

The Value Trail — Teacher's Guide

Making Money · course one. A three-week unit on the history and properties of money, for ages 9 and up.

11 levels · 10 teaching days + capstone · 15–20 min per day · No accounts, no data leaves the device

The unit at a glance

The Value Trail walks students along the whole arc of money: favors between neighbors, the first written ledgers, the failure of barter among strangers, commodity money, coin debasement and inflation, and the six properties that every form of money — shells, gold, paper, or digital — has always been tested against. Levels are set in a parallel village fable; short "true story" cards after each level connect the fable to real history (the clay tablets of Uruk, the cowrie-shell trade, Rome's shrinking denarius, the gold florin of Florence).

Students play one level per day. Each level is a small game — delivering firewood, recording favors, running a market stall, sitting on an emperor's throne — followed by a one-line lesson and a history card. Era checkpoints (3 questions each) fall naturally at the end of each week.

Level	Concept	Setting	Era
1	Reciprocity — the first debt	A village before money	Before Money
2	The ledger — writing debts down	The growing village	Before Money
3	Barter & the double coincidence of wants	The stranger's road	Before Money
4	Money as a medium of exchange	The island market	The Ancient World
5	Scarcity — inflation as a hidden tax	Ancient Rome	The Ancient World
6	Durability	The harvest storm	The Ancient World
7	Portability	The mountain pass	The Ancient World
8	Divisibility	The medieval market	The Age of Coins
9	Fungibility	The moneychanger's bench, Florence	The Age of Coins
10	Verifiability	Florence	The Age of Coins
11	Sound money — the six tests together	Back in the attic	Money Today

How the game teaches

The daily loop

- **Warm-up (2 min).** From day 2, a Daily Review card appears on the trail: three questions drawn only from levels the student has already completed. This is spaced retrieval practice — the strongest-evidenced technique for retention — and it pays game currency, so students want to do it. Open every session with it.
- **Play (8–12 min).** The day's level, its lesson, and its true-history card.
- **Talk (5 min).** One discussion prompt from the day-by-day notes below. The game plants the idea; saying it out loud fixes it.

The reward economy rewards learning

Students earn market coins three ways: stars on levels (paid only for *improvement* — replaying a beaten level pays nothing), checkpoint answers, and the Daily Review. Coins buy cosmetic characters at the in-game Goat's Market — the first is affordable around day 2. There is nothing to buy with real money and no way to pay to progress.

Why the goat? A goat occasionally dashes across a level; catching it drops bonus loot. It's deliberately just fun — the dependable income comes from answering questions. If a student is rich in coins, they've been learning.

The three-week plan

Day	Session	Built-in assessment
1	Level 1 — the first favor	—
2	Warm-up begins · Level 2	—
3	Level 3	Checkpoint: Before Money
4	Level 4	—
5	Level 5 (allow a few extra minutes)	—
6	Level 6	—
7	Level 7	Checkpoint: The Ancient World
8	Level 8	—
9	Level 9	—
10	Level 10	Checkpoint: The Age of Coins
11+	Capstone: class discussion, then Level 11	Checkpoint: Money Today

Checkpoints run once per era and land at natural week boundaries. If your timetable slips a day, nothing breaks — progress saves automatically and the trail waits.

Why Level 11 gets its own session. Level 11 is a synthesis: students judge candidate monies against all six properties at once. It lands far better after a class discussion than as an eleventh consecutive lesson — and the gap of a day or a weekend before it actively helps memory (spacing

effect). Week 3 is ideal.

Day-by-day notes

Day 1 • Level 1 — Reciprocity

Students carry firewood to freezing neighbors — and the first neighbor asks for the bargain out loud: *"Help us — and I promise, we'll repay you."* The student seals it with a Deal button; each rescued neighbor makes the same spoken promise. Then the student goes home hungry to a bare cupboard... and a neighbor arrives at the door with a hot meal: a DEBT, repaid. **Takeaway:** helping someone creates a debt; your side of it is called credit. This returned-favor promise is the seed all money grew from. The level ends on a hook: two neighbors still owe you, and their promises live only in their heads.

Ask: Has anyone ever owed you a favor? How did you both remember it?

Day 2 • Level 2 — The Ledger

The level opens with that hook cashed in: a neighbor claims he already repaid the firewood — and nobody can check; it's his word against yours. Students then watch four favors cross the square and are quizzed from memory, before the fix arrives: a public clay tablet. They *write the ledger themselves* — counting the goods on screen and carving the number of each favor into the record — then settle three disputes (including that neighbor's "we're even!") by checking the tablet, never by judging who's lying. **Takeaway:** a ledger lets trust scale beyond memory, and settles honest mistakes and false claims alike without accusations. The history card is a showstopper: some of the first writing humans ever produced was bookkeeping, in Uruk ~3200 BC.

