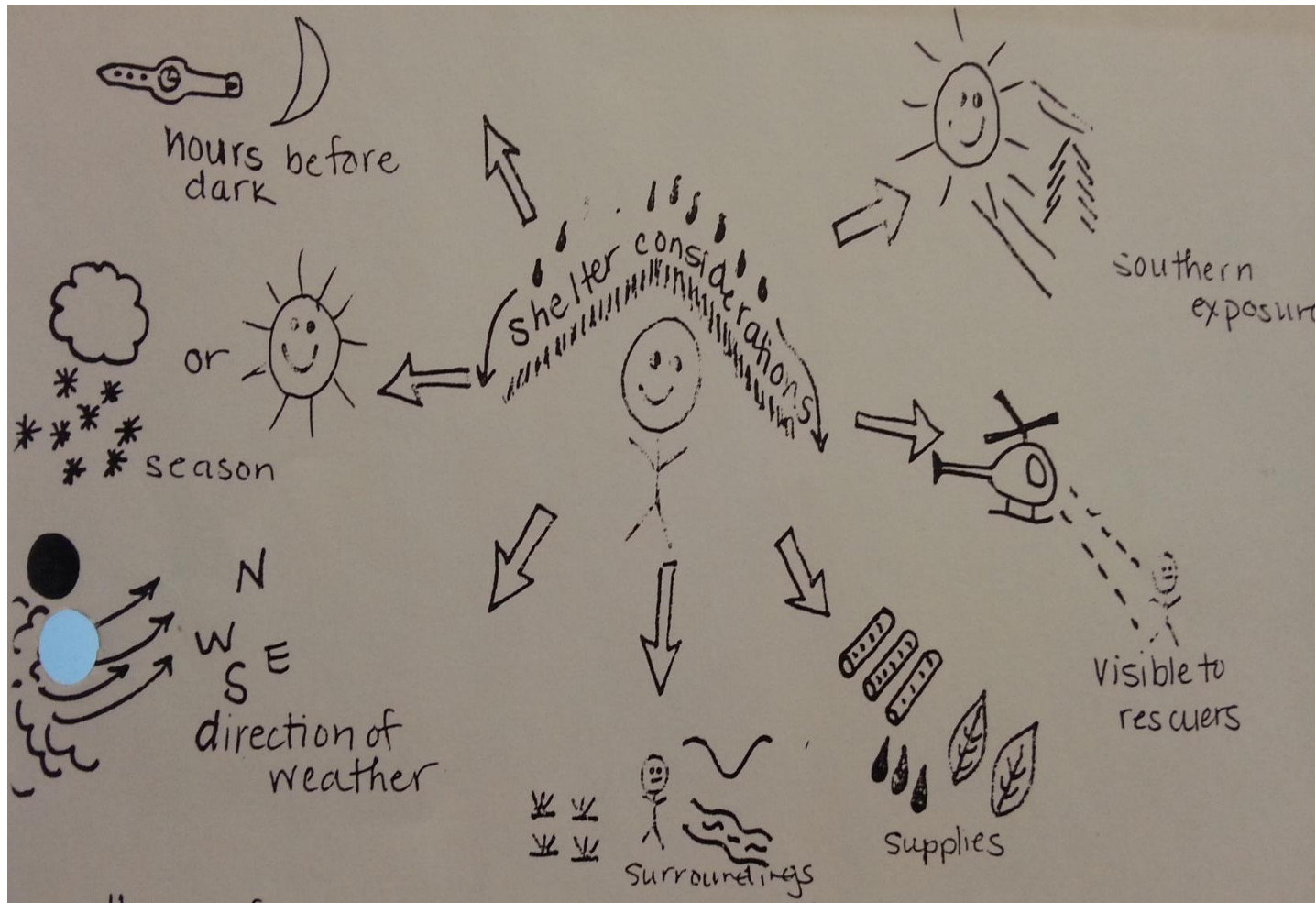


# SHELTERS, OUTDOOR SURVIVAL AND ORIENTEERING REVIEW

PAD30

# Before you Build your shelter you should consider the following:



# Hours Before Dark

- Close to dark = build something easy



# Season

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Summer =

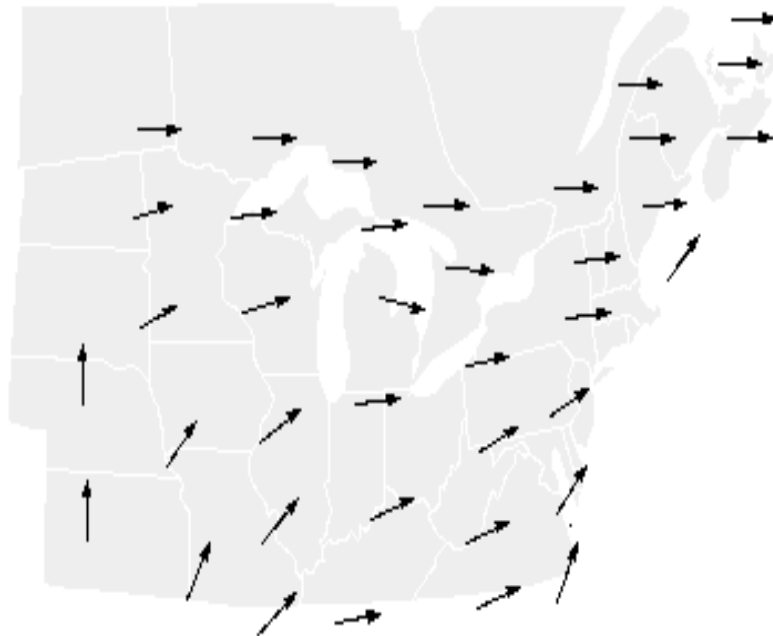
- Higher ground lets you cool off (rain proof, close to water)

Winter =

**Lower ground stays warmer (insulated)**

# Directions of Weather –

- where the opening should face, main support, etc.



# Surroundings –

□ **River? Valley? Swamp?**





# Supplies =

□ food, fuel, etc.



# Visible -

□ to rescuers instead of  
under bushes





# Longest Southern Exposure –

- **for sun to heat and dry the shelter**




# Where to avoid building your shelter

1. Dry gullies and river beds – Flooding
2. Thick woods – hard to dry
3. Pebble ground – uncomfortable, hard to put in stakes  
(Good to keep heat, good drainage)
4. Strong Winds
5. Animal runs
6. Near bees and hornets (they'll try to build in shelter)
7. Avalanches

