

Assignment Title: Submarine Cable Infrastructure

Objective: Explore and understand the submarine cable infrastructure that powers global internet connectivity.

Group Assignment: The teacher will arrange you into groups of 3-4.

If your teacher allows you to arrange your own groups, you must be accountable for your grouping decisions.

Collaboration and Role Fulfillment: Review the following assignments below. Work together to leverage each member's strengths. As a team, make group assignments.

Group Member 1: Complete your research and accurately record data. Present, explain, and answer questions about your data to the class during your groups presentation (Speak for, at minimum, 60 seconds.)

Group Member 2: Complete your worksheet. Present sound hypothesis based on research and sound scientific reasoning. Present, explain, and answer questions about extended and strategic thinking activities to the class during your groups presentation (Speak for, at minimum, 60 seconds.)

Group Member 3: Create a presentation to include the research of members 1 and 2. The presentation can be a poster, slide presentation, or other means that will capture the attention of the audience.

Example:

As Group member 1 presents data during presentation, group member 3 is responsible for technical support, ensuring that the correct cables are being projected on the screen as Group Member 1 presents. Please synchronize with Group Member 1.

As Group member 2 presents research, group member 3 is responsible for including pictures or highlighting other visuals that support the extended/strategic thinking of group member 3.

Group Member 4: If there is 4th group member:

Group Member 3 can work to synthesize report with presentation Group Member 1

Group Member 4 can work to synthesize report with presentation Group Member 2

Group members 3 and 4 will then work together to create one singular presentation

Note: All group members, including members 3 and 4 must speak for at least 60 seconds on the presentation.

Name:

Group Member 1

1. Visit the website:
<https://www.submarinecablemap.com/>

2. Examine the map

3. Under continents connected, isolate a cable the connects two different continents. What is the name of the cable? What is the length of the cable? Using your geography skills, what is the Western landing Port? What is the Eastern Landing Port?

Record this information for 3 different continent to continent connections (i.e. Africa to South America - North America to South America - Australia to Asia)

Continents Connected	Name of Cable	Length of Cable	Western Landing Port	Eastern Landing Port

Name:

Group Member 2

1. Visit the website:

<https://www.submarinecablemap.com/>

2. Examine the map

3. **(Extended Thinking)** What impact does technological and economic advancement have on internet access?

4. **(Strategic Thinking)** There is a communication failure between 2 continents.

A. List the steps that you would take to locate and repair the communication failure?

B. What factors would you consider when deciding how to repair the failure?

Grading Rubric

<p>Collaboration and Role Fulfillment</p>	<p>Collaboration and Role Fulfillment (1-4 points) 1 Point: Roles were not clearly defined or adhered to; minimal collaboration. Conversations consistently redirected to topic. 2 Points: Some roles were fulfilled with moderate collaboration. Conversations sometimes redirected to topic. 3 Points: Roles mostly fulfilled with good collaboration and teamwork. Conversations rarely redirected to topic. 4 Points: Each member effectively fulfilled their role with excellent collaboration. Conversations stayed on topic.</p> <p>Notes:</p>	<p>/4</p>
<p>Map Navigation and Analysis</p>	<p>Map Navigation and Analysis (1-4 points) 1 Point: The group struggled to navigate the map and analyze the data. 2 Points: The group navigated the map with some difficulty and performed basic analysis. 3 Points: The group navigated the map well and analyzed most data accurately. 4 Points: The group expertly navigated the map and performed a thorough and detailed analysis.</p> <p>Notes:</p>	<p>/4</p>
<p>Presentation of Findings</p>	<p>Presentation of Findings (1-4 points)** 1 Point: Findings are not well-communicated; presentation lacks structure. 2 Points: Findings are somewhat communicated but lack clarity or detail. 3 Points: Findings are clearly communicated with some detail and organization. 4 Points: Findings are communicated in a detailed, organized, and engaging manner.</p> <p>Notes:</p>	<p>/4</p>

Please provide teacher your group members and their roles. Teacher will monitor progress based on the data you provide.

Member Name	Member Role