



## Paideia Seminar Lesson Plan



Text:

### **A Compass Rose**

Grade/Subject

Early ES / Science<sup>1</sup>



Ideas, Values:

Definition, Measurement, Nature, Science



### Pre-Seminar Content



### Launch Activity:

Using a compass, show students how to determine the four cardinal directions: North, South, East, and West. Orienting from the center of the classroom, post directional labels (“North,” “South,” etc.) on the walls of the classroom to indicate the proper directions. Practice learning the directions by giving directions within the classroom for at least a week...by using the four directions.



### Inspectional Read:

Distribute a copy of the text. Ask students what they think this drawing represents and discuss all the various possibilities. Share that it always appears on maps and discuss what sort of information they might expect to learn from it.

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<sup>1</sup> Note that the compass rose is an integral part of most elementary Social Studies standards, and that this plan can be modified to emphasize Social Studies as well as Science.

## Background Information:

A **compass rose**, sometimes called a **windrose**, or **Rose of the Winds**, is a figure on a compass, map, nautical chart, or monument used to display the orientation of the cardinal directions—North, East, South, and West—and the points in between. It is also the term for the graduated markings found on the traditional magnetic compass. Today, the idea of a compass rose is found on, or featured in, almost all navigation systems and maps.

## Vocabulary:

Share the following vocabulary by posting common definitions on the board: North, South, East, West, Northeast, Southeast, Southwest, and Northwest. Also share definitions for *Compass*, *Map*, and *Orient*. Include any vocabulary from other subjects (Social Studies for example) that you would like to integrate into this seminar.

## Analytical Read:

Distribute tracing paper and colored pencils. Have students work in pairs to trace the compass rose and label the four cardinal directions. Then have them label the intermediate directions. Have them rotate their copies of the “rose” so that the N points toward North in the classroom, etc.

Now distribute a common map (road map of your state) to groups of 4-5 students. Have them find the compass rose that is displayed on the map and compare it to their compass roses.



## Pre-Seminar Process

-  Define and state purpose for Paideia Seminar.
-  Describe the responsibilities of facilitator and participants.
-  Have participants set a Personal Goal.
-  Agree on a Group Goal.

## Seminar Questions

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*Opening (Identify main ideas from the text.):*

- ❖ What would be another good name for the design you see on the page in front of you? (round-robin response)
- ❖ Why would you call it that? (spontaneous discussion)

*Core (Analyze textual details.):*

- ❖ In olden days, this design was also called a Wind Rose. Why do you think our ancestors called it that?
- ❖ What do the letters ne, se, sw, and nw represent? Why are they placed where they are on the design?
- ❖ Originally, compass roses only showed four directions (N, E, S, and W). Why do you think four more were added?
- ❖ Why do you think people found it necessary to measure direction in the first place?
- ❖ Why do you think compass roses always appear on maps? What purposes do they serve?

*Closing (Personalize and apply the ideas.):*

- ❖ What would you like to create a map of? Would you add a compass rose? Why or why not?

## Post-Seminar Process

- ★ Have participants do a written self-assessment of their personal participation goal.
- ★ Do a group assessment of the social and intellectual goals of seminar.
- ★ Note reminders for next seminar.



## Post-Seminar Content

### *Transition to Writing:*

Have students choose one of the following four teams and divide the class up more-or-less equally while honoring their choices as much as possible:

- Hallway
- Playground
- Gymnasium
- Principal's office

Tell them that they are going to create maps of those spaces and orient them using a compass rose.

### *Writing Task:*

How would you use a compass to orient a map of a space in your school? After examining and discussing a Compass Rose about measuring direction, write a short paragraph in which you explain how to orient a map of one space in your school. Use the Compass Rose as part of your response. (Informational or Explanatory/Explain)

(LDC Task#: 14 )



### *Brainstorm:*

Using an interactive whiteboard or overhead projector, project a floor plan for your classroom. Fill in objects in the room by drawing them where they belong in the floor plan. Print a small-scale version of the floor plan and using the directional signs posted on the walls in the *Launch Activity*, orient the map to match the room.

Now have students from the four *Transition to Writing* groups meet together, each with a blank floor plan of their chosen spaces. Have them examine that space and fill in important objects by hand. While in the space, have them repeat the orientation process from the *Launch Activity* and label the cardinal directions both on the walls and on their floor plans.

## Structure the Writing:

Distribute a template for a short paragraph in which students explain (in 4-6 sentences) how they decided to label the cardinal directions on their floor plan/maps. Discuss as a whole group.

## First Draft:

Have the students work in their four floor plan/map groups to decide how to add a drawing of a compass rose—complete with the four cardinal directions—to their floor plan/maps. Then each student should fill in the paragraph template, using the hand-drawn maps to provide details.

## Collaborative Revision:

Have students read their paragraphs aloud to a partner from another group and discuss where each needs to add more detail in order to be clear. Add those details to the original draft template.

## Edit:

Once the teacher or another adult has gone over each student's draft paragraph (still in the template form) and corrected spelling and grammar errors, have the students recopy their paragraphs on a clean sheet of paper to accompany their maps.

## Publish:

Display the four groups of maps on a floor display (in a hallway or media center) that also features a large-scale Compass Rose oriented correctly—with all of the student maps oriented to match the correct direction. Place the accompanying student paragraphs in a ring binder beside the four groups of maps. Invite student families AND a local Boy Scout or Girl Scout troop to an evening honoring the Compass and the Compass Rose. Have students stand by their maps and explain their paragraphs to the visitors.

*This Paideia Lesson Plan was created by:*

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A Compass Rose

