



Lessons from Scout Elf School: Compass Clues





Note to Teacher

In the stories of Scout Elf School, Scout Elves use Christmas magic to return each night to the enchanted North Pole, which is located at True North. But if your students wanted to find the North Pole, they'd use a compass, which would lead them to magnetic north, a location that is constantly changing due to fluctuations in the earth's iron core. In this activity, your students will practice orienteering on paper using a compass star, introducing them to cardinal and ordinal directions.

Core Curriculum Standards

CCSSCRA.R.7

Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

NGS.EE1.The World in Spatial Terms.S1

Use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

Introductory Activity

- Project or draw an image of a compass star (also known as a compass rose). Depending on the level of your students, you may decide to share a simplified compass star that only includes cardinal directions (north, south, east and west) or you may share a more developed compass star that includes ordinal directions (northwest, northeast, southwest, southeast).
- Remind students they have already seen a compass in the Compass Clues video from Scout Elf School.
- The compass star can help us to navigate or orient ourselves when we are looking at a map or globe.
- Help students to identify north, south, east and west in your city, and subsequently in your classroom, using points of reference they might be familiar with.



Further Compass Practice

In this activity, students will practice using a compass star to follow a set of directions and decode a message from the Scout Elves. There are three levels of difficulty and four worksheets. Teachers may want to display a compass star for students to use.

Beginning:

Print a copy or copies of Compass Clues Activity Level 1 for students to work on individually or in groups.

- **Answer key:** Ho ho ho!

Progressing:

Print a copy or copies of Compass Clues Activity Level 2A for students to work on individually or in groups.

Remind students that ordinal directions (northwest, southwest, southeast, southwest) would move diagonally on a grid instead of vertically or horizontally.

- **Answer key:** You make each day merry and bright!

Print a copy or copies of Compass Clues Activity Level 2B for students to work on individually or in groups. Remind students that ordinal directions (northwest, southwest, southeast, southwest) would move diagonally on a grid instead of vertically or horizontally.

- **Answer key:** The Scout Elves love spending time with you!

Advanced:

Print a copy or copies of Compass Clues Activity Level 3 for students to work on individually or in groups. Remind students that ordinal directions (northwest, southwest, southeast, southwest) would move diagonally on a grid instead of vertically or horizontally.

- **Answer key:** Our favorite is hot cocoa with whipped cream and sprinkles!



Compass Clues

Level 1

Play starts at the square with a compass. Follow each clue in order.

Write the clue number in each square when you land.

Follow the next clue from each spot where you land.

This puzzle uses north (N), south (S), east (E) and west (W).





























1. Go north 2 spaces.
2. Go west 4 spaces.
3. Go north 2 spaces.
4. Go east 2 spaces.
5. Go south 4 spaces.
6. Go west 3 spaces.



Compass Clues

Level 1 Message Decoder

When you are done, use the key to decode a message from the Scout Elf.
In order, write the letter that goes with the picture you found for each clue.

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

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Compass Clues

Level 2A

Follow the clues to get a message from the Scout Elves!

Write the number of each clue in the box where you land, then continue from that spot.

Play begins at the square with the compass.

This puzzle uses north (N), south (S), east (E) and west (W).




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|-----------------------|------------------------|------------------------|
| 1. Go north 2 spaces. | 11. Go east 2 spaces. | 21. Go east 3 spaces. |
| 2. Go east 1 space. | 12. Go north 1 space. | 22. Go north 1 space. |
| 3. Go south 3 spaces. | 13. Go north 1 space. | 23. Go north 3 spaces. |
| 4. Go west 4 spaces. | 14. Go east 3 spaces. | 24. Go west 1 space. |
| 5. Go north 3 spaces. | 15. Go north 1 space. | 25. Go south 2 spaces. |
| 6. Go east 1 space. | 16. Go south 4 spaces. | 26. Go east 2 spaces. |
| 7. Go north 2 spaces. | 17. Go west 2 spaces. | 27. Go east 1 space. |
| 8. Go west 3 spaces. | 18. Go north 4 spaces. | 28. Go north 3 spaces. |
| 9. Go south 3 spaces. | 19. Go west 2 spaces. | |
| 10. Go south 1 space. | 20. Go south 4 spaces. | |



Compass Clues

Level 2A Message Decoder

When you are done, use the key to decode a message from the Scout Elf.
In order, write the letter that goes with the picture you found for each clue.

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

												!



Compass Clues

Level 2B

Follow the clues to get a message from the Scout Elves! Write the number of each clue in the box where you land, then continue from that spot. Play begins at the square with the compass.

This puzzle uses north (N), northwest (NW), northeast (NE), south (S), southwest (SW), southeast (SE), east (E) and west (W).



