- When lost in the wilderness, many people choose to walk around and try to find their way out.
- However, you **MUST** remember that it takes **Twice** as much food (energy) to travel as it does to sit and wait at your shelter.



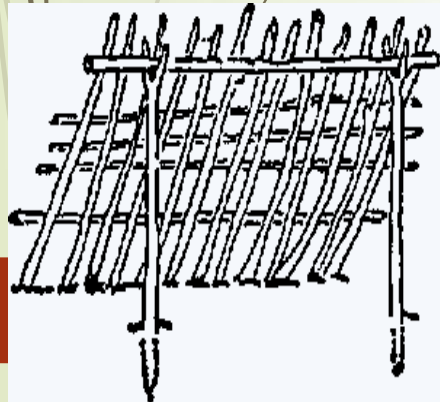


➡ Remember, that survival is **80%** mental, and **20%** skills.

➡ Many people feel that being found sitting and waiting doesn't seem like the "**manly**" thing to do, however, it may increase your chance to **Survive**.

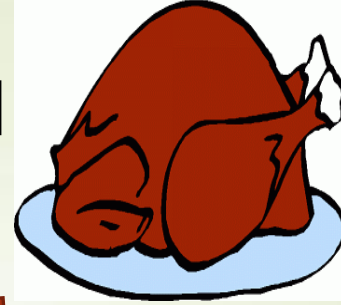


1.  
Empty  
Pockets



2. Build  
Shelter

5. Food



You're  
Lost



4. Fire

3. Find  
Water



Draw this on your page to help you remember  
what to do



## 1. Empty Pockets

- **Dry Matches, food, Knife?**

## 2. Build a Shelter

- **Warm, dry, comfortable**
- **In bad weather, you won't last long.**





3. Keeping hydrated keeps you **Healthy and Ready**

4. Fire – **collect wood that is farther from you so that when you are tired, you can collect wood that is closer to you.**

- **Also use fire as a SIGNAL!!**

## 5. Food – Not a necessity right away

- you can go a long time without it.



