



GIRL SCOUTS OF CITRUS COUNCIL INTRODUCTION TO ORIENTEERING PATCH PROGRAM



Introduction to Orienteering

The information in this packet starts with the very basics and progress to the more advanced. The packet is divided into four parts:

- A. Introduction to Directions
- B. Introduction to Maps
- C. Reinforcement Activities
- D. Using the Compass in Four Easy Steps
- E. Answer Key

This packet is a progression and it is recommended to only move onto Using the Compass after the group or individual is comfortable with directions.

A compass course designed especially for Mah-Kah-Wee Program Center is available for your use. It may be reserved by going to <http://citrus-gs.doubleknot.com/facilitycalendar/3471>.

Note to the Leader:

Leaders should duplicate the following Reinforcement Activities for the girls:

- Test Your Memory
- Word Search
- Through The Squares
- Can You Find Your House
- Mystery Picture
- Compass Crossword

Please do not write on the sheets.

Section A

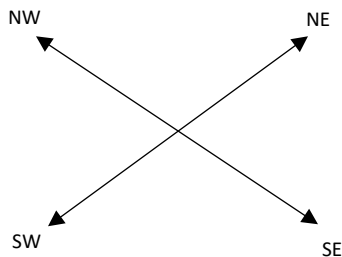
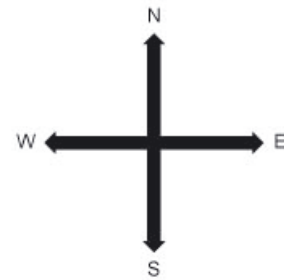
Introduction to Directions

Magnetic North

A compass is an instrument containing a magnetized, moveable pointer on a pivot and is used to show direction. The Earth has a natural magnetic field to which the pointer responds, allowing it to always point towards the Magnetic North Pole. Magnetic North is sometimes a little different from the north that is shown by the position of the sun and the stars, but the pointer always points in a northerly direction.

Cardinal Points

There are four directions that are most important when learning your way around the world in which we live. These directions are north, south, east, and west and are sometimes referred to as the four cardinal points.



Intermediate Points

There are times when the directions are not simply north, south, east or west and instead are located somewhere between two cardinal points. The four directions that make up the intermediate points are northeast, southeast, southwest, and northwest.

The Compass Rose

The compass rose is the combination of the four cardinal and four intermediate points.



Section B

Introduction to Maps

What is a map?

A map is a representational diagram of an area showing landmarks, cities, roads, etc.

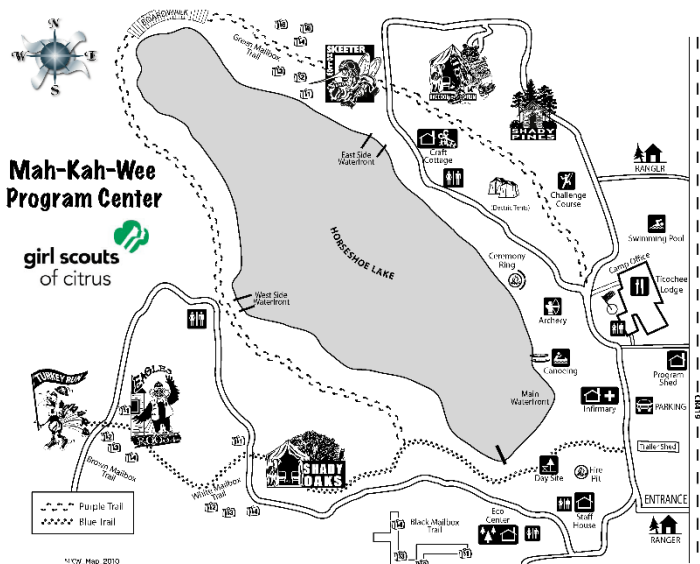
Words to Know

- Orienteering – using a map and compass to find your way
- Legend – a map legend is a visual explanation of the symbols used on the map.

Different kinds of maps

There are many different types of maps to show cities, climate, resources, roads, and the natural area. Below are two of the most common for orienteering:

- Physical map – shows the physical features of a place or country like rivers, mountains, forests, and lakes. Different features are often shown in different colors ex- bodies of water in blue, low elevation in dark green and lighter as the elevation increases.
- Topographic map – similar to a physical map but differences in elevation and changes in landscape are shown with the help of contour lines instead of colors.



