

## Exploration

### 'New' Navigational and Ship Technology

#### Directions

For each item listed in the chart below, fill in the information requested and identify any long-or short-term effects associated with the technological development as part of the "ranking" section. In column four, you should rank the developments from greatest effect (#1) to least effect (#4). To complete the chart, use your textbook and/or online resources.

Technological Development	Original Date of Invention	Function	Ranking of Greatest Effect	Reasoning for Ranking of Effect
Compass				
Astrolabe				
Rudders (Sternpost or Axial)				
Sails				

Brainstorm a list of the possible environmental hazards that were involved in crossing the ocean. Refer to your list of technological developments and think of ways that the environment might hinder their use.

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What other challenges other than environmental ones did explorers face in overseas exploration?

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**Apply Your Understanding**

Identify as many long and short term causes and effects for each development.

<b>LONG or SHORT Term CAUSES (of development)</b>	<b>Development</b>	<b>LONG or SHORT Term EFFECTS (of development)</b>
	<p><b>Technological developments:</b> cartography and navigation, improved maritime technology (e.g. compass, astrolabe, rudders, sails) and navigational skills, improved understanding of global wind and current patterns</p>	
	<p><b>Migrations of Europeans (use of natural resources in New World)</b></p>	
	<p><b>Migrations of Europeans (agriculture/crops)</b></p>	
	<p><b>Migrations of Europeans (animals)</b></p>	
	<p><b>Migrations of Europeans (diseases)</b></p>	