SOUTH AFRICAN PONY CLUB

Map Reading Achievement Badge

WORKBOOK

Objectives:
- Know points of the compass
- Find direction using a compass
- Recognise symbols ,abbreviations & contour patterns on a map
- Follow a route , using a simple map , written instructions & a compass

Key points:
- Name and point out 4 main compass points(N,S,E,W)
- Name and point out 4 quadrants (NE,SE,SW,NW)
- Show how to determine direction using a compass
- Recognise symbols for buildings, road types & church types on a map
- Recognise contour patterns on a map
- Whilst riding in pairs / in a group, follow a written description of a short route around farmland
- Record map co-ordinates of markers on route

Additional reading:
- Compass basics http://www.ussartf.org/compass_basics.html
- Kjetil Kjernsmo's illustrated guide on 'How to use a compass' http://www.learn-orienteering.org/old/lesson1.html
  The additional reading contains more information than is required for the badge, but it provides good background knowledge.

NAME

BRANCH

Compass points and quadrants

Write down what each abbreviation of the 4 compass points stand for:

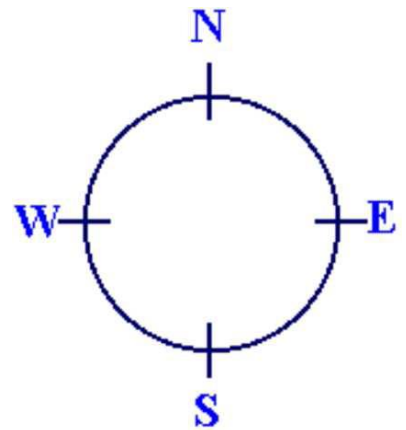| N		S	
W		E	

Make up a word association rhyme of your own to remember which compass point is located where:

*Eg **N**ow **W**e **S**hall **E**at*

_____

Use a ruler and pencil to divide this compass into 4 quarters or quadrants.
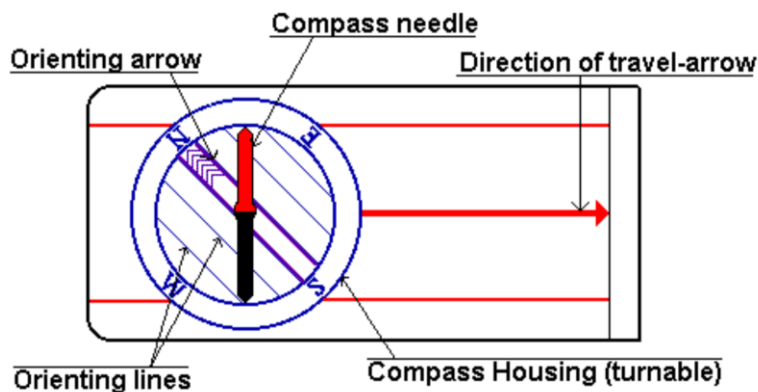Now label and colour in the following quadrants:

NE in blue	SE in red
NW in green	SW in yellow

Finding Magnetic North

- Look at the picture of the compass
- The *compass needle* is always floating, it may be red & white/ red & black

Colour the light grey half of the *compass needle* in red

- The red part always points towards the earth's magnetic north pole
- Have a look at the edge of the *Compass housing*(it can turn around)
- It has the letters N, S, W and E for North, South, West and East (and may have the scale from 0 to 360°as well)
- Move the whole *compass housing* until the *compass needle* is on top of the *orienting arrow*. This is stencilled on the base of the *compass housing*

Colour the orienteering arrow in blue

- The zero degree mark on the *compass housing* and the north end of the needle should be aligned - they now point to magnetic north
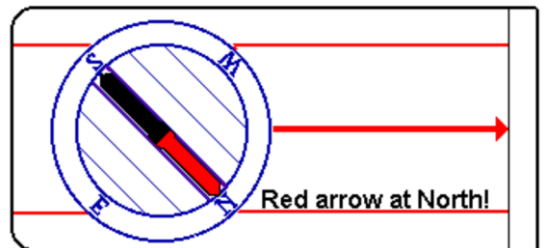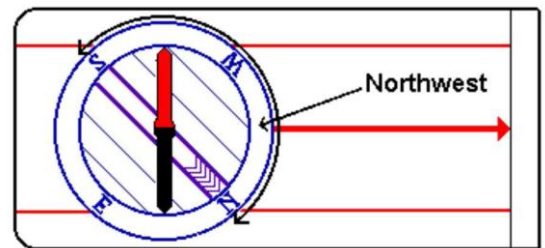
Finding direction

- Say you want to go in a North Westerly direction
- Find NW right between North and West on the *compass housing*

Draw a green cross on NW

- Hold the compass flat on your hand, so that the *compass needle* can turn
- Then turn your whole body until the *compass needle* is in line with the *orienteering arrow*

In which direction would the red side of the *compass needle* be pointing?

Northwest

Red arrow at North!

Kjetil Kjernsmo © 1997

Write 0˚ where magnetic North is located on the picture of the compass

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Now draw a green line, using your ruler, in a NW direction, across the compass.

