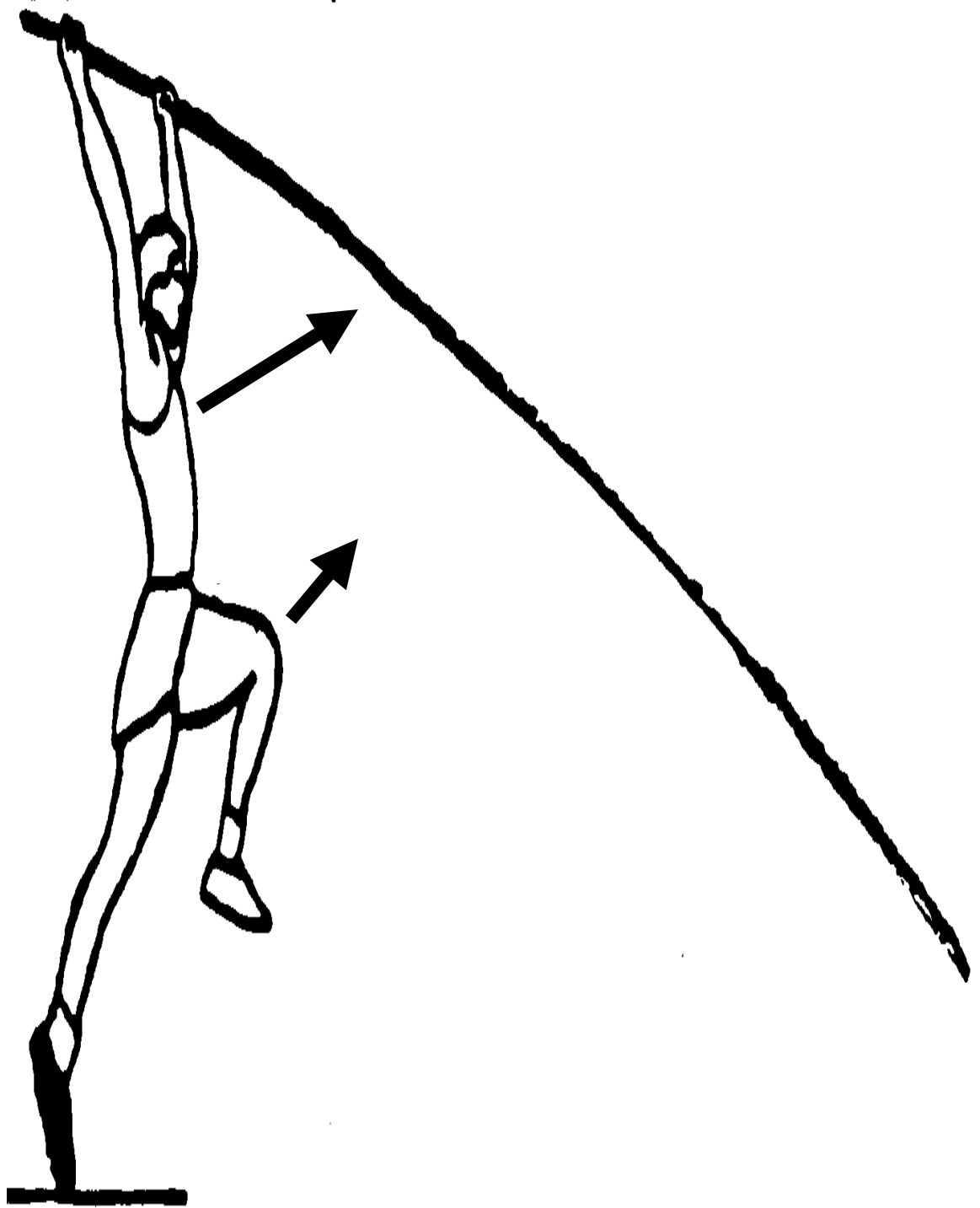
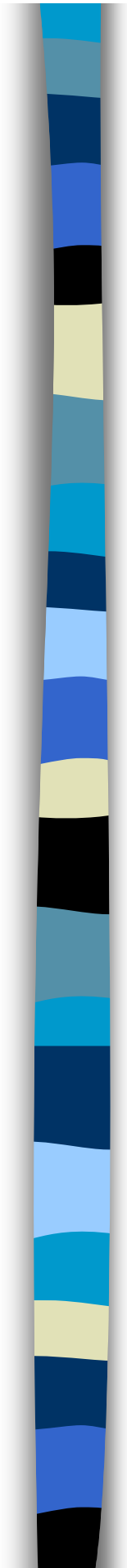




