The Ultimate AP® World History Unit 4 Cheat Sheet

4.1 Technological Innovations

Borrowed Know-How

Knowledge transfer: Europeans adapted Classical, Islamic & Asian tech → sailed beyond coasts; few tools were new European inventions, most came via trade.

Tech	Origin	Use
Compass	China	direction, any weather
Astrolabe	Greek → Islamic	latitude by stars
Lateen sail	Arab / Ind. Oc.	sail into the wind
Sternpost rudder	China	steer big ships
Portolan chart	Med. (Italy)	coasts, ports, routes
Gunpowder	China	cannon on ships

Ship Design

Caravel (Portugal): small, fast, lateen + square sails → probed W. African coast & returned upwind.
Carrack: big 3-masted hull for cargo + cannon → long ocean voyages (Columbus's Santa María, da Gama).
Fluyt (Dutch): cheap, huge hold, small crew → ↓ shipping costs → Dutch dominate 1600s trade.
Galleon: armed cargo ship; Spain's Manila galleons hauled silver Acapulco ↔ Manila, 1565–1815.

Winds, Currents & Maps

Volta do mar: Portuguese swung far W into the Atlantic to catch westerlies home → open-ocean sailing.
Trade winds & monsoons: known seasonal wind cycles let crews time round trips; Arab & Gujarati dhows had ridden the monsoons between India & E. Africa for centuries.
Mercator map (1569): straight lines = constant compass bearing → easier long-distance navigation.

⚠ Europe didn't invent the compass or astrolabe; say "adapted from Asia & Islamic world."

✓ Causation chain: borrowed tech + state money + motive (wealth, faith) → exploration. Name 1 tech + its effect.

4.2 Exploration: Causes & Events

Motives: God, Gold, Glory

Wealth: bypass Ottoman & Venetian middlemen → direct access to Asian spices & silk; find gold & silver.
Religion: spread Christianity; Reconquista zeal (Granada falls 1492); outflank Muslim powers & find Christian allies.
Glory & state power: monarchs funded voyages to beat rival states; explorers sought titles, land & fame.

Explorer	Sponsor	Result
Henry the Nav.	Portugal	W. Afr. coast voyages
Dias (1488)	Portugal	Cape of Good Hope
da Gama (1498)	Portugal	sea route to India
Columbus (1492)	Spain	Caribbean, Americas
Magellan (1519)	Spain	1st circumnavigation
Cabot / Cartier	England / France	N. Atlantic, Canada
Hudson (1609)	Dutch, England	Hudson R. & Bay

Key Events

Portugal 1st: state-backed voyages down W. Africa → gold, enslaved people, forts (Elmina 1482), São Tomé sugar.
Columbus's error: sailed W to reach Asia but underestimated Earth's size → landed among the Taíno (Bahamas).
Treaty of Tordesillas (1494): Spain & Portugal split new lands along a line → Brazil goes to Portugal.
N. Atlantic crossings: cod fishing, furs & settlement drew England, France & Dutch to N. America.
Oceania & Polynesia: existing exchange networks stayed intact b/c European visits to the Pacific were rare.
Spain in the Pacific: Magellan's route → Manila (1571) links Asia & Mexico by galleon → American silver flows to China.

⚠ Zheng He (1405–33) was state-sponsored but sought tribute, not colonies; use him as a contrast, not an example.

✓ LEQ causation: tie each motive to a state (Portugal → trade posts; Spain → gold + converts).

4.3 The Columbian Exchange

What Moved Where

From → To	Crops	Animals & germs
Americas → Afro-Eurasia	maize, potato, manioc, cacao, tobacco	turkeys
Europe → Americas	wheat, sugar, coffee, grapes	horses, cattle, pigs, smallpox
Africa → Americas	rice, okra, yams	malaria, yellow fever

Disease & Demography

Virgin-soil epidemics: smallpox, measles & flu killed est. 50–90% of Native Americans w/ no prior immunity.
Labor shortage: Native die-off → colonists turn to enslaved Africans → Atlantic slave trade grows.
Malaria & yellow fever (from Africa) killed Europeans in the tropics → planters relied even more on Africans.
Forced migration: enslaved Africans were the largest group to cross the Atlantic before 1800; ~12.5M embarked overall.

Food, Population & Environment

American crops (potato, maize, sweet potato, manioc) ↑ calories → pop. growth in Europe, China & Africa.
Cash crops: sugar & tobacco → plantation monoculture, deforestation, soil depletion in Caribbean & Brazil.
Horses reshaped Plains peoples (Comanche, Lakota) → mobile bison hunting & raiding; **cattle & pigs** trampled & ate Native crops, spread fast on open range.
Ecological imperialism: European weeds, rats & earthworms spread & remade American landscapes.