Ask: What do we write down at school so nobody has to argue about it later?

Day 3 • Level 3 — Barter • Checkpoint 1

A trading chain along a road: four swaps to get the salt you need, because the salt trader doesn't want your meat. **Takeaway:** the double coincidence of wants — barter only works if both sides want what the other has, at the same time. Note the sequencing: neighbors used ledgers and credit; it was trade with *strangers* that pushed people toward money.

Ask: Why did the ledger work in the village but not with a stranger passing through?

Day 4 • Level 4 — Money

Nobody at the island market wants fish — but everyone takes shells. **Takeaway (worth getting exactly right):** money doesn't work because people *like* the object; it works because each person is confident the *next* person will accept it. The cowrie card notes the shells came from the far-away Maldives — nobody could just gather more, which quietly plants scarcity for tomorrow.

Ask: Would you accept payment in shells today? Why not — what changed?

Day 5 • Level 5 — Scarcity

The unit's centerpiece, in three beats. *The Shell Flood*: back on the island, students find a cove full of shells, greedily gather them all — and return to a market where prices have exploded. They personally destroy the shell money by making more of it (the real cowrie collapse, played). *The apple slate*: a tiny economy of 10 apples and 10 coins, $\text{price} = \text{coins} \div \text{apples}$; one tap adds 10 coins and the price jumps before their eyes — and adding apples brings it back down (more stuff, lower prices). *Rome*: students work mint shifts while the Emperor's nightly minting outruns their savings, then *become* the Emperor — tax (fury, revolt) or mint (silence, but every price rises, including their own horse fund). **Takeaway**: good money must be scarce; printing money is a hidden tax, paid by savers. Expect strong reactions; this is the level students talk about at dinner.

Ask: The Emperor never took a coin from anyone's pocket. So who paid for the army?

Day 6 • Level 6 — Durability

Beat the storm: students race to store their wealth in the vault — and are deliberately *not told* which things will last. The storm hits, and the discovery is the lesson: fish, milk and berries rot before their eyes; gold, gems and stone survive. Only then is the word named: DURABLE. **Takeaway**: money must carry value across time. The history card: Egyptian grain stores charged fees *because the pile shrank*.

Ask: What would happen if your savings could rot?

Day 7 • Level 7 — Portability • Checkpoint 2

A trader across the mountains owes you your whole fortune — and pays it in whichever form you choose. Then you heave it over the pass, literally: stone money barely leaves the foothill and rips the bag (let them enjoy this); gold arcs over the summit in one heave. Encourage trying every material. **Takeaway**: value must be able to travel. The closing timeline traces the arc onward — carry it yourself - paper claims - government cash - bank wires - stablecoins (the paper claim reborn) - bitcoin — with each era's travel time and weak spot labeled.

Ask: What's the most portable form of value you've ever seen?

Day 8 • Level 8 — Divisibility

A cow worth 10 can't buy 3-coin bread — the baker can't make change from a cow. Sell the cow, and suddenly every price is payable. Students make exact change for four customers — then a tinker wants a *half-coin* needle, and they cut a coin in two. The point lands there: the metal is what divides; coins are just pre-cut metal. **Takeaway**: good money splits into exact amounts. "Pieces of eight" were literally cut — that's why a quarter is "two bits."

Ask: What's the smallest amount of money you can pay with? Could it be smaller?

Day 9 • Level 9 — Fungibility

Students run a Florentine moneychanger's bench against the clock: florins they simply count (tossing the odd clipped one), while customers paying in cows or gems force slow, one-by-one appraisal that eats the timer. **Takeaway**: when every unit is identical, nobody argues about which one they're getting — that sameness is why Florence's florin was accepted across Europe unweighed.

Ask: Why don't shops care which particular banknote you hand them?

Day 10 · Level 10 — Verifiability · Checkpoint 3

Spot the fake: first by eye (barely better than guessing), then with the touchstone — students physically rub each coin across the dark stone and read the streak: bright gold is real, a dull smear is paint over copper. **Takeaway:** if ordinary people can't check that money is real, they stop trusting it. The touchstone is real history — traders carried them for millennia, and the word still means a test of worth.

Ask: How do we check money is real today? Who checks?

