

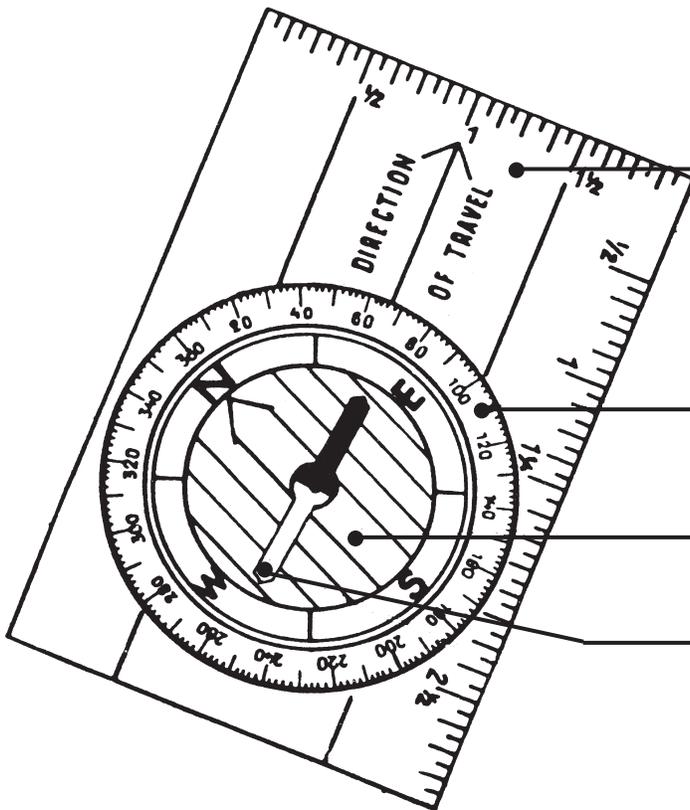
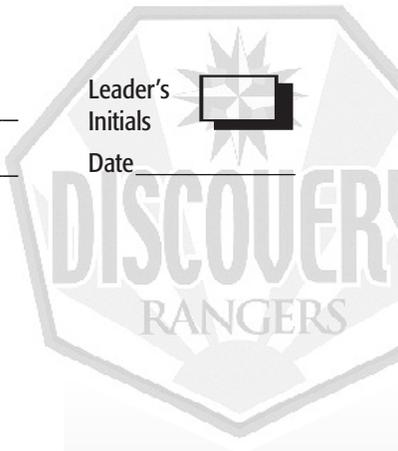


Compass Merit

1. List the two main types of compasses.

2. List the four main parts of a compass.

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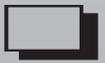
1. _____

