The Simple AP® European History Unit 4 Cheat Sheet

4.1–4.2 Scientific Revolution: The Cosmos

Old View → New View

Old authorities: Aristotle, **Ptolemy** (Earth at the center) + Galen, all backed by the Church.
New approach: observation, experiments + math replace trust in ancient books + Church teaching.

Thinker	Big idea
Copernicus, 1543	Sun at center
Kepler	elliptical orbits
Galileo, 1610	telescope proof
Newton, 1687	universal gravity

How It Built

Copernicus: put the Sun at the center but kept circular orbits; little impact at first.
Kepler: used Brahe's careful data → planets move in **ellipses** (ovals), not perfect circles.
Galileo: telescope shows Jupiter's moons + sunspots → heavens aren't perfect.
Galileo's trial (1633): the Inquisition forced him to take back his views + kept him under house arrest.
Newton (1687): one set of laws of gravity + motion rules both Earth + the heavens.

Why It Mattered

Natural laws found by reason → thinkers try the same idea on govt + society (4.3).

⚠ Change was slow: ~150 years from Copernicus to Newton; many stayed devout.

✓ Causation: the Sci Rev's trust in reason led to the Enlightenment's push for reform.

4.2 Methods, Medicine & Institutions

Two Methods

Thinker	Method
Bacon	inductive (observe)
Descartes	deductive (reason)

Bacon (empiricism): observe + experiment, then build general laws from the facts.
Descartes (rationalism): doubt everything + rebuild knowledge w/ math + logic.
Scientific method: blends both → hypothesis, experiment + repeated observation.

Medicine & Chemistry

Vesalius (1543): careful dissections fix Galen's old mistakes about human anatomy.
Harvey (1628): blood circulates; the heart pumps it around the body in a closed loop.

Institutions & Networks

Royal Society (London, 1660) + **French Academy of Sciences** (1666) share + test results.
Print + letters spread findings fast across borders → a Europe-wide science community.
Women: Margaret Cavendish, Maria Winkelmann + Émilie du Châtelet did key science work.

Continuity

Old beliefs lasted: Newton studied alchemy, Kepler did astrology; witch trials faded after ~1680.

⚠ Women were mostly shut out of universities + the new science academies (e.g., Winkelmann).

✓ SAQ: name a thinker, the method used + 1 way it broke w/ Aristotle, Galen or the Church.

4.3 The Enlightenment: Thinkers

Political Thought

Thinker	Big idea
Hobbes, 1651	strong ruler for order
Locke, 1689	natural rights
Montesquieu, 1748	separation of powers
Rousseau, 1762	general will

Hobbes: without govt, life is "nasty, brutish and short" → people give power to 1 ruler.
Locke: life, liberty + property; govt needs consent + can be overthrown if it abuses rights.

Society, Law & Economy

Voltaire: religious toleration + free speech; mocked the Church; *Candide* (1759).
Beccaria (1764): against torture + the death penalty; punishment should fit the crime.
Adam Smith (1776): free markets (**laissez-faire**) instead of mercantilism + govt control of trade.
Diderot: the *Encyclopédie* gathered new knowledge; Church + king often censored it.

Women & Rights

Wollstonecraft (1792): women deserve equal education so they can reason too.
Olympe de Gouges (1791): wrote a declaration of the rights of women to match men's rights.

⚠ Hobbes → absolute ruler; Locke → limited govt. Both use a social contract.

✓ DBQ: group docs by type of thinker (political, legal, economic) + show how each used reason.

4.3 Spread, Religion & Reaction

How Ideas Spread

Salons: elite women hosted gatherings where writers + nobles debated ideas.
Coffeehouses, clubs + libraries → a new **public sphere** for open discussion of ideas.
Print: newspapers + pamphlets boomed as more people, esp. in cities, learned to read.
Republic of Letters: writers across Europe swap ideas by letter, often in French.

Religion & Reason

View	Belief
Deism	God = clockmaker
Skepticism	doubt church teaching
Atheism	no God at all

Toleration spreads as an ideal: Joseph II's **Edict of Toleration** (1781), then Jews in 1782.
Haskalah: Moses Mendelssohn urged Jews to join European culture + keep their faith.

Faith Pushes Back

Revivals stressed emotion + personal faith: Pietism + **Methodism** (John Wesley).
Censorship: Church + states banned books, so many writers published abroad.
Jansenism (France): strict Catholic reform movement opposed by Jesuits + the crown.

⚠ The Enlightenment was mostly elite + urban; most peasants stayed devout + untouched by it.

✓ Continuity + change: religion didn't vanish; it split into deist elites vs. revivals.

4.4 18th-Century Society & Demographics

Agricultural Revolution

Where: began in the Dutch Republic + England, then spread to other parts of W. Europe.