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|---------------------------|---------------------------|----------------------------|----------------------------|
| 1. Go north 2 spaces. | 10. Go northeast 1 space. | 19. Go northwest 1 space. | 28. Go south 2 spaces. |
| 2. Go northeast 1 space. | 11. Go west 3 spaces. | 20. Go northwest 1 space. | 29. Go west 4 spaces. |
| 3. Go north 2 spaces. | 12. Go north 2 spaces. | 21. Go north 3 spaces. | 30. Go north 2 spaces. |
| 4. Go east 3 spaces. | 13. Go south 4 spaces. | 22. Go west 2 spaces. | 31. Go southeast 1 space. |
| 5. Go southeast 1 space. | 14. Go east 6 spaces. | 23. Go south 2 spaces. | 32. Go east 1 space. |
| 6. Go south 3 spaces. | 15. Go north 2 spaces. | 24. Go east 2 spaces. | 33. Go south 1 space. |
| 7. Go southwest 2 spaces. | 16. Go north 2 spaces. | 25. Go northeast 2 spaces. | 34. Go southeast 2 spaces. |
| 8. Go northeast 1 space. | 17. Go east 1 space. | 26. Go north 1 space. | 35. Go southwest 1 space. |
| 9. Go west 3 spaces. | 18. Go south 4 spaces. | 27. Go west 3 spaces. | 36. Go southeast 1 space. |



Compass Clues

Level 2B Message Decoder

When you are done, use the key to decode a message from the Scout Elf.
In order, write the letter that goes with the picture you found for each clue.

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

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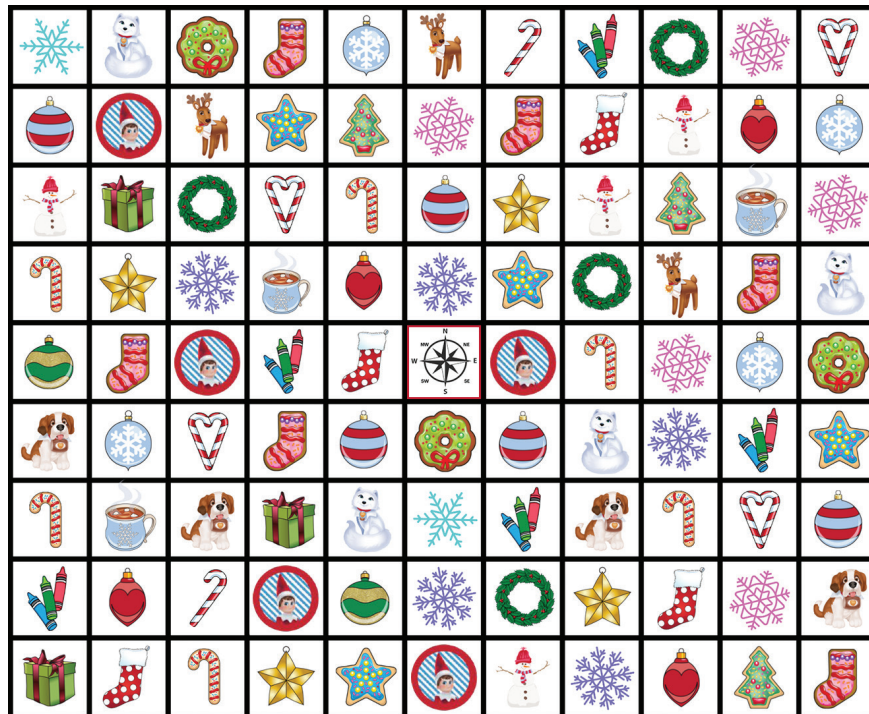
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Compass Clues

Level 3

Follow the clues to get a message from the Scout Elves! Write the number of each clue in the box where you land, then continue from that spot. Play begins at the square with the compass. This puzzle uses north (N), northwest (NW), northeast (NE), south (S), southwest (SW), southeast (SE), east (E) and west (W).





























1. Go north 2 spaces.
2. Go east 2 spaces.
3. Go south 4 spaces.
4. Go northeast 2 spaces.
5. Go north 4 spaces.
6. Go southwest 3 spaces.
7. Go south 2 spaces.
8. Go west 6 spaces.
9. Go northeast 2 spaces.
10. Go south 5 spaces.
11. Go east 3 spaces.
12. Go northeast 3 spaces.
13. Go northwest 4 spaces.
14. Go west 2 spaces.
15. Go west 2 spaces.
16. Go south 2 spaces.
17. Go northeast 1 space.
18. Go southeast 3 spaces.
19. Go southwest 1 space.
20. Go east 7 spaces.
21. Go southwest 1 space.
22. Go west 3 spaces.
23. Go southeast 1 space.
24. Go north 4 spaces.
25. Go northeast 1 space.
26. Go north 3 spaces.
27. Go west 3 spaces.
28. Go south 3 spaces.
29. Go southwest 2 spaces.
30. Go north 5 spaces.
31. Go south 7 spaces.
32. Go west 3 spaces.
33. Go south 1 space.
34. Go northeast 2 spaces.
35. Go north 2 spaces.
36. Go northeast 3 spaces.
37. Go east 4 spaces.
38. Go southeast 1 space.
39. Go south 2 spaces.
40. Go southwest 1 space.
41. Go south 3 spaces.
42. Go east 1 space.
43. Go north 1 space.
44. Go west 5 spaces.
45. Go north 2 spaces.
46. Go northwest 2 spaces.
47. Go northeast 3 spaces.
48. Go south 4 spaces.
49. Go northeast 2 spaces.



Compass Clues

Level 3 Message Decoder

When you are done, use the key to decode a message from the Scout Elf.
In order, write the letter that goes with the picture you found for each clue.

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

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Compass Clues Answer Key

Level 1 Answer

H O H O H O !

Level 2A Answer

Y O U M A K E E A C H D A Y
M E R R Y A N D B R I G H T !

Level 3A Answer

T H E S C O U T E L V E S
L O V E S P E N D I N G T I M E
W I T H Y O U !

Level 3 Answer

O U R F A V O R I T E I S H O T
C O C O A W I T H W H I P P E D
C R E A M A N D S P R I N K L E S !