Basic Technique:

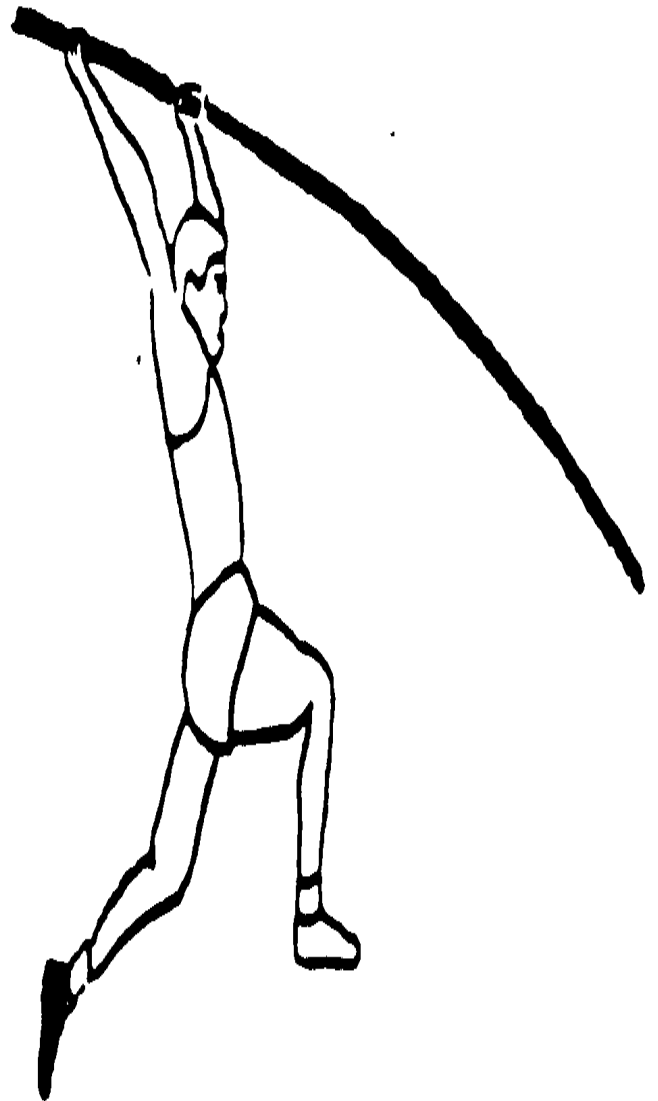
# The Takeoff

- First instant the toe leaves ground
- At takeoff, top hand should be as high as possible and directly over the take off foot
  - Not possible if shoulders parallel
- Take off is a forward and upward motion similar to a long jumper or triple jumper
- Proper body posture should be maintained throughout takeoff
- Pole bend is a natural occurrence, not a goal!..



## Basic Technique: **The Swing**

- **Upon leaving ground**, the vaulter should attempt to stay as long as possible by keeping arms and take off leg extended
- **The hips and stomach are leading the swing..**