⚠ The Columbian Exchange = biological transfer (plants, animals, germs, people), not just a list of trade goods.

✓ SAQ formula: item + direction + effect, e.g., potato → Europe → famine ↓, pop. ↑ in 1700s.

4.4 Maritime Empires Established

Trading-Post Empires: Africa & Asia

Portugal: forts at Goa (1510), Malacca (1511), Macau + cannon ships → forced Indian Ocean traders to buy passes (cartaz) & pay customs at Portuguese ports.
Dutch VOC (1602): seized Spice Islands, built Batavia (1619) → nutmeg & clove monopoly; Cape Colony 1652.
English EIC (1600): posts at Surat, Madras, Bombay, Calcutta traded Indian cotton cloth by Mughal permission.
Spanish Philippines: Manila (1571) = Spain's Asian hub; Chinese junks traded silk & porcelain for Mexican silver.

Empire	Hub	Model	Key good
Portugal	Goa, Brazil	posts, plant.	spice, sugar
Spain	Mexico, Peru	conquest	silver
Dutch	Batavia	joint-stock	spices
Britain	India, N. Am.	co. + settlers	cloth, tobacco
France	Quebec, Haiti	fur, plant.	fur, sugar

Americas: Conquest & Colonies

Spain: Cortés took the Aztecs (1521), Pizarro the Inca (1532) w/ Native allies, steel, horses & smallpox → viceroyalties.
Britain, France & Dutch: N. American colonies for fur, fish & tobacco; French partnered w/ Native fur traders.
France: New France (Quebec 1608) had few settlers; Saint-Domingue (Haiti) became the richest sugar colony by 1750.
Brazil (Portugal, from 1500): coastal sugar plantations worked by enslaved Africans; gold rush in the 1690s.

Slave Trade Begins

Portugal launched the trans-Atlantic slave trade → Brazil sugar; Spain's **asiento** licensed foreign suppliers.
African agency: African rulers & merchants sold captives for guns, cloth & cowries; Europeans rarely raided inland.

⚠ Before 1750, most of Asia & interior Africa stayed under local rule; Europeans were coastal traders, not overlords.

✓ Contrast: land empires (Unit 3) ruled territory; most maritime empires controlled ports & sea lanes.

4.5 Maritime Empires Maintained

Economic Systems

Mercantilism: wealth = bullion; colonies send raw goods, buy home manufactures; exports > imports; royal monopolies.
Joint-stock companies (VOC, EIC): investors share risk & profit → funded long voyages; ran armies like states.
Silver: Potosí & Zacatecas → Spain & Manila → China (Ming single-whip tax paid in silver) → 1st global trade web.
Price revolution: silver flood → inflation in Spain & Europe; Spain spent it on wars & imports, not industry.
Atlantic system: guns & cloth → Africa; captives → Americas; sugar, tobacco & silver → Europe.

Labor Systems

System	Where	Who / how
Chattel slavery	Caribbean, Brazil	Africans; hereditary
Encomienda	Spanish Amer.	Native labor/tribute
Hacienda	Spanish Amer.	peons tied by debt
Mit'a	Andes, Potosí	Native rotating draft
Indentured	British N. Am.	poor Europeans, 4–7 yr

Mit'a: Spain adapted the Inca labor draft to force Andean men into Potosí mines; mercury & cave-ins killed many.

African & Asian Responses

Asante & Dahomey grew powerful selling war captives for guns; **Kongo** converted & traded w/ Portugal.
Tokugawa Japan: banned Christianity, expelled Iberians (1639), let only Dutch trade at Dejima (Nagasaki).
Ming & Qing China: limited Europeans to set ports & took silver; Europe had little leverage in China.

⚠ Encomienda ≠ hacienda: encomienda = grant of Native labor/tribute; hacienda = large estate w/ debt peons.

✓ Silver is top "global" evidence: Americas → Europe → Asia links 3 regions in a single essay sentence.

4.6 Challenges to State Power

Resistance in the Americas

Why resist?: forced conversion, labor drafts, taxes, land loss & slave raids, plus rulers' new centralizing demands.
Pueblo Revolt (1680): Popé led Pueblo vs. Spanish missions & forced labor → Spain out of New Mexico 12 yrs.
Metacom's War (1675–76): Wampanoag-led alliance vs. English land seizures in New England; Native defeat.
Maroon societies: people who escaped slavery built free towns (Palmares in Brazil, Jamaica's Maroons).