Section C

Reinforcement Activities

To reinforce your directional skills, try the following activities.

Activity #1

Test Your Memory

Choose a game leader and divide the group into two teams of equal size. The game leader will ask the teams questions from below, when a team thinks they know the answer, one member will raise her hand and give their response. The team with the most correct answers wins.

Questions:

1. Name the four cardinal points.
2. Which direction does the magnetic needle point to?
3. Name all the intermediate points.
4. What is the name of the tool used by mapmakers that has both cardinal and intermediate points?
5. What is the purpose of a legend?

Activity #2

Word Search

Find the hidden orienteering words in the below word search. The words can be found up, down, across, backwards, and diagonally.

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Q V T N Z E V E L M H O W S E
Y O E A V Y D G H E P D O M T
B L P A D X Q N A X G U K E A
A L A L Y G N O B R T E S O I
F K M C S P C R X H S O N Y D
A M H X I S F T Y K R S S D E
B M R L I H P H S S H D N F M
M T F R V Y P G S Y Z T H U R
S T N I O P L A N I D R A C E
D R S T J Y P U R V K O R C T
I F X K S M Q O G G H R X B N
L P D U O A K N C U O V B J I
N H Y C T S E W B S K P A Y Z
Y L M A G N E T I C X V O M B
P K B H E F I W Q J P F C T N
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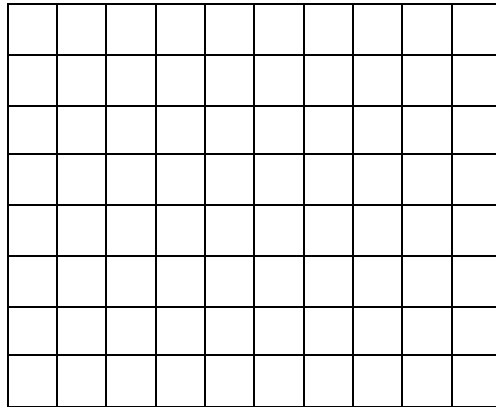
NORTH WEST SOUTH EAST INTERMEDIATE MAGNETIC COMPASS ROSE CARDINAL POINTS MAP
LEGEND TOPOGRAPHICAL

Activity #3

Through the Squares

Can you find your way through the squares by following the directions? Mark an X in the boxes as you go.

1. Begin at the Arrow
2. Go two squares east
3. Go three squares north
4. Go four squares east
5. Go four squares south
6. Go three squares west
7. Go three squares south
8. Go seven squares west



Activity #4

Can You Find Your House?