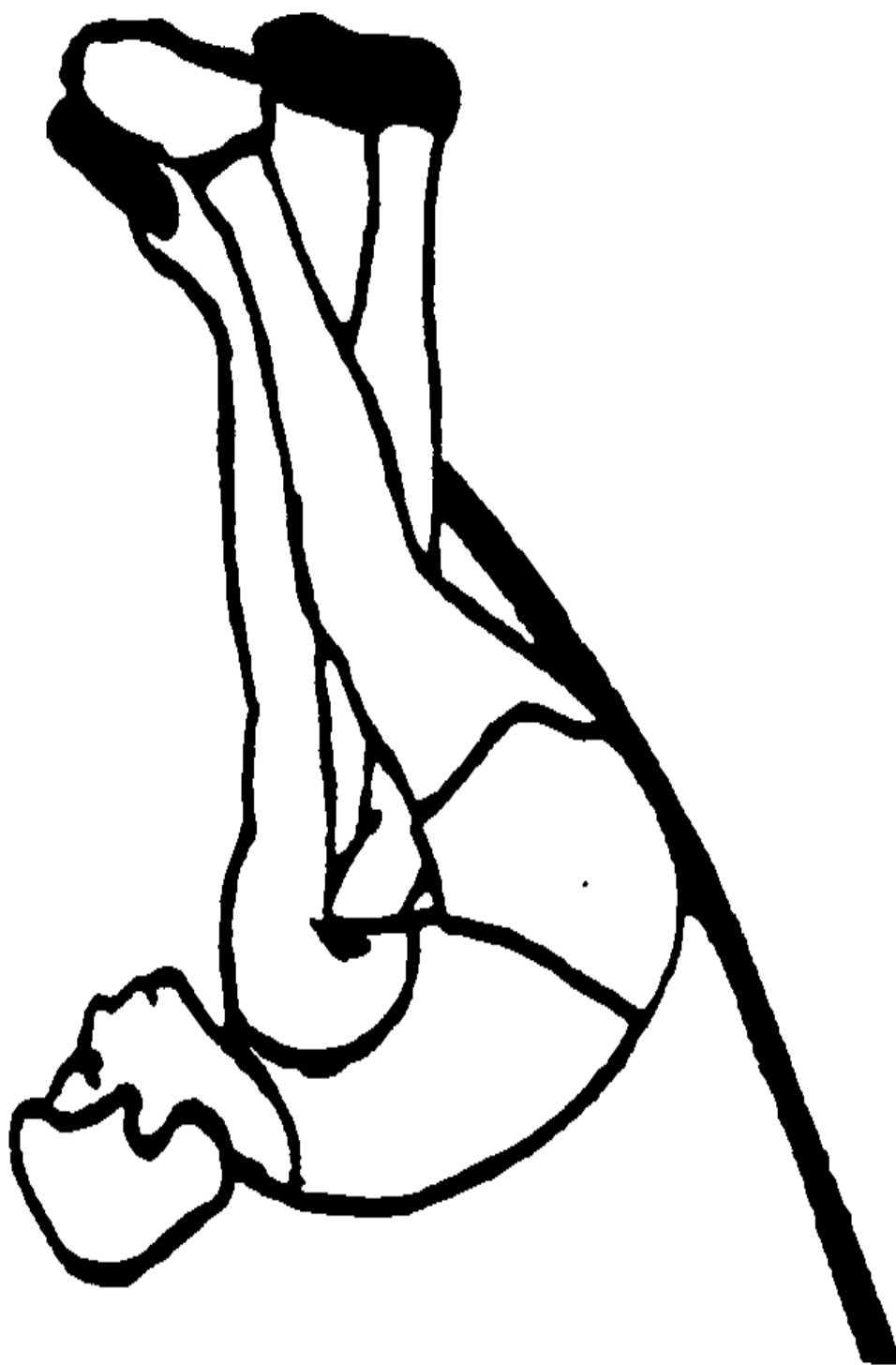
## Basic Technique:

# The Rockback

- As the swing slows, the vaulter begins to break at the waist, drive lead knee to top hand
- The vaulter should remain in the rockback position as long as possible, until the pole is almost straight..



