

THE COIN BUREAU

The Case of Shortchange Sam



Special Agent: Penelope

A villain called **Shortchange Sam** is cheating the town. Learn every coin, count any pile — and take him down.

Meet the Coins

Four suspects. Learn their faces.

LEARN



smallest value



smooth edge



smallest coin!



biggest coin

These coins are printed **exactly real size** — lay real coins on top and check! First Bureau secret: **size does not tell you value**. The dime is the smallest coin of all, but it beats the bigger penny and nickel.

Second clue: run your finger around a real coin's edge. Pennies and nickels are **smooth**. Dimes and quarters have tiny ridges (that's why their edges are drawn dashed).

- 1 Write each coin's value in the box.


 ¢

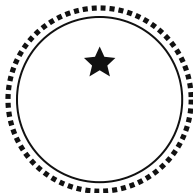
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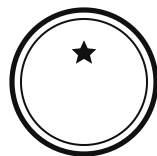
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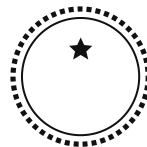
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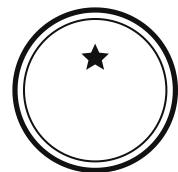
- 2 A nickel is bigger than a dime. Which one is worth more? _____

- 3 Sam filed the names off these coins! Use **size** and **edges** to identify each one. (The two smooth ones: the bigger is the nickel.)









penny · nickel · dime · quarter

Counting One Kind of Coin

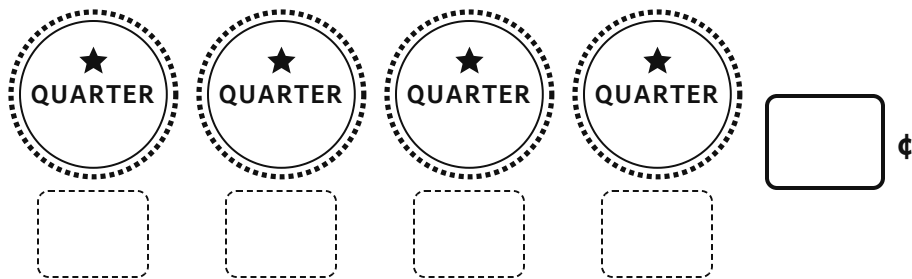
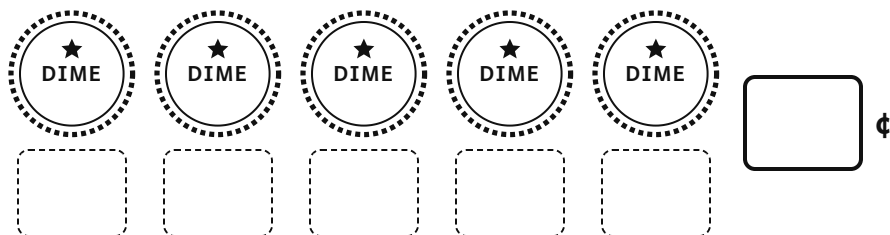
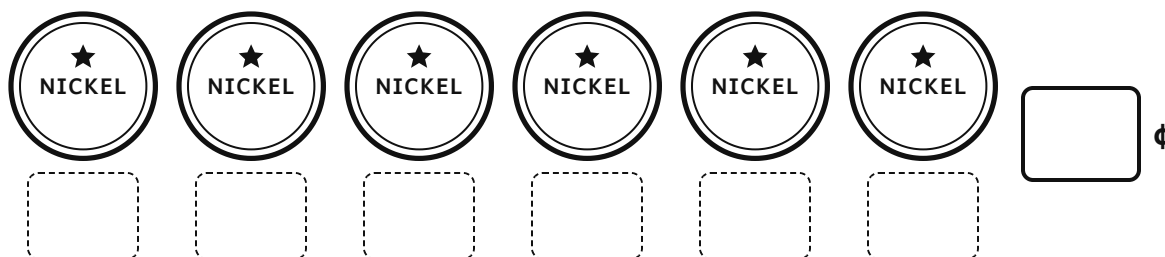
Every coin is a skip-count in disguise.

LEARN

Counting a pile of the **same** coin is just skip-counting: pennies count by **1s**, nickels by **5s**, dimes by **10s**, quarters by **25s**.

Quarters go **25, 50, 75, 100** — learn that little song and quarters become easy.

- 1** Count each pile. Write the running count under each coin, then the total.



