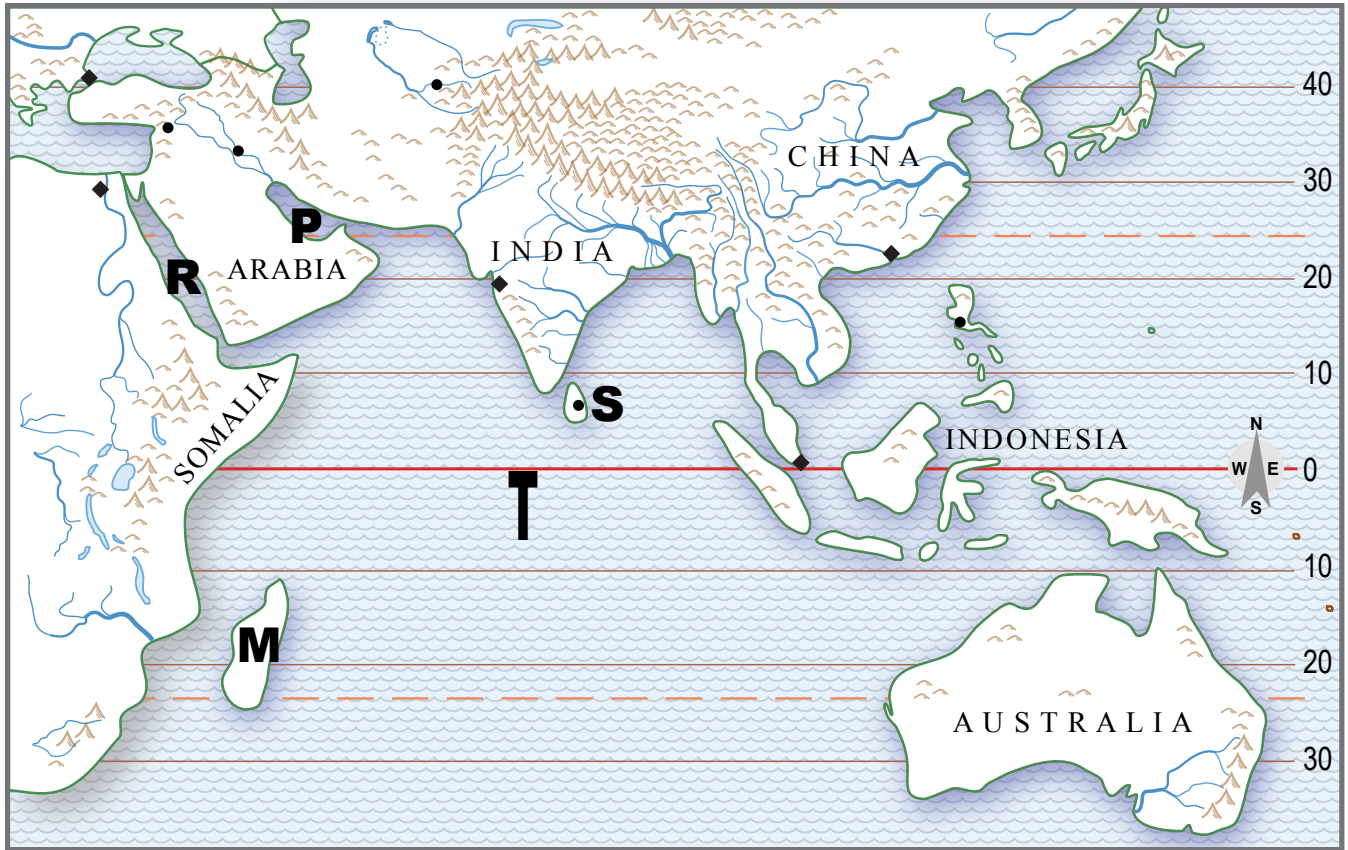


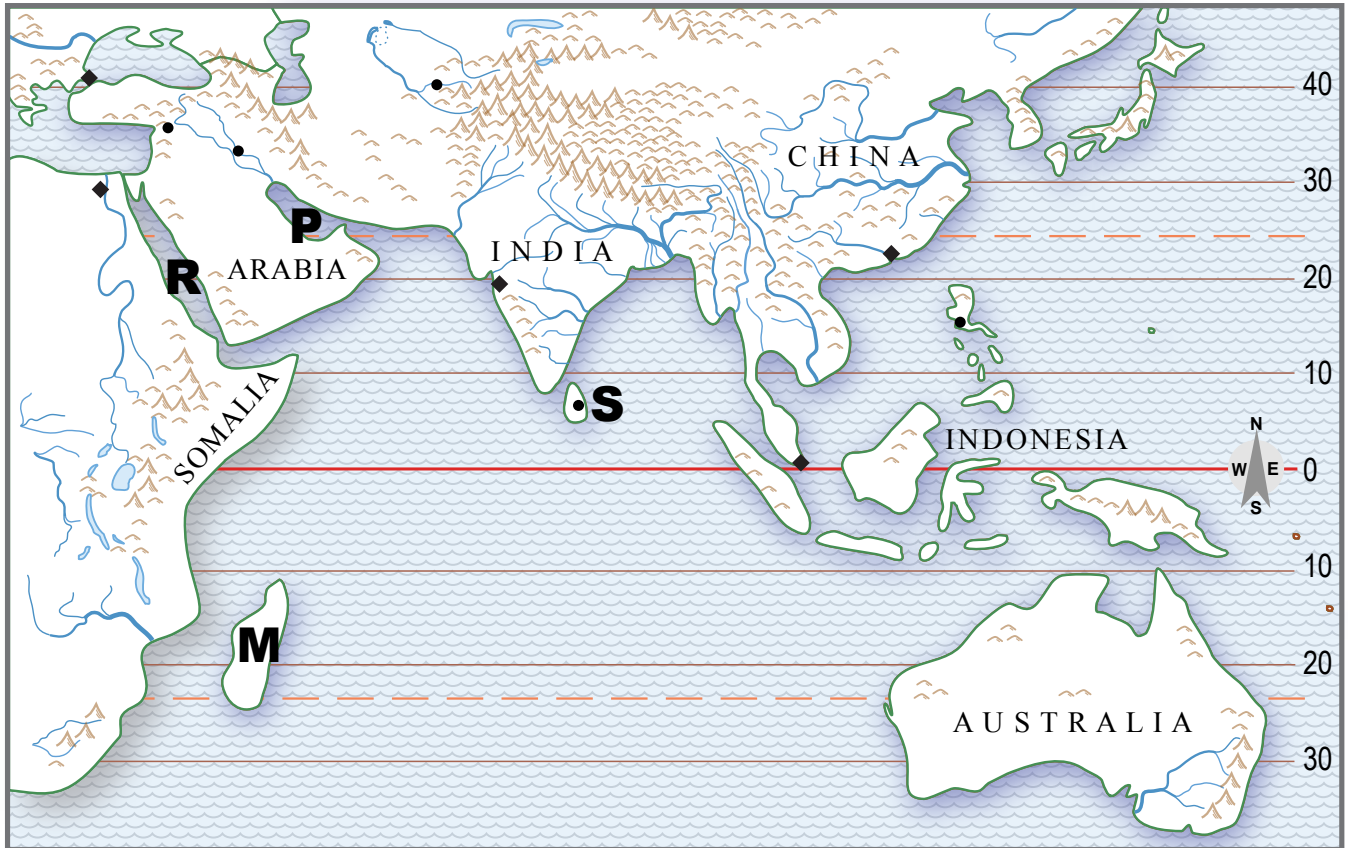
Sailing in the Arabian Sea in Summer



1. **Sunshine.** In summer, central Asia gets a lot of solar energy. The ground is warm.
 2. **Jet stream.** The west-to-east jet stream goes north of the Himalaya Mountains (the big area of high land in Central Asia). **Put an M in the middle of these mountains.**
 3. **Trade winds.** Strong winds blow from east to west in the latitudes marked by the letter T. A courageous sailor could "ride the trade winds" all the way from the Indonesian islands to the coast of Africa. That's 3600 miles, like going from New York all the way to Spain.
 4. **Trade current.** The trade winds push a strong current of water westward. This causes water to "pile up" near Somalia. **Put an A where water is extra deep near Africa.**
 5. **Air pressure.** A jet stream far north plus warm land makes low air pressure over Asia.
 6. **Monsoon wind.** Low air pressure causes wind to blow northeast from Somalia toward India.
 7. **Monsoon rain.** The winds carry moist air to India and on toward the Himalaya Mountains.
 8. **Monsoon current.** The monsoon winds also push a lot of water northeastward toward India. **Put a B on the map where water "piles up" in the northern part of the Arabian Sea.**
 9. **Coast current.** Excess water flows southeast along the coast of India toward Sri Lanka (S).
- Reread these 9 statements, and draw arrows on the map to show how water moves**
- circle: **west east** along the equator, as a current pushed by the trade winds,
 - circle: **northwest northeast** along the Somali Coast, pushed by the summer monsoon,
 - circle: **northwest southeast** along the west coast of India.

Traders came southeast in the Persian Gulf (P) and Red Sea (R) from Europe and Egypt. They met sailors bringing spices and silk from India, Indonesia, and China. These sailors "rode" the clockwise circulation of water in the Arabian Sea in summer.

