

Geokids Guide to Using a Compass and Orienteering

Overland Park Arboretum & Botanical Gardens



What Is Orienteering?

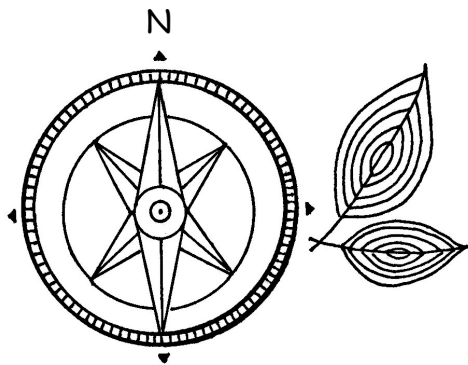
Orienteering is a sport in which people use a map and a compass to travel an unfamiliar route as quickly as possible.

It's a cross-country race in which participants use a map and compass to move between checkpoints along a course new to them.

The use of a map and a compass to find locations and plan journeys has been a vital skill for humans for thousands of years.

Look at your map of the Overland Park Arboretum and locate the Compass Rose.

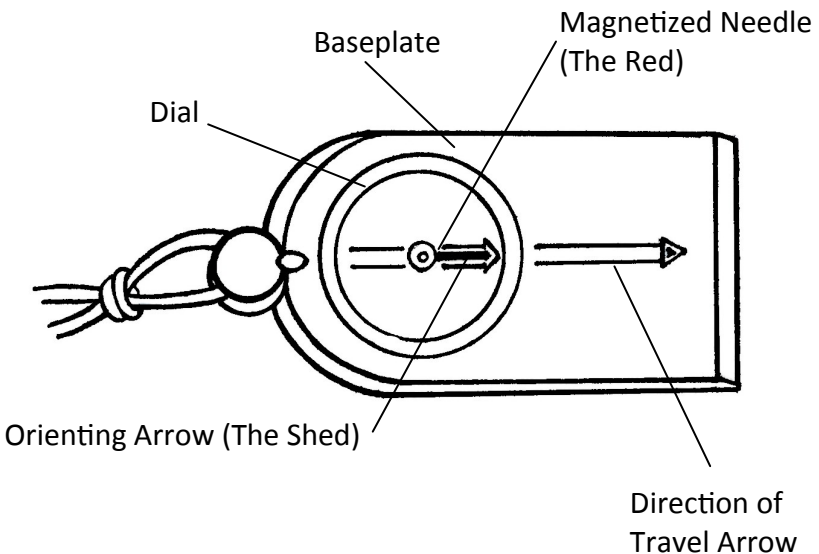
This gives a general sense of where sites may be found; but a real compass with its magnetic needle pointing North is most accurate.



How Does A Compass Work?

A compass helps determine the direction of true North. The Earth is magnetic and has a magnetic field. A compass uses a magnetic needle mounted on a spindle that allows it to spin freely. This needle always points North.

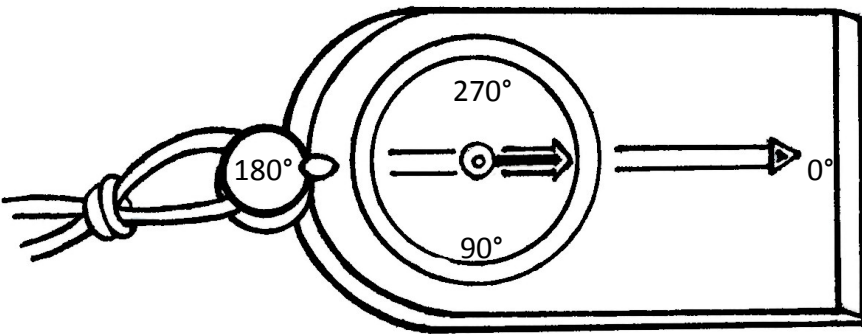
Look at the compass we have loaned you. It has 3 arrows. The free-moving red arrow points north. We'll call it "The Red." A long red arrow is printed on the plastic base. It's called the directional arrow and indicates the direction you want to walk. The third arrow is the red arrow inside the dial. This is "The



We'll call it "The Red." A long red arrow is printed on the plastic base. It's called the directional arrow and indicates the direction you want to walk. The third arrow is the red arrow inside the dial. This is "The Shed."

Notice points or degrees 0 to 360 around the outer edge of the dial. 0 degrees marks North; 90 degrees, East; 180 degrees, South; and 270 degrees, West.

Line up your map with your compass showing true North.



Now let's practice!

Let's go 90 degrees or East. Turn the moveable dial to match 90 degrees to the directional arrow in the plastic base. Slowly turn your body, keeping the compass level, until the "Red is in the Shed." Are you facing East?

Try setting your compass to 220 degrees. Turn the dial to move 220 into line with the directional arrow. Slowly turn your body until the "Red is in the Shed." You should now be facing southwest or 220 degrees.



Keep the red
in the shed!



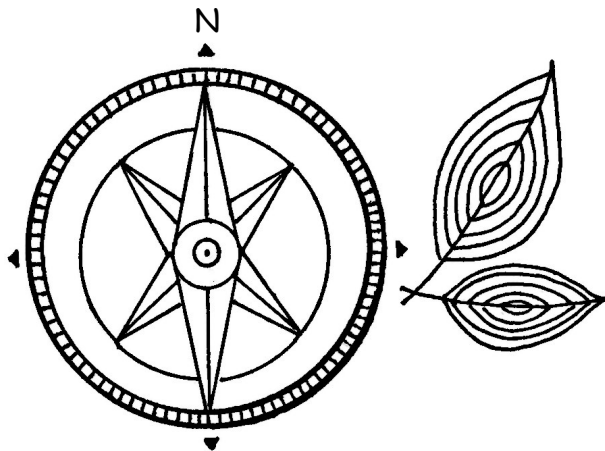
Using a Compass to Find True North

Hang the compass around your neck so you don't lose it.