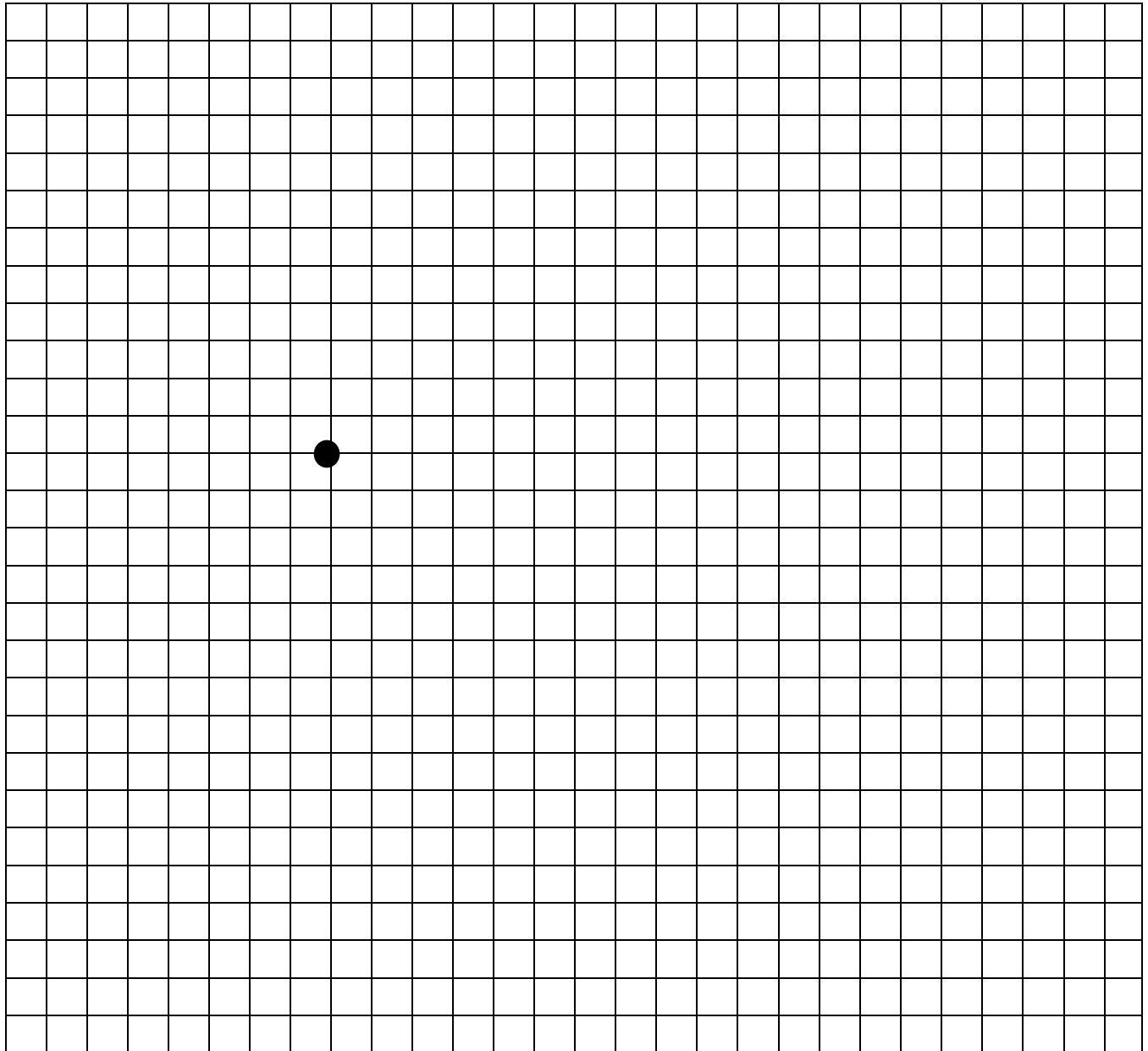
You are lost. Can you find your house by following the directions? Write each move's number in the house.



1. Begin in the most northwest house.
2. Move three houses east.
3. Move one house south.
4. Move two houses southwest.
5. Move one house west.
6. Move two houses northeast.
7. Move two houses southeast.
8. Move four houses west.

Activity #5

Mystery Picture



Begin at the dot and draw a line according to the below instructions.

- 1. 7 NE
- 2. 7 SE
- 3. 3 W
- 4. 4 SE
- 5. 4 W

- 6. 6 SE
- 7. 6 W
- 8. 4 S
- 9. 3 W
- 10. 4 N

- 11. 7 W
- 12. 7 NE
- 13. 5 W
- 14. 4 NE
- 15. 7 W

Activity #6

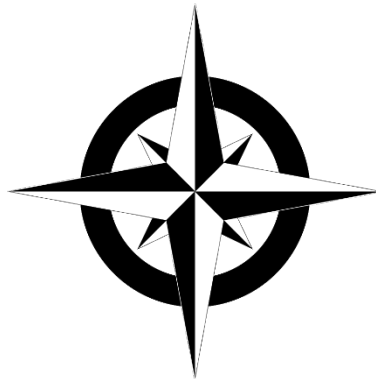
Compass Rose

Materials required:

- Glue
- Construction Paper
- Scissors
- Markers
- Pencils
- Compass Rose pattern pieces

Directions:

1. Trace each piece of the pattern onto construction paper. Be sure to mark each piece with the first letter of the direction it represents as shown on the pattern pieces.
2. Cut each piece out and set aside.
3. Glue the East and West pieces together at the wide end.
4. Repeat step 3 with the North and South pieces.
5. Glue together your pieces from steps 3 and 4 to form the four cardinal points – North, East, South West.
6. Turn the cardinal points piece over and glue the wider end of the intermediate points pieces to the center.
7. Turn everything to be face up and glue the round piece in the center of the front side.
8. When finished, you will have a compass rose that resembles this:



Activity #7

Living Compass Rose

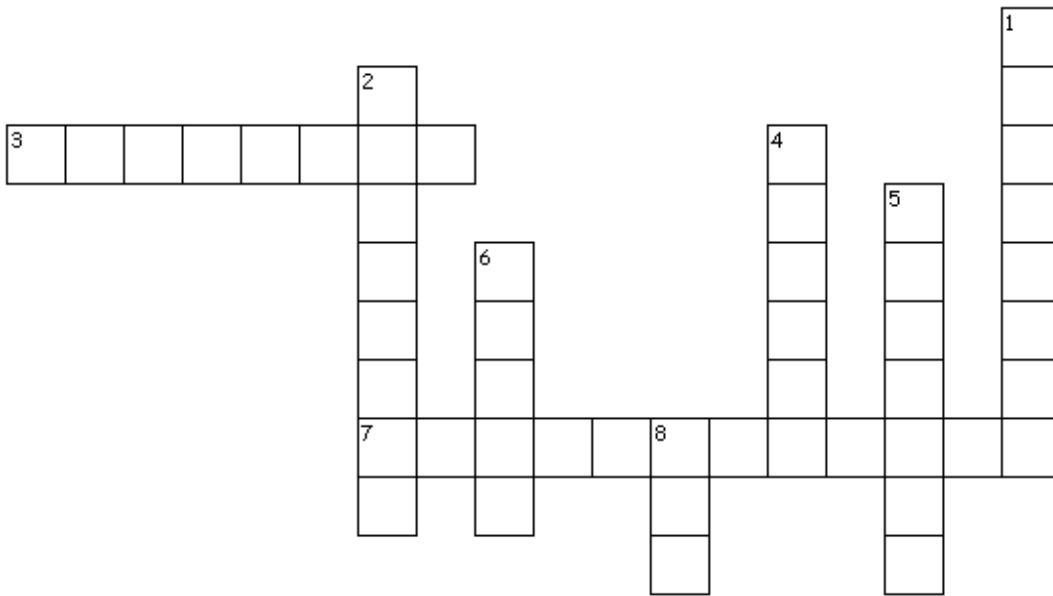
Materials required:

- Six index cards
- Marker

Write one directional point on each card and shuffle them. Give one card to each group member and tell the group they much organize themselves to form the shape of a compass rose.

Activity #8

Navigation Crossword



Across

3. Primary four points on a compass (_____ Directions)

7. The name of the secondary four points

Down

1. A map and compass can be used to help you _____

2. What causes the needle in a compass to point North? (_____ Field)

4. Where to look to determine the meaning of symbols on a map

5. A tool to help determine direction

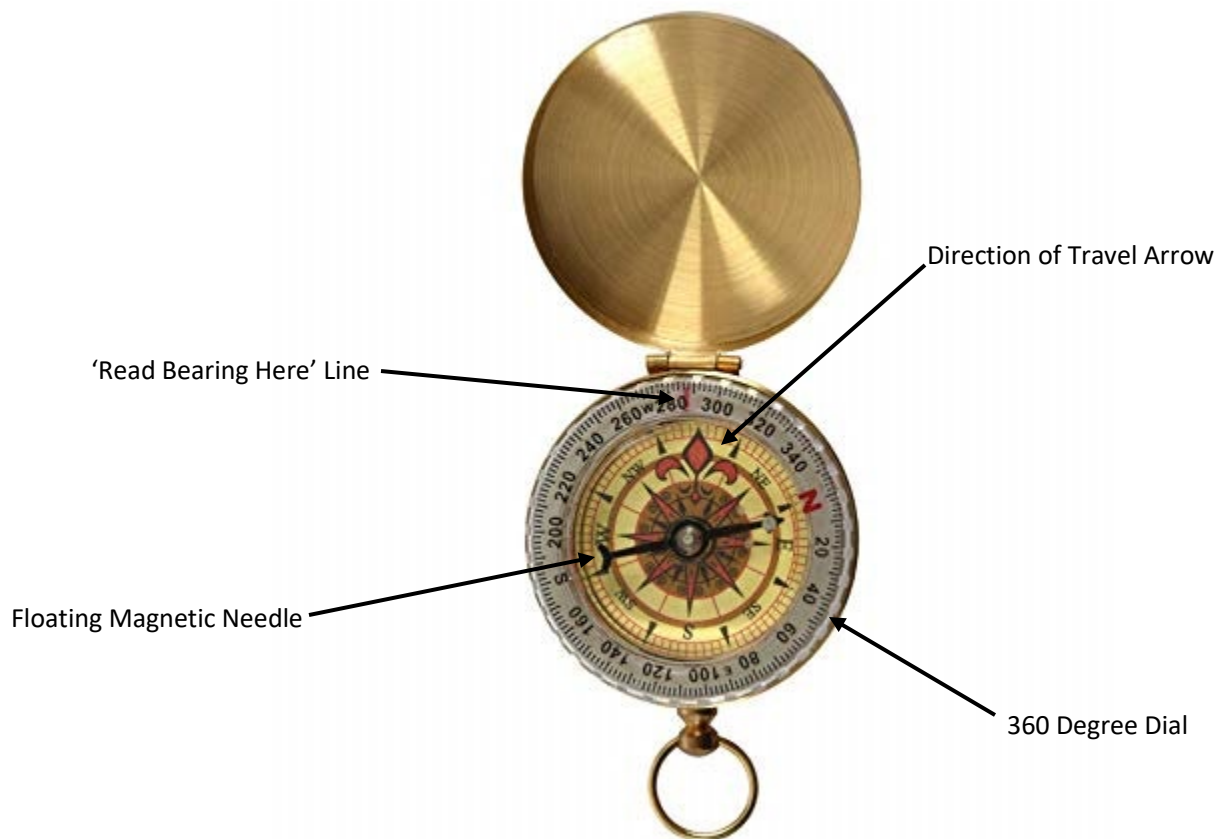
6. The direction the needle will always point towards in a compass.