# The Survival Rules of 3

- ▶ 3 MINUTES WITHOUT AIR
- ▶ 3 HOURS WITHOUT SHELTER
- ▶ 3 DAYS WITHOUT WATER
- ▶ 3 WEEKS WITHOUT FOOD

# 7 Enemies of the Wilderness Survivor

1. Pain

2. Cold

3. Thirst

4. Hunger

5. Fatigue

6. Boredom

7. Loneliness

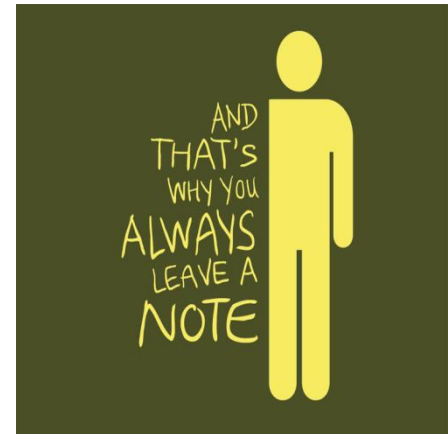


BORED OF BEING  
BORED BECAUSE  
BEING BORED IS  
**BORING**



# Some Things to Note

- ▶ Preventative medicine:- What are some things we can do to prevent getting lost and ending up in a survival situation.
- ▶ 1. Inform someone of your activities: - where you are going, how long, when you will be back, if you are with someone else



# Some Things to Note

- ▶ 2. Study the area you are going before you get there
  - ▶ Find landmarks and study terrain before you go.





# Some Things to Note

- ▶ 3. Bring equipment that will help you stay on course. Compass, map, GPS.
  - ▶ Use it before you get lost



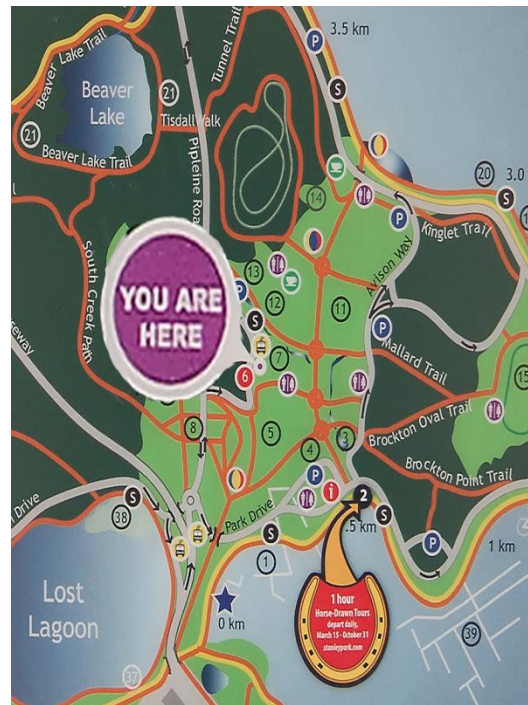
# Some Things to Note

4. Be aware of your surroundings – take note of features around you and not just the trail in front of you.



# How to decide to travel or not

- ▶ 1. know your exact location



# How to decide to travel or not

## ► 2. Orienteering methods (Compass, maps, gps)



# How to decide to travel or not

## ► 3. Unusual physical stamina





# How to decide to travel or not

## 4. Suitable clothing





# How to decide to travel or not

- ▶ 5. Available food, fuel, shelter or equipment to get it

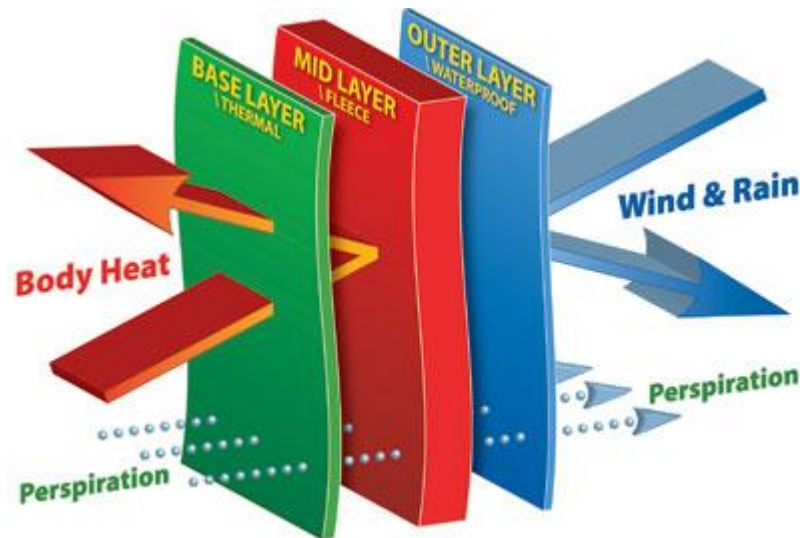


# Important Things to Think About

1. Chances of being located are greater if you stay at your shelter.
2. It takes twice as much food (energy) to travel as it does to sit and relax
3. One may not be able to find shelter, fuel or food along your route.

