

GO WEST MY SON

MMEW 2011

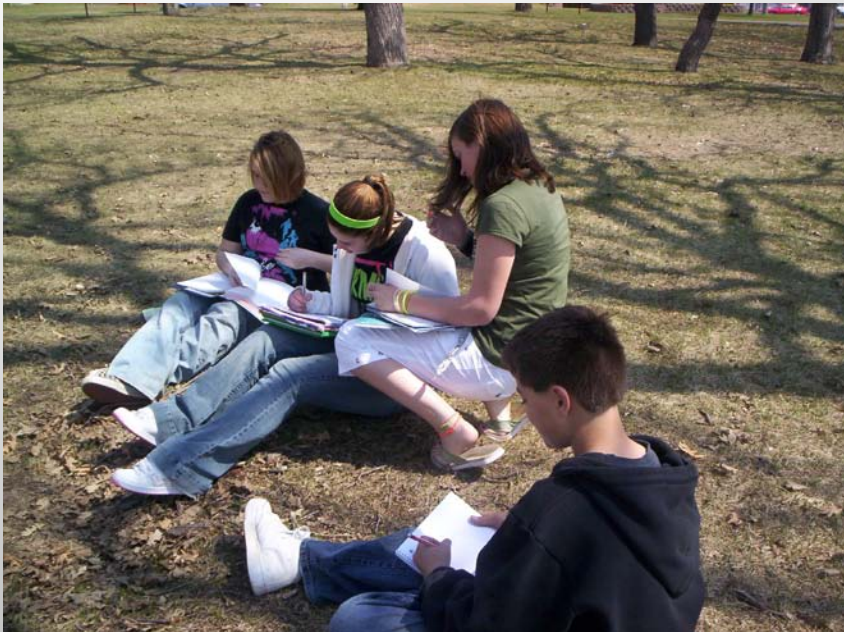
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Direction Unit at the beginning of the first term (w/in first two weeks)

- ▣ **Direction signs visible**
- ▣ **Lesson 1: Rationale for using directions**
Inquiry Activity



DIRECTION LESSON

Time to go outside

Direction Lesson

- ▣ Tell students not to talk, observe as much as you can with your senses.
- ▣ Students bring their science journals and a pencil outside.
- ▣ As soon as the class gets to a location, have them write directions for a younger student to get from our classroom to this location.
- ▣ Exchange journals with a classmate and read their directions.
- ▣ If time allows, go back to class & have the students follow the directions, explicitly.
- ▣ Discuss some things that might make these directions more clear and accurate.
- ▣ Guide the discussion towards descriptive language such as: “take a left as soon as you exit the room, going south.”
- ▣ It is time to actually get the tool used to help with directions, the compass.

Get to know how a compass works

Each student has a
compass

BEFORE any explanation,
allow the students to
hold and “play” with
the compass

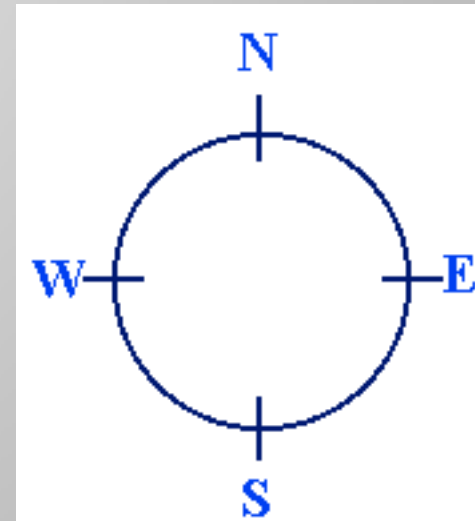
Describe how to use the
compass

Practice in class, moving as
a group: “everyone
take two steps to the
East”



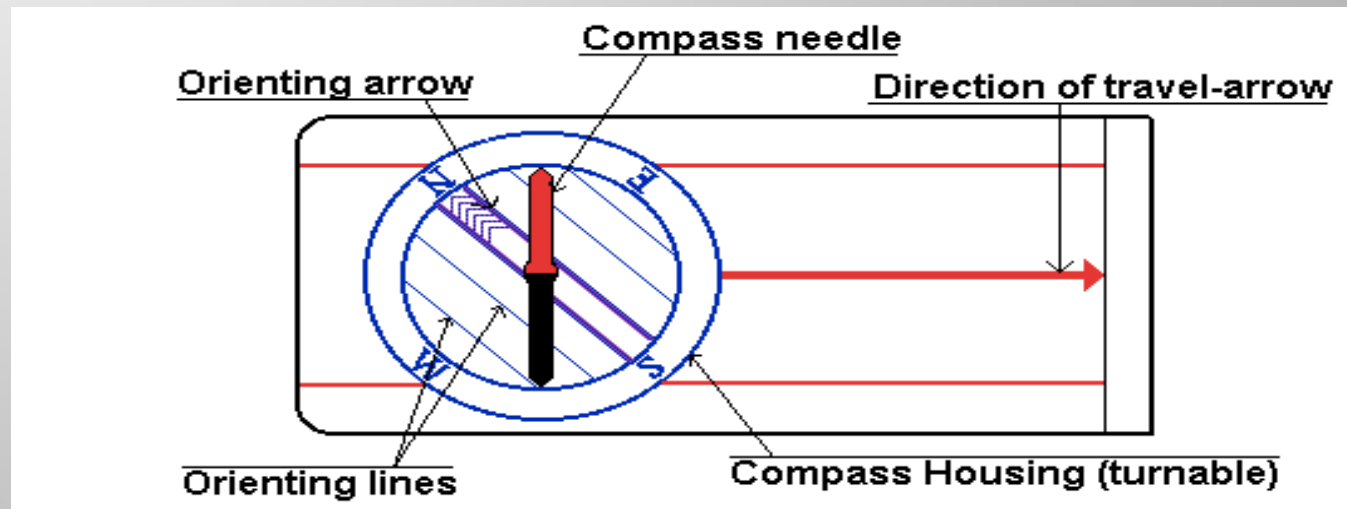
Lesson: How to use a Compass

- ▣ Learn the directions: **N**orth, **S**outh **E**ast and **W**est.
- ▣ If you want to go in a direction between these, you combine them:
 - Northwest (NW)
 - Southwest (SW)
 - Northeast (NE)
 - Southeast (SE)



Lesson: How to use a compass

- ❑ The colored part of the compass needle is always pointing towards earth's magnetic north pole.
- ❑ Rotate the compass so the compass needle is above the "N" (colored end of the needle).
- ❑ Compass needs to stay level.



Lesson: How to use a compass

- ▣ There are many types of compasses.
- ▣ Local magnetic attractions can cause the arrow to read wrong: a staple, steel in a desk, or even in the soil
- ▣ Once you have identified North, you can turn your body, your hand and the compass to the direction you want to move.
- ▣ Aim on some object or point in the distance, as a tree, or post and move towards that.

Compass Activity (one class period)

CONFUSION & LAUGHS



- ▣ A large space is nice
- ▣ Groups of 2-4 / set of directions
- ▣ Begin at the center of the space
- ▣ Each group goes out in different directions and different number of paces
- ▣ “End Location” marker
- ▣ Teacher has a satellite image of the space of activity to document group’s end location
- ▣ Evaluated on their documentation, questions & conclusion

Extension to Direction Unit

- ▣ GPS Activity
 - Classroom set of GPS transmitters
 - GPS Activity
 - GeoCaching
 - Leads into a mapping unit, earth's movements w/in the solar system, review of latitude, longitude and elevation