Materials and Directions for Teaching Latitude and Longitude with Battleship Game

**Get In The Game!**

**Teaching latitude and longitude** is easy "in theory", but many students struggle with consistent and accurate demonstration of the skills.

**The best remedy for this,** in my opinion, is to set up situations that require the students to use latitude and longitude in meaningful ways with ALOT of repetition.

**The game of battleship** is a great familiar way to let pairs of students square off in competition while using latitude and longitude during each turn.

**Every move in the game is plotted**by both students and the proper order of how to state out loud a latitude and longitude location is reinforced over and over again as the students call out potential "hits" and "misses".

**It is a bit slow at first**to get everyone on the same page and in the groove of how to play, but the students quickly pick it up because they are all familiar with the game of battleship.

**I recommend using**this as a reinforcement tool after spending some time learning and practicing latitude and longitude at the base level.

**This prior learning**will help minimize the "I can't do it" frustration some students may feel and minimize the opportunities for belittling trash talk when one opponent is not as strong in the skills as the other.

**This game may be**used in elementary school through high school (where I use it).

**The Rules**

**Latitude/Longitude Battleship**

**Goals:**

To practice the proper way to speak aloud a specific location using latitude and longitude.

To practice finding latitude and longitude quickly and naturally using a physical map.

**What Each Player Needs:**

· 2 Game Sheets – one to record your moves (hits/misses) and one to hide your ships on and record your opponent’s moves (hits/misses).

· A Latitude/Longitude Script Sheet

· (Optional) A Clipboard

· (Optional) Ruler – to help with finding the line’s degree easier.

**Rules of The Game**

· Attach the two game sheets to a clipboard – a portable “desk” that will keep your intel private.

· Each player must choose one game sheet to represent his/her stealth military invasion- we will call this sheet the “mission sheet”. The player will hide five ships along line intersections using a highlighter or a dark mark. The ships may NOT be placed diagonally and may not overlap each other. The player’s opponent’s moves will be recorded on this sheet.

o **Aircraft Carrier** – 5 line intersections

o **Battleship**- 4 line intersections

o **Submarine**– 3 line intersections

o **Cruiser** – 3 line intersections

o **Destroyer**- 2 line intersections

· The second game sheet will be used to record the player’s own moves – we will call it the player’s “intelligence sheet”.

· Moves on both the mission and intelligence sheets will be represented by an X for a miss (a move that does not locate a hidden ship) or an O for a hit (a move that hits any part of a hidden ship).

· Each player takes a turn guessing a point using a verbal statement with the lines of latitude and longitude – including the words “degrees” and noting “direction”. Each player will have a script to follow until stating a point of latitude and longitude correctly becomes natural.

· The game is over when one player sinks all of the other player’s battleships.

**Earning Full Credit**

***In order to earn full credit,*** each player must follow the latitude and longitude script and mark all of the player’s opponent’s moves as well as his/her own moves on their proper sheets. These sheets will be turned in and MUST be signed with the teacher’s initials to signify that the sheets are “legit”.

**The Script Sheet**

**Latitude/Longitude Verbal Script**

**Directions:** Use the following script to properly verbalize a location in terms of latitude and longitude. Fill in the blanks with the proper number and direction.

**Example:** “Latitude 40° North and Longitude 110° West”

**The Script:**

“Latitude \_\_\_\_° North/South and Longitude \_\_\_\_° East/West”