Extended Trail Leg



**Lead Knee to Top Arm**



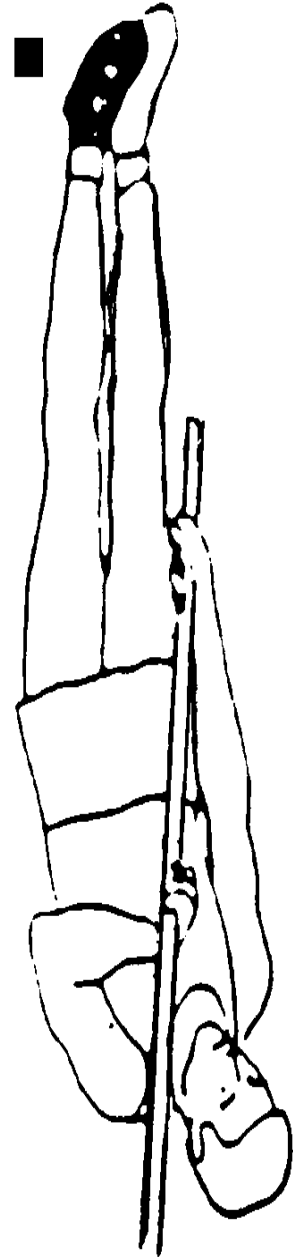
**Basic Technique:**

# **The Pull, Turn Release**

- **The pull and turn begin when the pole is nearly straight**
  - This is when the top arm may bend
- **The vaulter should stay as close as possible to the pole and pull along it's axis.**
- **Bend at the waist to facilitate bar clearance, lift arms to avoid contact with the bar..**

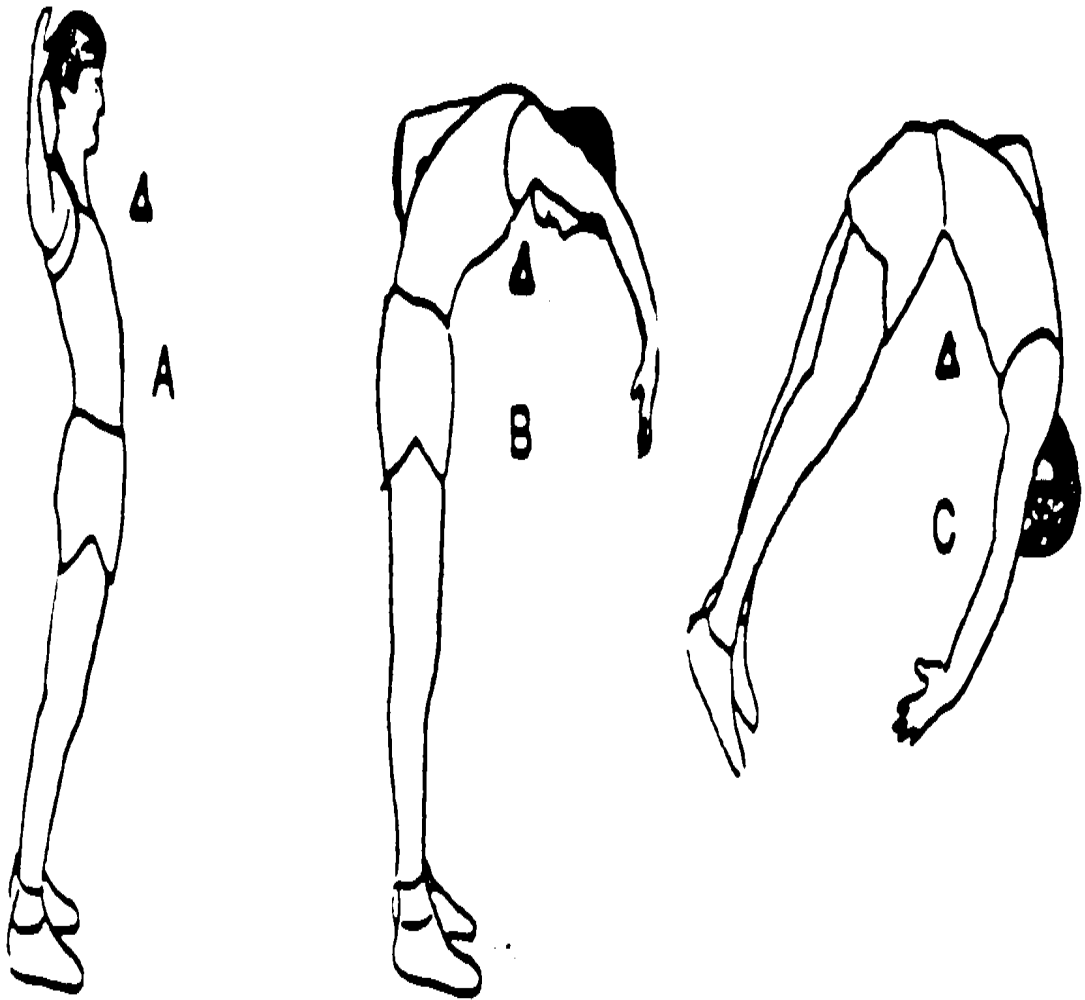
# Basic Technique: Pull & Turn

- Top Hand to hip
- Bottom hand Flex in
- Extend
- Turn
- Pull-Push..