# How to Stay Warm and Happy

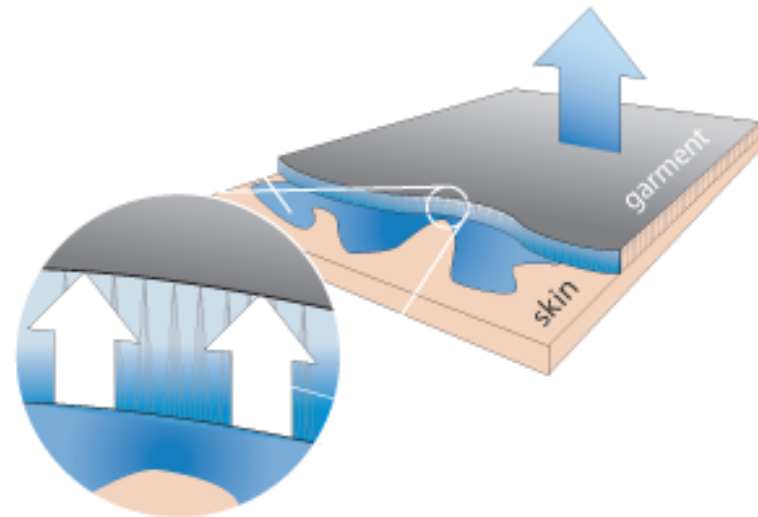
- ▶ Dress appropriately for the current weather conditions and be prepared for weather changes to extremes in either direction (warmer, colder, wetter, and drier).



# This is best accomplished by using the following layering system.

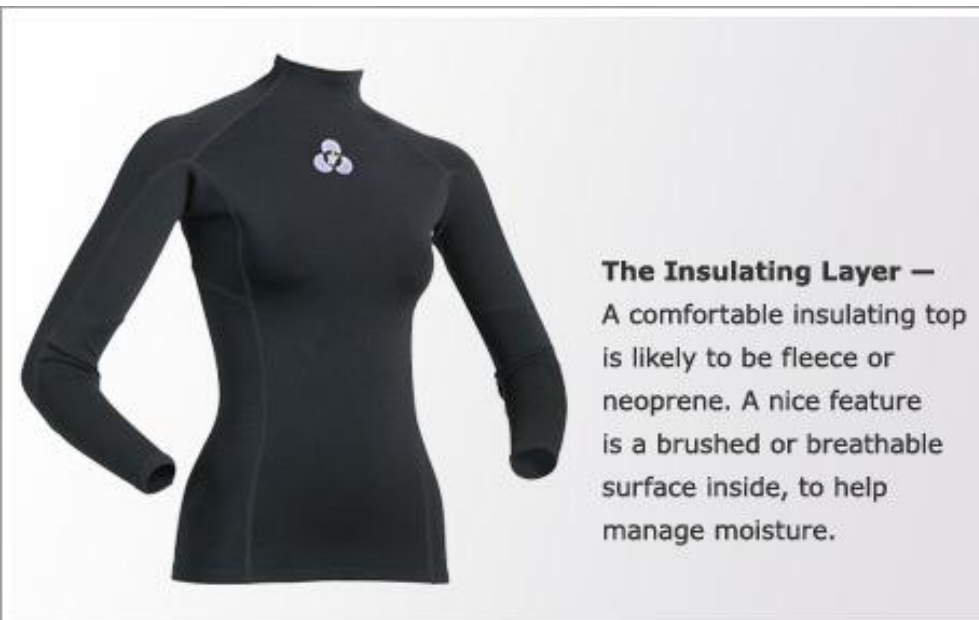
1. Wicking Layer next to the skin – helps one stay dry

► Polypropylene, Capilene, or silk



## 2. Insulating Layer(s) – use as many layers as necessary

- ▶ Wool, pile, fleece, etc. (not cotton if you are going to be active)



### INSULATING LAYERS

External: Cordura®  
Internal: Anti-perforation fabric with PU anti-abrasion coating