This would be your *direction of travel*

Recognising symbols on maps

On the map of the Johannesburg area:

- On the outside border of the map , write down the abbreviations for the 7 other points of the compass you have learned so far

- Colour the N3 national road from Alberton to Heidelberg , in **blue**

- To the West of Heidelberg is the Suikerbosrand Nature Reserve, colour it in **green**

- The names of large cities are typed in bold, along with with a circular symbol. Colour the symbols for Tshwane and Johannesburg in **yellow**

- Shade the entire province of Gauteng lightly in **red**

Finding directions on a map

Answer these questions, based on the map of Gauteng on the previous page:

Which province is east of Gauteng?

_____

Which town is NE of Johannesburg?

_____

In which direction would you travel from Vereeniging to get to Vanderbijlpark?

_____

Which national road would you travel on from Springs to Germiston?
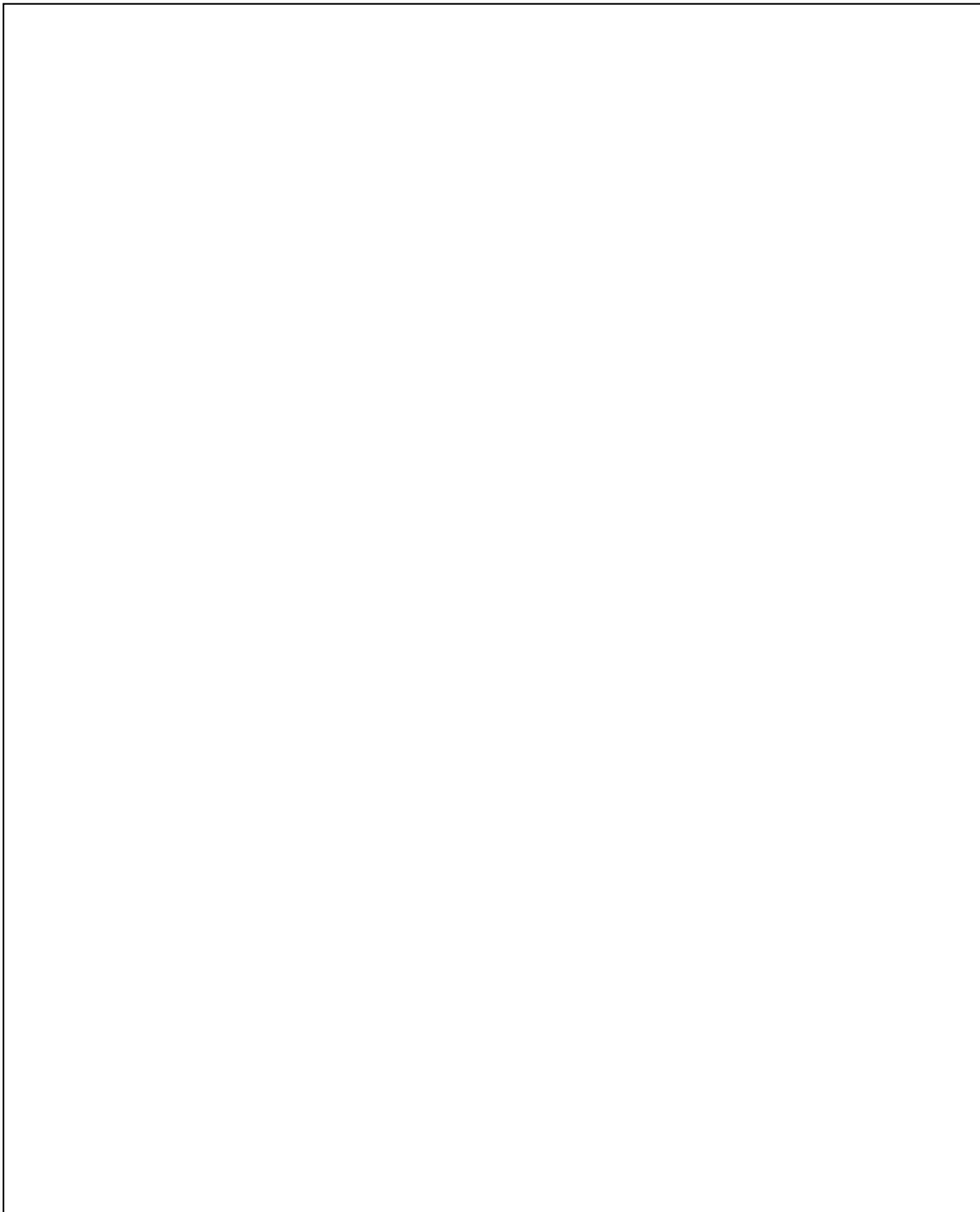
_____

In which direction would you be travelling?

_____

Recognising symbols and contour patterns on maps

Study the Google earth image and complete the map of it on the next page, using the symbols provided:

Key

Contour lines

Buildings

Roads

Vegetation