Change	Effect
Crop rotation	no fallow fields
Seed drill (Tull)	bigger harvests
Enclosure	more landless poor
Potato	more calories

Enclosure: shared land fenced into private farms → many small farmers lose their land.

Population Boom

Causes: more food, fewer famines + the end of major plague in W. Europe (1720).
Result: population grows fast after ~1750 → more workers, but also more poor people.

Economy & Family

Cottage industry: merchants pay rural families to spin + weave wool at home (putting-out).
Industrious revolution: families work more hours to buy goods like tea, sugar + cloth.
Family: people married later + lived in small nuclear households (parents + kids).
Bread riots: when prices spiked, crowds (often women) forced sellers to charge "fair" prices.

⚠ Change was uneven: E. Europe kept serfdom + old farming methods much longer.

✓ LEQ: Ag Rev → more people + spare labor → cottage industry → Industrial Revolution.

4.5 18th-Century Culture & Arts

Art Styles

Style	Feel	Artists
Baroque	grand, dramatic	Bernini
Rococo	light, playful	Fragonard
Neoclassical	serious, Roman	David

Baroque (1600s): grand + emotional; served the Church + kings like Louis XIV (Versailles).
Rococo (early 1700s): pastel, fancy scenes of nobles at play (Fragonard's *The Swing*).
Neoclassicism (late 1700s): Greek + Roman models + civic duty (*Oath of the Horatii*).
Shift: Rococo's private fun → Neoclassicism's public virtue, like the Enlightenment.

Music & Literature

Music: Bach + Handel, then Haydn + Mozart; paid public concerts grow in big cities.
Novels rise: *Robinson Crusoe* (1719) → stories about everyday people, read by the middle class.

Who Consumes Culture

Patronage shifts from kings + the Church to middle-class buyers + audiences.
Popular culture: almanacs + festivals (Carnival); elites start to pull away from them.
Literacy ↑ in cities + NW Europe → more readers for newspapers + novels, incl. women.

⚠ Rococo = playful + aristocratic. Neoclassical = serious + moral. Don't mix them up.

✓ Image MCQ: nobles at leisure in pastels → Rococo; stern Roman scene → Neoclassical.

4.6 Enlightened & Other Rulers

Enlightened Absolutism

Idea: rulers use reason to reform + strengthen the state, but they keep full power.

Ruler	Reform	Limit
Frederick II	toleration	kept serfdom
Catherine II	Nakaz (1767)	serfs worse off
Joseph II	ended serfdom	undone later

Frederick the Great (Prussia): "first servant of the state"; legal + school reforms, toleration.
Catherine the Great (Russia): read philosophes, but after Pugachev's revolt she backed nobles.
Joseph II (Austria): ended serfdom + granted toleration; nobles fought back hard.
Maria Theresa (Austria, 1740–80): centralized taxes + army; limited the labor serfs owed.

Wars & Balance of Power

Austrian Succession (1740–48): Prussia takes rich **Silesia** from Maria Theresa's Austria.
Seven Years' War (1756–63): Britain wins N. America + India; France goes into debt.
Partitions of Poland (1772–95): Russia, Prussia + Austria divide it until Poland disappears.

Other Paths

Britain: Parliament + a prime minister (Walpole) share power w/ the king; no absolutism.

⚠ "Enlightened" ≠ democratic. These rulers reformed to make the state stronger.

✓ Comparison LEQ: show what each ruler changed vs. kept, + why (nobles, war, money).

4.7 Causation & Exam Strategy

Cause → Effect Chains

Sci Rev → natural laws found by reason → thinkers look for laws of govt + society.
Enlightenment → challenges to kings + the Church → American + French Revolutions.
Ag Rev → more food → more people → spare workers for the Industrial Revolution (Unit 6).
War debt (Seven Years' War) → France's money crisis → the French Revolution.
Ideas → reform: Beccaria's ideas lead Frederick II + Joseph II to limit the use of torture.

Long-term	Short-term
new ideas	bad harvests
growing middle class	royal debt

Writing Moves

Thesis: answer the prompt w/ a claim + 2–3 reasons (ideas, economy, war).
Context: link to what came before (1648 Westphalia, absolutism, the Reformation).
Sourcing: explain how a doc's situation, audience, purpose or point of view shapes it.
Complexity: show change + continuity (reason rises, but faith + serfdom still last).
Key terms: **philosophes**, **public sphere**, **deism**, **natural rights**, **salon**, **laissez-faire**.

⚠ Causation ≠ a list of events. Explain HOW one thing led to the next, w/ evidence.

✓ SAQ: answer in 1 sentence, give a specific example (name + date), then explain it.