Neoprene insulating barrier

High tenacity Nylon fabric, no slip, insulating felt

Heat reflecting aluminum coated polyethylene insulating barrier

Insulation barrier in high-density expanded polyethylene

Thermo-reflective aluminum facing

Anti-abrasion protective netting



### 3. Weather protection / shell layer – breaks wind and/or sheds water

► Nylon, cotton/polyester, dense weave





# Orienteering

# How does one tell direction?

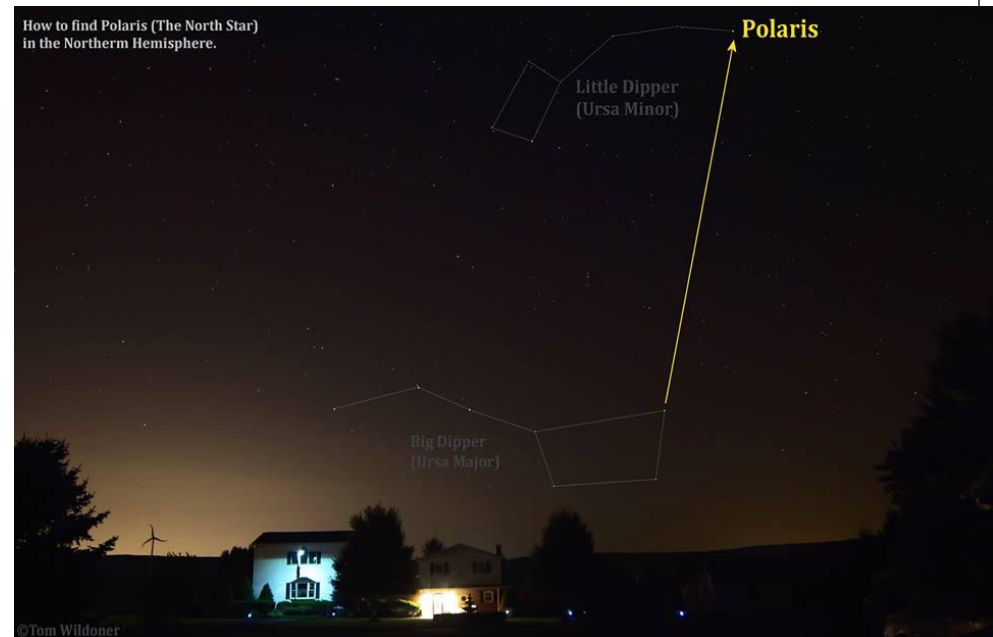
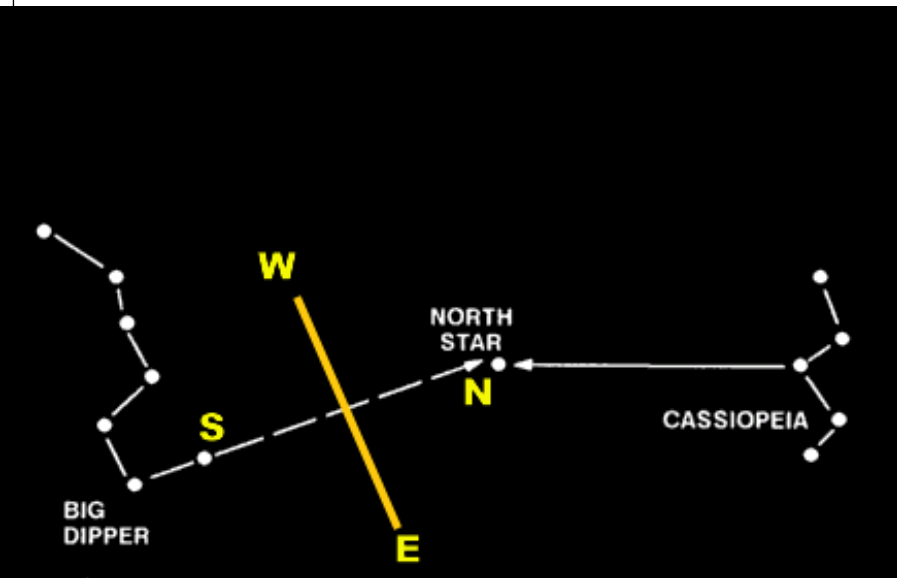
- **1. The Sun**

- Rises in the East and sets in the West
- With an analog wrist watch put the hour hand at the sun; South is  $\frac{1}{2}$  way between hour hand and 12 o'clock



# How does one tell direction?

- 2. Polaris ( North Star)
- Can find North using the big dipper



# How does one tell direction?

## 3. Trees on Ridges

Prevailing winds from the West; trees lean to the east



- **4. Learn the Lay of the land and drainage patterns**
- Study topographic maps before you go into the bush.