Sailing in the Arabian Sea in Winter



1. **Sunshine.** In winter, central Asia gets very little solar energy. The ground is cold. BRRRR!
2. **Jet stream.** The west-to-east jet stream goes south of the Himalaya Mountains (the big area of high land in Central Asia). **Put an H in the middle of these mountains.**
3. **Air pressure.** A jet stream over India plus cold land in Asia makes high air pressure.
4. **Monsoon Wind.** High air pressure causes strong winds to blow southwest from India.
5. **Monsoon Current.** Winds push water along the Somali Coast from India to Madagascar (M).
Put an A in the Arabian Sea, north of the equator between India and Somalia.
6. **Trade Wind.** Meanwhile, trade winds blow west from Australia toward Madagascar.
7. **Trade Wind Current.** The trade winds also push water toward Madagascar.
8. **Countercurrent.** "Excess" water north of Madagascar flows eastward near the equator. This flow is called a countercurrent, because it goes against the "normal" trade wind. The Equatorial Countercurrent is weak and unreliable. It is very risky for sailing ships.
9. **Coast current.** Some of the water in the Equatorial Countercurrent is pulled northwest along the west coast of India to replace water blown away by the dry winter monsoon.

Reread these 9 statements, and draw arrows on the map to show how water moves

- circle: **northeast southwest** along the Somali Coast, pushed by the winter monsoon,
- circle: **east west** as a weak countercurrent along the equator,
- circle: **northwest northeast southeast** along the west coast of India.

Traders came southeast in the Persian Gulf (P) and Red Sea (R) from Europe and Egypt. They met sailors bringing spices and silk from India, Indonesia, and China.

These sailors "rode" the counterclockwise circulation of water in the Arabian Sea in winter.