The capstone session (day 11 or week 3)

- **Discuss first (10–15 min), play second.** Put the question on the board: "You're starting a new town. What would you accept as money — and what would make you reject something?" Let students propose and attack candidates. They will re-derive most of the six properties themselves — the game has been planting them for two weeks.
- **Then play Level 11.** It returns to the attic where the story began — now at night — and tests candidate monies (fish, gold, stone money, paper cash, bank money, bitcoin) against all six properties. After two weeks of build-up, this plays as a victory lap.
- **Close the frame.** The final idea is the course's thesis come full circle: every form money has taken — shells, coins, paper, computer entries — is the village ledger, grown up.

Assessment & evidence

- **Era checkpoints** — 3 questions each, run once per era, with explanations after every answer. Results are stored per student.
- **Stars** — each level awards 1–3 stars on performance; the trail shows them at a glance.
- **Save codes as a record.** Any student can show a save code (Who's playing? - *show my save code* — tapping it copies it). It encodes their entire journey — stars per level, checkpoint scores, coins. Collect codes at the end of the unit and you hold a verifiable record of every student's completion, with zero infrastructure: type any code into any device to see that student's trail.
- **Field Notes** — in-game, every completed lesson and history card is re-readable from the hub's Notes tab. Point students there before checkpoints.

Classroom setup

Devices

- Runs in any modern browser; designed for a phone/tablet-shaped window. One device per student is ideal; pairs work.

- **Shared devices:** the game supports named player profiles — one player per name, enforced. Each student taps their name at start; nothing bleeds between profiles. Add students via + *New player* on the Who's playing? screen (reachable any time from the button).
- **Moving between devices:** a student types their save code into any other device and their whole journey comes with them. Codes use no ambiguous letters (no I/L/O/U) and refuse typos outright, so a mistyped code can't half-load.

Privacy

Nothing leaves the device. No accounts, no sign-in, no network calls, no analytics. All progress lives in the browser's local storage on that device. There is nothing for a district privacy review to flag: no student data is collected, transmitted, or stored anywhere but the device itself.

Sound

All music and effects are optional; the mute button is on every screen and the setting is remembered per student. The game is fully playable silent — captions carry everything.

Accuracy & positioning

- **Apolitical by design.** Levels are a village fable; history cards state documented facts (Uruk's tablets, cowrie trade routes, the denarius's silver content, the florin's standard weight, the touchstone). No current government, party, or policy is named or criticized.
- **The ledger comes first.** The unit follows the historically supported sequence — credit and record-keeping among neighbors preceded barter-with-strangers and money — rather than the textbook "barter came first" story, which historians of money widely dispute.
- **Contested claims are attributed.** Where economists genuinely disagree, the game attributes rather than asserts; settled diagnostics (more money chasing the same goods raises prices) are stated plainly.
- **On Bitcoin.** Bitcoin appears where it is factually relevant: as a modern example in the final level's property tests (its fixed supply of 21 million illustrating scarcity, alongside gold, paper and bank money), in Level 7's how-value-moves timeline, and in the "money today" cards. The game neither advises nor advocates; it gives students the six tests and lets them do the judging — on every form of money equally.
- **Inflation history is sourced.** The in-game "Money Graveyard" covers the Roman denarius, the 1923 German mark, the 2008 Zimbabwe dollar and the Venezuelan bolívar — documented episodes, deliberately not claiming all money fails.

Vocabulary

The game highlights each term in gold the first time it appears. Students should leave the unit using these comfortably:

debt · credit · ledger · barter · double coincidence of wants · medium of exchange · commodity money
· inflation · scarcity · durability · portability · divisibility · fungibility · verifiability · sound money

Extensions

- **The month-after session.** The Daily Review keeps working after day 10 — it always draws on everything completed. A single 10-minute session 2–4 weeks after the unit measurably strengthens long-term retention. Put it in the calendar when you close the unit.
- **Classroom economy.** Run a one-day barter market with real classroom objects, then introduce a class token — students will feel Level 3 and Level 4 happen to them.
- **Family replay.** The game is small and free of accounts — students can play the whole trail again at home and teach it to a parent. Teaching is the strongest retrieval practice there is.
- **Debate for older groups.** "Resolved: printing money is a tax." Level 5 gives both sides their arguments.

One-line summary: Ten short lessons, one a day, each opened with a two-minute review; checkpoints close each week; discuss first and play Level 11 as the capstone; collect save codes as the record. The game handles the practice and the motivation — you supply the conversation.