2. _____

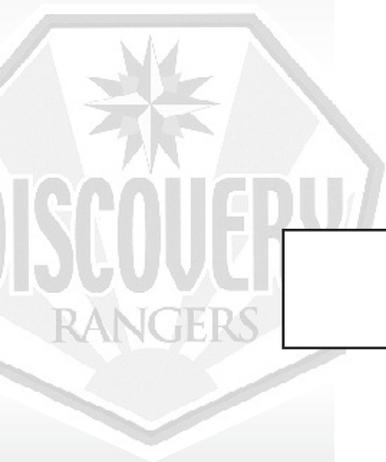
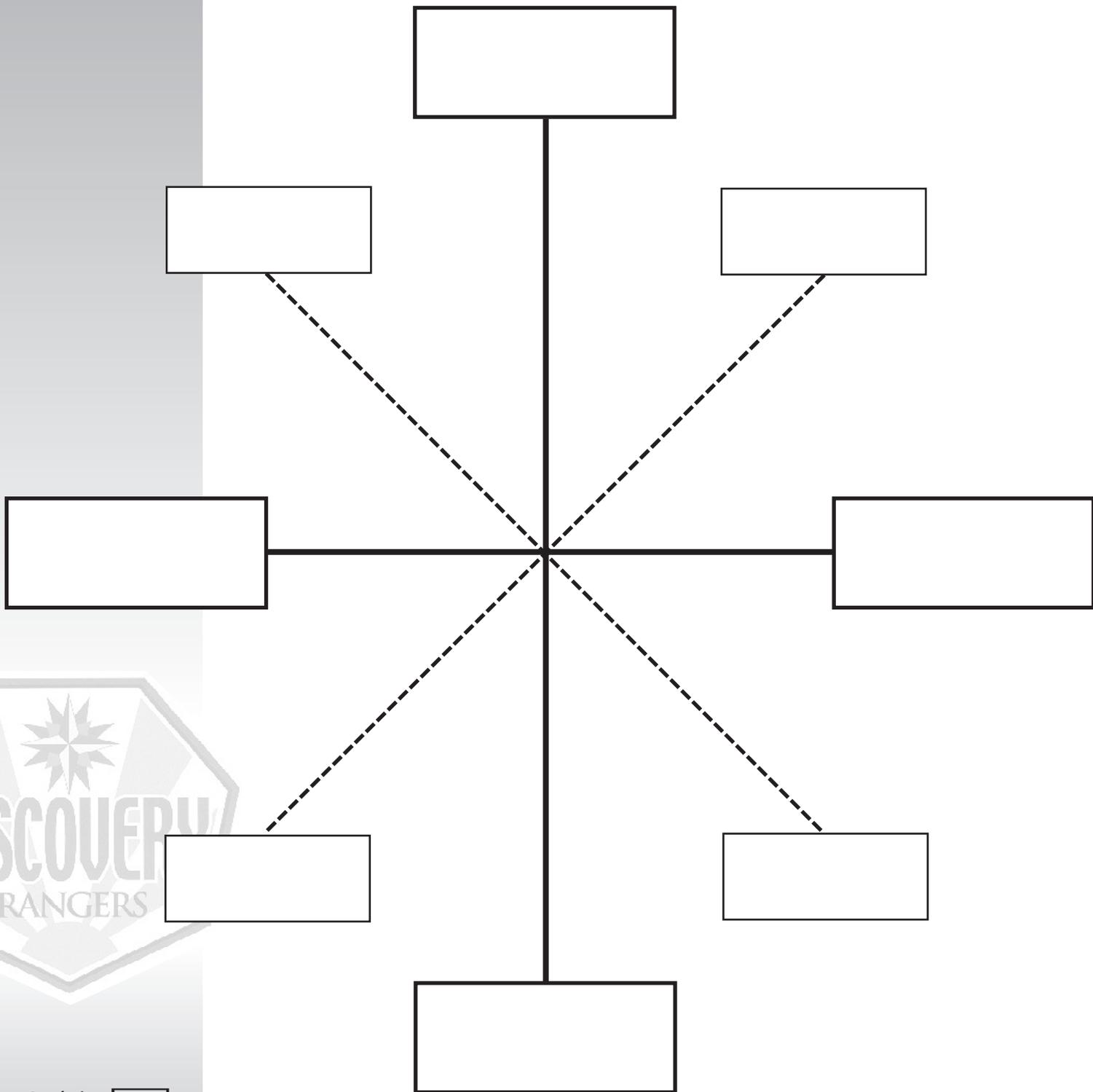
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3. List the eight major directions and their bearings. For example: NE 45°



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4. Define these terms: *magnetic north*, *true north*, *declination*, and *magnetic variation*.

Match the words with the definitions. Place the letter next to the correct definition. Check your answers with your leader and then cover up the definitions and try to remember them.

- | | |
|---|--------------------------------------|
| ___ The angle between true north and magnetic north | a. Declination or magnetic variation |
| ___ The direction of the Earth's magnetic pole | b. True north |
| ___ The north pole or axis on which the Earth rotates | c. Magnetic north |

5. Demonstrate how to orient your compass.

Can you figure this out? Set your compass to a 50° bearing. When you have completed orienting your compass, the blue end of the magnetic needle should (Circle one.)