Africa & South Asia

Queen Nzinga (Ndongo & Matamba): war, diplomacy & a Dutch alliance held off Portuguese slave raids for decades.
Marathas: Hindu warriors under Shivaji fought Aurangzeb's Mughals → Mughal power drained by 1700s.

Revolts Inside Empires

Fronde (1648–53): French nobles revolted vs. royal centralization → Louis XIV tamed nobles at Versailles.
Cossack revolts: Stenka Razin (1670–71) led Cossacks & peasants vs. the tsar & nobles; crushed.
Outcomes: most revolts were crushed, but they forced concessions & drained treasuries (Mughals, Spain, France).

Revolt	Against	Main cause
Pueblo	Spain	religion, labor
Metacom's	England	land loss
Nzinga	Portugal	slave raids
Marathas	Mughals	religion, rule
Fronde	French crown	taxes, power
Razin	Russian tsar	serfdom, taxes

⚠ Resistance ≠ success: argue partial impact (Spain returned in 1692, but w/ more religious tolerance).

✓ DBQ grouping: sort revolts by cause (religious, economic, political) to build 2+ distinct arguments.

4.7 Changing Social Hierarchies

New Elites

Manchus (Qing): minority rulers kept banner armies & imposed the queue, but staffed bureaucracy w/ Han scholars.
Creoles (American-born Spaniards) grew rich but ranked below **peninsulares** for top offices in church & state.
Merchant & gentry classes rose in port cities & Europe from global trade profits; some bought land & noble titles.

The Casta System

Group	Status
Peninsulares	Spain-born; top offices
Creoles	American-born Spanish
Mestizos	Spanish + Native
Mulattoes	Spanish + African
Native peoples	tribute, labor drafts
Enslaved Africans	bottom; legal property

Race-based ranks: ancestry set rights, taxes & jobs; casta paintings showed each mix & its rank.
Gender in colonies: few Spanish women came early → unions w/ Native women → large mestizo population.

Old Elites, Families & Minorities

Elite power fluctuated: Mughal zamindars, European nobles & Japanese daimyo checked by stronger rulers.
Russia: Peter I made nobles serve the state (Table of Ranks) while serfdom tightened on peasants.
Slave trade demography: ~2/3 of captives male → W. & Central Africa skew female → polygyny ↑, women farm more.
Euro-African traders: Luso-African families on W. African coasts became middleman elites in the slave & gold trades.
Religious minorities: Jews expelled from Spain (1492) → many resettle in Ottoman cities & Amsterdam.

⚠ Casta was legal & race-based, not just class; tie it to colonial labor needs (mit'a, slavery) in your answer.

✓ Compare hierarchies: Qing (ethnic minority on top) vs. Spanish America (birthplace + race ranks).

4.8 Continuity & Change + the Exam

1450–1750 at a Glance

Change	Continuity
Americas join global trade	Asia still richest region
Atlantic slave trade grows	Farming = most people's work
Silver drives world economy	Land empires stay strong
New colonial hierarchies	Coerced labor persists

Big change: 1st truly global network links the Americas to Afro-Eurasia; European sea power ↑.
Big continuity: Qing, Mughal & Ottoman economies still lead; Europeans joined, not replaced, Indian Ocean trade.

Key Comparisons

Spain vs. Portugal: Spain conquered American land; Portugal ran Asian & African posts plus Brazil plantations.
Spanish vs. English colonies: Spain ruled & mixed w/ Native peoples; English settlers pushed them out.
Maritime vs. land empires: sea empires ran on companies, forts & navies; land empires on armies & bureaucracies.

Exam Moves

Weight: Unit 4 = 12–15% of the exam; it often pairs w/ Unit 3 (same era) in MCQ stimulus sets & LEQ prompts.
MCQ stimuli: trade-route maps, silver-flow charts, casta paintings, explorer & missionary accounts.
LEQ prompts: causes of exploration, effects of the Columbian Exchange, compare 2 labor systems.
SAQ: "Identify 1 effect of the Columbian Exchange on Africa" → slave trade ↑ or maize & manioc → pop. ↑.
DBQ (7 pts): thesis, context (e.g., Reconquista), 4 docs, outside evidence, HIPP on 2 docs, complexity.

⚠ Stay in 1450–1750: Atlantic revolutions & industrialization belong to Units 5–6; don't drift forward.

✓ Go-to evidence: Potosí silver, Columbian Exchange, Asante, Tokugawa limits, casta, VOC.