# Pacing

- A pace is equal to 2 steps. Count 1 pace each time your **right foot** hits the ground.



- It is desirable to practice pacing on level as well as rolling terrain in order to calculate your average pace; the number of paces taken by an individual to cover a given distance may vary depending upon terrain and obstacles.

# Converting Map Distances to Paces

- Example:
- If it takes you 125 paces per 100 meters, then you will need to divide that number by the number in the column that says *Number of Paces*

Map Scale	Map Distance	Actual Distance	Number of Paces
1: 4 000	1 mm	4 m	Divide * by 25_____
1 : 1 000	1 mm	10 m	Divide * by 10_____
1 :25000	1 mm	25 m	Divide * by 4_____
1 :50000	1 mm	50 m	Divide * by 2_____

- Another way to estimate how many paces to walk a given distance on a map.
  1. Find the distance needed to travel in meters
  2. Multiply the distance by the number of paces you take in 100 meters divided by 100m
  3. Distance on map x (# of paces / 100m)

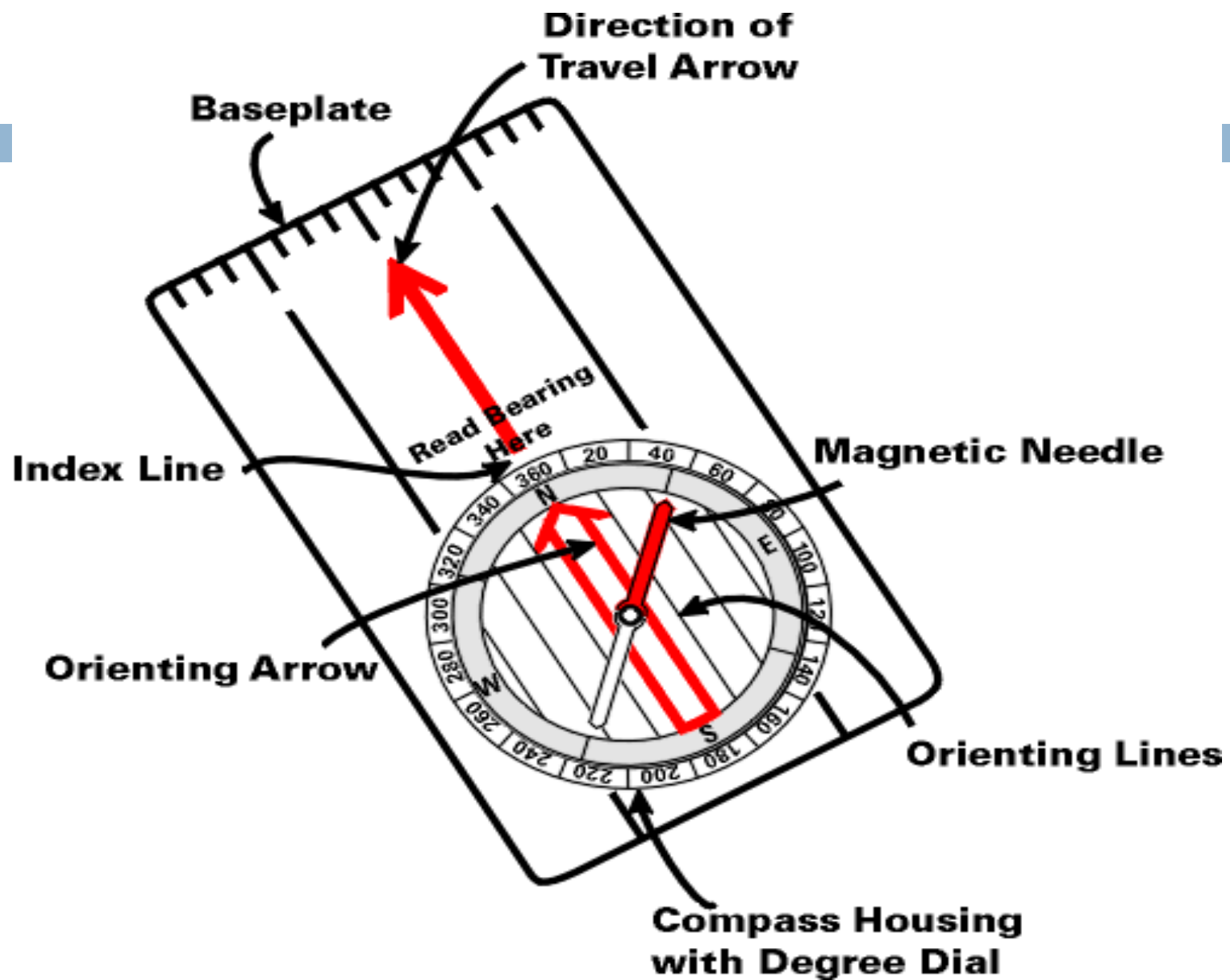
# Parts of a Compass

- On most compasses, there is a red and black arrow.
- It is called the **magnetic needle**
- On some compasses it might be red and white, the **red part is always pointing North.**



