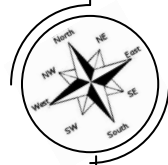


## Orienteering Courses

The Nashoba Brook Watershed Trails Orienteering Course consist of many separate courses. Each starts at the Texas Road parking lot near the kiosk at the post with a dotted line. Set the compass bearing to the direction of the selected course and place it atop the post. Rotate the entire compass so the Red needle is inside the orienting arrow. Sight down the direction arrow to pick a trail. Follow that trail for the corresponding distance. You should arrive at the next post. Record the symbol. Repeat the procedure for the remaining number of legs. When you are finished use the answer key to check your work. All courses start and end in the Texas Road Parking lot.

Esker Loop		Distance 3 Km	
Leg	Direction	Distance	Symbol
1.	237° mag	193 meters	
2.	316° mag	550 meters	
3.	300° mag	190 meters	
4.	241° mag	105 meters	
5.	223° mag	127 meters	
6.	193° mag	842 meters	
7.	36° mag	245 meters	
8.	90° mag	550 meters	
9.	50° mag	193 meters	

Course #2		Distance 3.4 Km	
Leg	Direction	Distance	Symbol
1.	237° mag	193 meters	
2.	237° mag	219 meters	
3.	233° mag	515 meters	
4.	315° mag	1037 meters	
5.	107° mag	63 meters	
6.	193° mag	369 meters	
7.	30° mag	75 meters	
8.	190° mag	190 meters	
9.	90° mag	550 meters	
10.	50° mag	193 meters	



Long Haul Distance 3.7 Km			
Leg	Direction	Distance	Symbol
1.	237° mag	193 meters	
2.	237° mag	219 meters	
3.	233° mag	515 meters	
4.	315° mag	1037 meters	
5.	350° mag	390 meters	
6.	65° mag	65 meters	
7.	130° mag	112 meters	
8.	110° mag	328 meters	
9.	190° mag	190 meters	
10.	90° mag	550 meters	
11.	50° mag	193 meters	

**Please Stay on Trails**

### ANSWER KEY

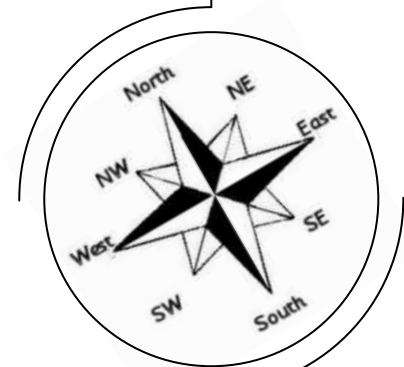
⋮			11.
⊔	⋮		10.
⊥	⊔	⋮	9.
⋮	⊥	⊔	8.
⋮	⋮	⊥	7.
⋮	⋮	⊔	6.
⊥	⊥	⊥	5.
⊥	⊥	⋮	4.
⊥	⊥	⋮	3.
⊥	⊥	⊥	2.
⊔	⊔	⊔	1.
Long Haul	Course #2	Esker Loop	Leg

*"I can't say I was ever lost, but I was bewildered once for three days."*

*-Daniel Boone*

## Nashoba Brook Watershed Trails

### Orienteering Course Texas Road



**An Eagle Scout Project  
By  
Matt Lauer  
Troop 591**

More Courses at [www.scouttroop591.org](http://www.scouttroop591.org)

## "Ten Essentials"

The "Ten Essentials" is a list of items that can save your life in the event of an outdoor emergency. Consider the Ten Essentials as an insurance policy against the unexpected. At some point during your hiking career you will be glad you have them along.

1. **Map**
2. **Compass**
3. Flashlight/headlamp (extra set of batteries)
4. Extra food (enough for one extra day)
5. Extra clothing
6. Rain gear (even if it's sunny)
7. First aid supplies
8. Pocket knife
9. Matches
10. Fire starter

## Using a Compass to Follow Directions

Suppose you want to go in the direction of 120 degrees. To do this you must:

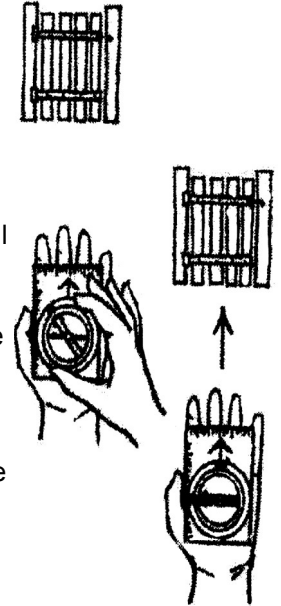
1. Turn the degrees dial around until the 120 degree mark is lined up with the Direction of Travel arrow.
2. Hold the compass so the Direction of Travel arrow points straight ahead of you.
3. Turn yourself around until the orienteering arrow of the compass is right under the magnetic needle with both pointing in the same direction.
4. If you walk straight ahead you will be walking in the direction of 120 degrees.



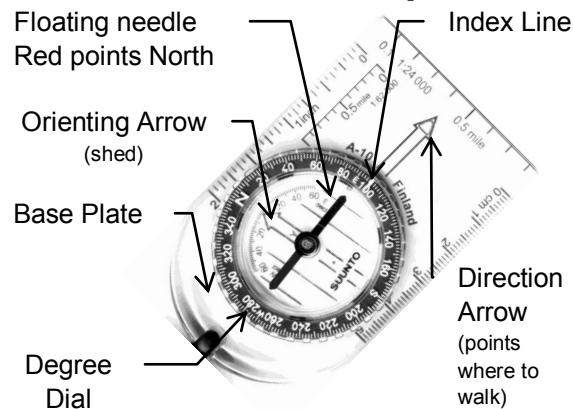
## Using a Compass to Give Directions

To give directions with a compass you :

1. Face an object for which you want a direction, such as a fence.
2. Hold the compass so the Direction of Travel Arrow faces the fence.
3. Turn the degree dial on the compass until the orienteering arrow is right under the magnetic needle with both of pointing the same direction.
4. The direction of the fence is given by the number that is aligned with the Direction of Travel Arrow.



## Parts of a Compass



## A SIMPLE WAY TO PRACTICE YOUR COMPASS SKILLS

Place a penny on the ground next to your feet. Set your compass to any direction. Follow that direction for ten steps. Now add 120 degrees to your direction of travel. Reset the compass to this new direction. Follow this new course for ten steps. Once more add 120 degrees to your current direction of travel. Follow this direction for ten steps. If you have done everything right you should be able to bend over and pick up your penny.