# Basic Technique: Bar Clearance

- C-B-A in this picture..





**Pole Vault Drills:**

# **Approach & Carry**

- **Sprint drills with pole**
- **High Knees with pole**
- **Rhythm sprints with pole**
- **Runs with bigger poles**
- **Pole drop timing..**



## Pole Vault Drills:

# Plant

- **Counting**
  - 4-3-2-1-P
- **Standing plants** (wall, Line)
- **Walking plants**
- **High Knee Walking plants**
- **Running plants**
  - With bigger poles
- **Sliding Box** (plant into movable barrier)
  - 8, 10, 12 step
  - **Full approach..**
    - (which may be 8 or 12 step for beginners)
    - (good # for approach is approx best height)
    - (ie. 12' vaulter runs from 12 steps)



## Pole Vault Drills:

# Pre Takeoff & Takeoff

- **Pop and reach**
- **Stay Downs**
- **Vault into sand for distance**
- **A-Frame**
- **Sliding Box** (plant into movable barrier)
- **Training pole..** (shorter grips and lighter weights)



## Pole Vault Drills:

# Swing

- **Pop-Ups** (straight pole rapid invert)
- **Rings**
- **High Bar** (Giant Swings, Pull-overs)
- **Rope**
- **training pole..** (shorter grips and lighter weights)



## Pole Vault Drills:

# Rock Back

- vaulting from a platform
- Rings
- Rope
- training pole (shorter grips and lighter weights)
- Trampoline (back flips and rolls)
- Back Extensions.. (back roll into handstand)



## Pole Vault Drills:

# Pull turn and push

- **Pulley drill**
- **floor drill**
- **Underwater vaulting**
- **Back Extensions half turn**  
(back roll into handstand)
- **pull put..** (Shot put in towel thrown upward)



# Pole Selection

(not on Test)

- **Go with one brand**
- **Pole Weight**
  - vaulters weight or greater
- **Pole Length**
  - Designed to be held 0-18” from top with the top hand
- **Weight--Length relationship**
  - 1' = 20lbs
  - 12' grip on 13'160lbs is same as 12' grip on 14'140..



# Who should Pole Vault?

## Ideal Qualities

**Tall**

**Sprinter**

**Jumper**

**crazy risk taker**

**Patient** (Process oriented)

**Smart**

**Female Gymnast..**

(who has outgrown gymnastics)



# Extras

- **Tells**
- **Consistency wins**
  - Taping and Mark all poles the same
  - Pre-meet Warm-up routine
  - Standard settings
  - Moving from pole to pole
- **Speed is most important**
- **Plant is second**
- **Develop peer coaches**
- **BE SAFE..**

# Tells (vault diagnosis)

	<b>Vault Diagnosis (TELLS)</b>			
<b>What to Change</b>	<b>Vaulter landed...</b>		<b>Pole bent...</b>	
	<b>Too Deep</b>	<b>Too Shallow</b>	<b>Too much</b>	<b>Hardly at all</b>
<b>Pole Change</b>	Move to Stronger pole	Move to Softer pole	Move to Stronger pole	Move to Softer pole
<b>Grip Change</b>	Raise grip	Lower grip	Lower grip	Raise grip
<b>Approach Change</b>	Shorten approach	Lengthen approach	Shorten approach	Lengthen approach
<b>Standard Change</b>	Move Backward	Move Forward	Depends	Depends
<b>IDEAL Result</b>	4' past the box Centered (left-to-right)		90° (or a little more)	



# Questions:

■ **Now:**

■ **Later:**

– **Steve White**

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**Done**