- The tunable thing on your compass is called the **compass housing**. On the edge of the compass there is a scale. They usually go from 0 - 360 degrees or bearings.







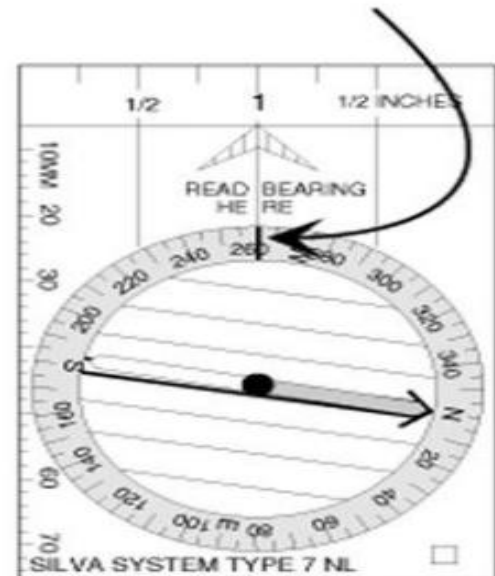
# How to find a Bearing on a Map

1. Place the compass on the map so either of the base plate edges is touching both your starting point and your finishing point.
2. Make sure the direction arrow is pointing in the direction you are traveling.

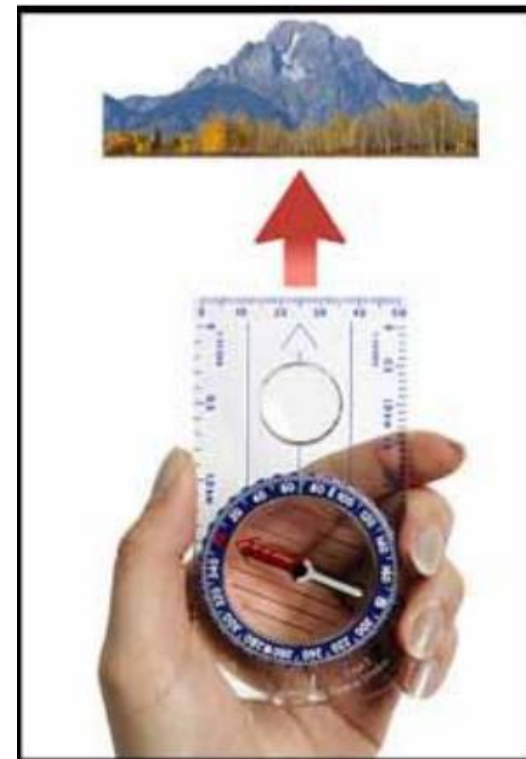


- 4. Take the compass off of the map
- 5. Read the bearing on the rim of the housing – this is your **Grid Bearing**. Add your variation to this number (and turn the housing to the new number) – This is your **Magnetic Bearing**

Read your Grid/Magnetic Bearing here



6. Hold the compass in front of you with the direction of travel arrow pointing directly away from you. Turn your whole body until the north end of the needle is in line with the 'Orienting Arrow of the Housing' The 'Direction of Travel Arrow' is now pointing towards your objective





7. Walk to this land mark without looking at the compass again.



8. Choose new land marks or send another person ahead to serve as a landmark if nothing suitable can be found or until your destination is reached.