

Map Tools: The Compass Rose

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Grade Level	2
Duration	2 class periods

National Standards

GEOGRAPHY

Element 1: The World in Spatial Terms

1. How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

AZ Standards

ELA

Reading Craft and Structure

2.RI.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

Integration of Knowledge and Ideas

2.RI.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

MATHEMATICS

Operations and Algebraic Thinking

2.OA.2. Fluently add and subtract within 20.

Arizona Social Science Standards

GEOGRAPHY

The use of geographic representations and tools help individuals understand their world.

2.G1.1 Use and construct maps, graphs, and other geographic representations of familiar and unfamiliar places in the world; and locate physical and human features.

2.G1.2 Use maps, globes, and other simple geographic models to identify and explain cultural and environmental characteristics of places in the world based on stories shared.

SIOP Elements

Preparation Adapting content Linking to background Linking to past learning Strategies used	Scaffolding Modeling Guided practice Independent practice Comprehensible input	Grouping Option Whole class Small groups Partners Independent
Integrating Processes Reading Writing Speaking Listening	Application Hands on Meaningful Linked to objectives Promotes engagement	Assessment Individual Group Written Oral

Arizona English Language Proficiency Standards

Grade 2

Basic

Listening and Reading

Standard 1 By the end of each language proficiency level, an English learner can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

B-1: ask and answer questions by using evidence from a text.

Standard 2 By the end of each language proficiency level, an English learner can determine the meaning of words and phrases in oral presentations and literary and informational text.



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B-1: determine the meaning of frequently occurring academic and content-specific words and phrases.

Overview

Maps help us get from one place to another. Learning to read maps is a lifelong skill because it helps people when traveling.

Purpose

All compass roses are not alike but they all provide the same valuable information. In this lesson, students will identify compass directions in the classroom and on a map. This lesson includes strategies for diverse learners (ELLs).

Key Vocabulary

cartographer: a person that makes a map
distance: the amount of space between two points
travel: to move from one place to another
direction: the way someone or something is moving or pointing
symbol: a sign, picture, or object that represents something else
compass: an instrument with magnetic needle that always points north
cardinal directions: compass points of north, east, south, and west

Materials

- Primary level atlas
- Map with a compass rose
- Images of different compass roses
- Compass Worksheet
- Cardinal Directions Game
- Graph paper
- Dice
- Actual compass (if possible)
- Vocabulary Cards and Test
- Game markers (small toys)
- Sentence Frames
- Make a Map worksheet and Answer Key
- Make a Map Checklist
- Paper for Make a Map activity
- Glue

Objectives

The student will be able to:

1. identify the four main directions: north, south, east, and west.
2. use a compass rose to find directions on a map.

Procedures

SESSION ONE

Engage:

- a. Read the following student situation: You've been camping but now you are lost in the forest. How would you find your way out?
(Application: Meaningful)
- b. Give them about a minute to share responses with their partner. **(Application: Promotes engagement)**
- c. Introduce the key vocabulary words. Hand out Vocabulary Cards to students who might need more help with learning these terms.
(Scaffolding: Comprehensible input)
- d. Read from a primary level atlas with an emphasis on learning about directions. **(Application: Linked to objectives)**
- e. Tell students that today they will be learning about one map tool--a compass rose.
- f. Locate the compass rose on pages in the atlas. Then show them that maps also have compass roses. **(Scaffolding: Modeling)**
- g. Point out the four main cardinal directions. Post the words east, west, north and south in the appropriate places in your classroom--true to actual north. **(Scaffolding: Comprehensible input)**
- h. Teach students this memory technique to help remember the directions. **NEVER EAT SOGGY WAFFLES. (Scaffolding: Comprehensible input)**

Explore:

- a. Give each student a copy of one of the four different compass roses.
- b. Give them about 2-3 minutes to walk around the room and find students with the other 3 different compass roses.
- i. As they find a student with a different compass rose, they both will compare their pictures and name the directions. **(Application: Promotes engagement) (Integrating Processes: Speaking)**

Explain:



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- Tell students that compass roses may look different, but they all give us the same information. Some are labeled with words, some with letters, and some only with the N.
- Show students a real compass. (**Scaffolding: Comprehensible input**)
- Explain that a compass is a moving compass rose. The compass hands will move to find north.
- Have students label the blank worksheet of compass rose and write one complete sentence to explain what a compass rose is as their exit ticket. (**Assessment: Individual, Written**)

SESSION TWO

Elaborate:

- Have students share with a partner these review questions:
 - What does a compass rose look like?
 - Where is it located on the map?
 - What information does a compass rose give?(**Preparation: Linking to past learning**)
- Distribute the Cardinal Directions Game materials (graph paper, dice, sentence frames, etc.).
- Introduce Cardinal Directions Game by going over rules and steps of the game. Model several moves for student A and B until students comprehend what to do. (**Scaffolding: Modeling**)
- Give students about 10 minutes to play with their partner. (**Application: Hands on**)
- Visit each group and record their ability to mentally add the moves that they are making. (**Assessment: Individual, Oral**)

Evaluate:

- Distribute the Make a Map worksheet. Read instructions to the students. (**Scaffolding: Comprehensible input**) Students can work independently or in groups to complete the map making activity. (**Assessment: Individual or Group, Written**)

Assessment

Geography

Compass Worksheet can be graded. Mastery will be considered 100% of the directions in the right place.

Make a Map activity can be graded. Mastery will be 7 out of the 9 checks on the checklist.

Reading

Vocabulary test can be given over the Key Vocabulary words. Mastery will be seen as 80% or higher.

Math

Observations of each child's ability to mentally add the number of spaces moved will be recorded. Students who can mentally add the numbers 75% of the time will be considered satisfactory.

Extensions

- Have students play other compass rose games. http://www.eduplace.com/kids/socsci/books/applications/imaps/maps/g1_u3/index.html
- Have students write down directions to a place in the room or on campus. Groups can follow the directions and see if they find the spot and draw it on the map.

Sources

National Geographic. Beginner's World Atlas. Harcourt. 2006

Sweeney Joan. Me on the Map.

Graph paper www.printfreegraphpaper.com