- Be pointing toward true north
- Be located within the orienting arrow (and pointing toward magnetic north)
- Be lined up with the direction of the travel arrow
- Be lined up with the 50° reading on the housing

6. Demonstrate how to find a bearing.

Can you figure this out? Which direction are you facing when you have set and oriented your compass to a bearing of 270°? (Circle one.)

- North
- East
- South
- West

7. Give a good example of a *sighting point*.

Circle the one below you think might be a good sighting point.

- A bird
- A cloud
- Your commander
- A tree



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8. List three methods for estimating distances and tell which is the most accurate method.

Three methods: _____

Most accurate: _____

9. Calculate your *average step* and *average stride* using the step method.
- Count the number of steps it takes you to walk 100 feet.
 - Write this number in the first blank of the formula below.
 - Use this number to find your average step in the “Length of Average Step” table on MWS 1 “Step and Stride Tables.”
 - Place this number in the middle blank of the formula below.
 - Multiply your average step by two to find your average stride.

Number of steps in 100 feet = _____ = _____ (average step from table) x 2 = _____ feet. This is your average stride.
To double-check your average stride, count the number of strides you take in one hundred feet.

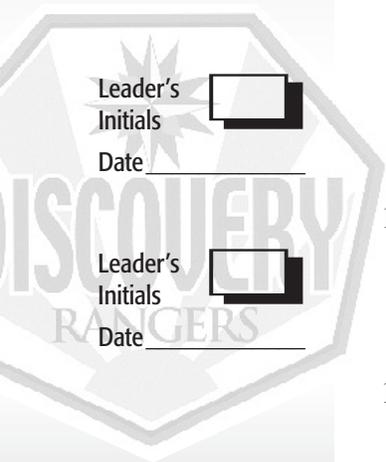
- Write this number in the first blank of the formula below.
- Find your average stride in the “Length of Average Stride” table.
- Write this number in the second blank. This second number should be almost the same as your results from the above formula.

Number of strides in 100 feet = _____ = _____ feet (from table).

Now try this: Knowing your average stride, what distance would you travel in ten strides?

10. Demonstrate how to determine directions without a compass using the following:
- a. The face of a standard watch
 - b. The stars
11. Demonstrate your understanding of a topographic (topo) map by doing the following:
- a. Tell what the standard topo map colors represent.
Can you match the following colors to their meanings? Place the letter next to the correct definition.

___ Green a. Absence of major vegetation (prairie, meadow, farm, fields)
___ Blue b. Contour lines and standard elevations



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- ___ Blue
 - ___ Black
 - ___ Brown
 - ___ White
- c. Water (lake, stream, spring, marsh, water tank)
 - d. Major vegetation (forest, brush, orchard)
 - e. Highways or boundaries
 - f. Man-made structures and place names (building, roads, trails, bridges, railroads)

b. Demonstrate your ability to read a topo map.

Can you answer the following questions using MWS 2 “Practice Topo Map”?

Which county is Blairs Bay located in? _____

What is the elevation (or height) of Record Hill? _____

What is the name of the camp just south of Blairs Bay? _____

c. Demonstrate your ability to identify topo map symbols.

Complete MWS 3 “Topo Map Symbols” to fulfill this requirement.

d. Draw and label ten topographic map symbols from memory.



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12. Describe what to do if you get lost.

Use the following as a guide. Your leader will go over this material with you.

P_____ for God's help.

Don't p_____; stay where you are.

Look for l_____ (like towers, mountains, etc.).

M_____ your trail if you must move to an area with better shelter.

Leave n_____.

Keep v_____ to aircraft.

Build or find s_____. Don't wait until dark.

Build a f_____.

Find w_____.

Make rescue s_____.

S_____ for food.

13. List three Scripture references regarding features on a map, such as rivers, mountains, trees, highways, and cities.

Scripture Reference

Feature

14. Successfully complete the compass skills activity provided by your leader.

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