8. A drawing showing physical features, cities, roads, etc

Section D

Parts of a Compass

It is important to know the parts of the compass in order to use it properly as each part plays its role at different times. Refer to this page for help while doing the practice activities.



List of Terms

Compass – A tool used to determine direction.

Degree – A number on the compass dial that is used to set a direction of travel.

Bearing – Similar to a degree, it is also used as a way to determine direction of travel.

Orienting – the art of using a compass and a map to find your way.

Site – To choose an object in the direct path of where you want to travel.

Using the compass in four easy steps

Step 1

Begin by holding the compass in the palm of your hand close to your chest. Be careful not to be wearing any metal buttons or jewelry as they can interfere with the needle's ability to find the natural magnetic field. The "Direction of Travel" Arrow should be pointing towards your destination.

Step 2

To set the degree, turn the dial so it is in line with the "Read Bearing Here" Line. Pay no attention to the Floating Magnetic Needle at this step.

Step 3

Leaving the compass in your hand and close to your chest, turn your whole body around until arrow of the needle is pointing to the N on the Degree Dial. The "Direction of Travel" Arrow should be pointing toward your destination.

Step 4

Following the "Direction of Travel" Arrow you are ready to set your site on an object directly ahead. Walk to that point and site your next object to continue.

Section E

Answer Key

Activity #1 Test Your Memory

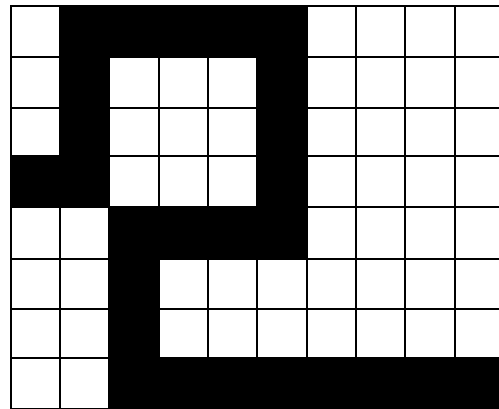
Questions:

1. North, South, East, West
2. North
3. Northeast, Southeast, Southwest, Northwest
4. Compass Rose
5. To explain the symbols on a map
6. Physical or Topographical

Activity #2 Word Search

Q V T N Z E V E L M H O W S E
Y O E A V Y D G H E P D O M T
B L P A D X Q N A X G U K E A
A L A L Y G N O B R T E S O I
F K M C S P C R X H S O N Y D
A M H X I S F T Y K E S S N E
B M R L I H P H S S H D N F M
M T F R V Y P G S Y Z T H U R
S T N I O P L A N I D R A C E
D R S T J Y F U R V K O R C T
I F X K S M Q O G G H R X B N
L P D U O A K N C U O V B J I
N H Y O T S E W B S K F A Y Z
Y L M A G N E T I C X V O M B
P K B H E F I W Q J P F C T N

Activity #3 Through the Squares



Activity #4 Can You Find Your House?

Numbers are to the left of the appropriate house.