Hold the plastic base level to the ground with the round dial close to your body and the long red directional arrow pointing straight ahead.

Do not hold anything metal under the compass or it will lose the magnetic pull.

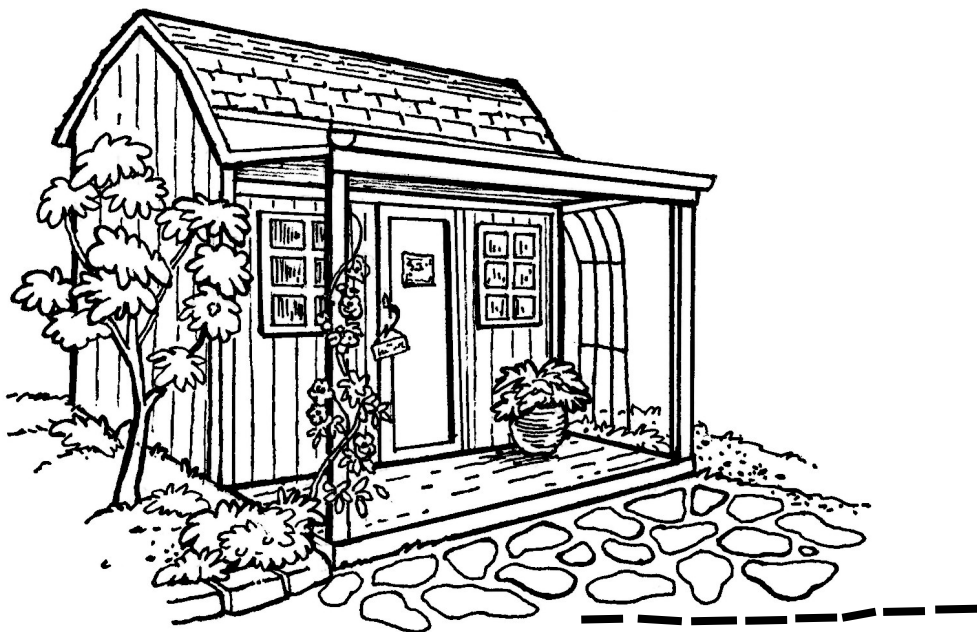
Move your body while holding the compass level, slowly turning until "the red" North arrow lies in the "shed."



Let's have some fun!

Follow some **bearings**, or directions, used at the Arboretum. **Paces** are used to count off distance between bearings. Two normal steps equal one pace. (For example, every time your right foot hits the ground, count one pace.)

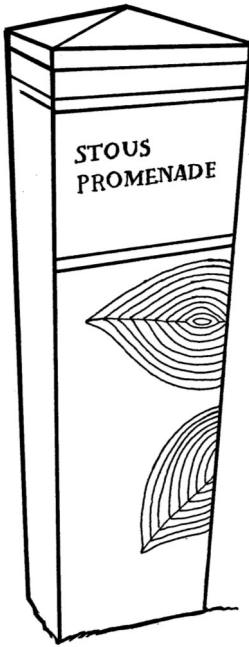
Start at the intersection by the little blue shed in the Monet Garden.





Set your compass for
340 degrees. Remember to put "Red
in the Shed."

Walk 20 paces on the sidewalk.
Do you see the bronze sculpture of the Artist
Monet painting?? Set your compass for 340 degrees.
Remember to put "Red in the Shed."



Set compass for 340 degrees and take 13 paces. Did you come to the Stous Promenade sign?

Set compass for 40 degrees and walk 12 paces*.

Is there an evergreen tree here?

Set compass for 310 degrees and walk 30 paces*.



Do you see a birch tree with peeling white bark?

*As you practice
you may walk in
the grass but
NEVER through a
garden.

Set compass for
290 degrees and
walk 32 paces.
Did you find a
blue bird house?
Set compass to
160 degrees and
walk 31 pace. You
should be back
on path.



Now you are ready to set your own bearings and have an orienteering adventure!

Create your own course:

1. Start at .
location
2. Locate a point of interest in the distance.
3. Set your compass to degrees.
0-360
4. Walk to that point, counting paces as you go,
 paces.
number

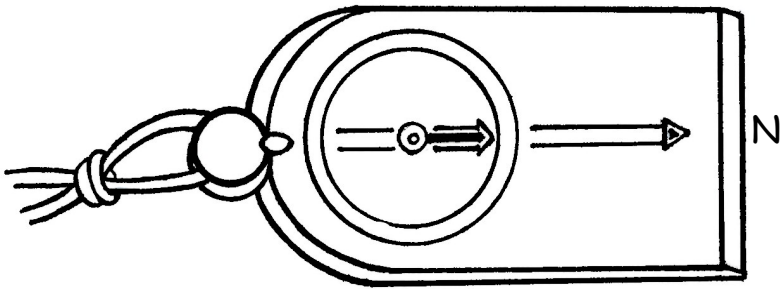
Keep going to make a map. Draw your map on the next page.

Draw your map here



Compass Reminders

- Hold the round dial end of the compass close to your body
- Move your whole body slowly to put the red North arrow “in the shed”.
- Look up as you move to see what’s ahead.
- Do no hold anything metal under the compass.
- Stay out of the flower beds.





Written by:
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Education Committee

Illustrated by Andra Chase

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Overland Park Arboretum & Botanical Gardens



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