- 2** Now count ON — start at the first number and keep going:

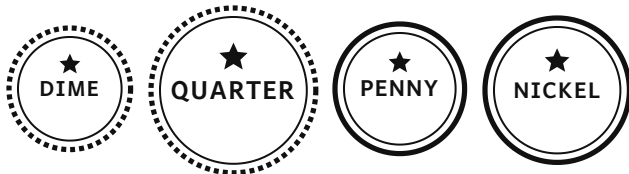
Start at **25¢** and add 3 dimes: **25**, _____, _____, _____

Start at **50¢** and add 2 nickels: **50**, _____, _____

The Biggest-First Trick

Mixed piles need a detective's method.

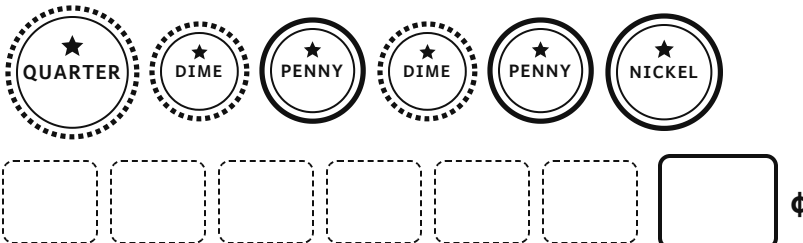
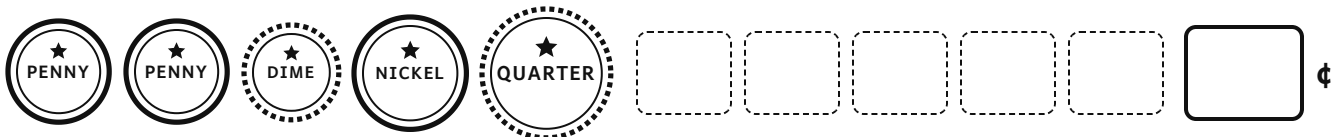
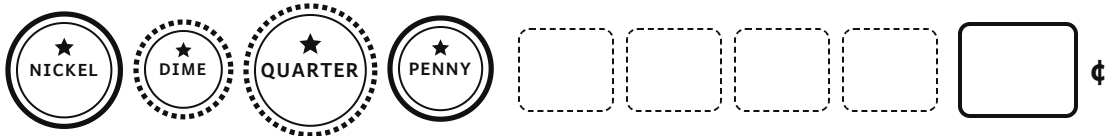
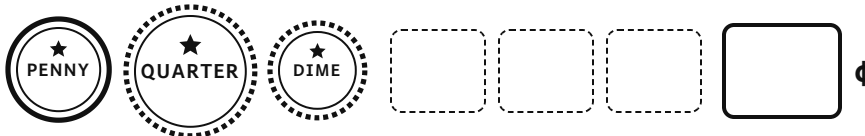
THE METHOD



Mixed coins are tricky if you count them in any old order. The trick: **find the biggest value first**, then count down to the smallest.

Here: quarter first (**25**), then the dime (**35**), then the nickel (**40**), then the penny (**41**). Total: **41¢**.

1 Count each pile **biggest value first**. Use the dashed boxes for your running count.



More Coins or More Money?

Shortchange Sam's favorite trick.

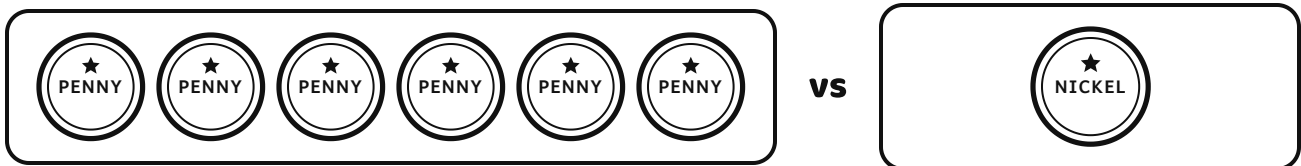
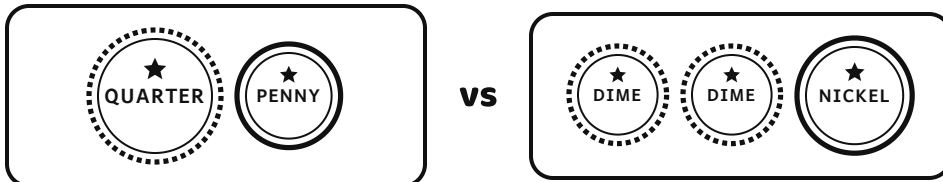
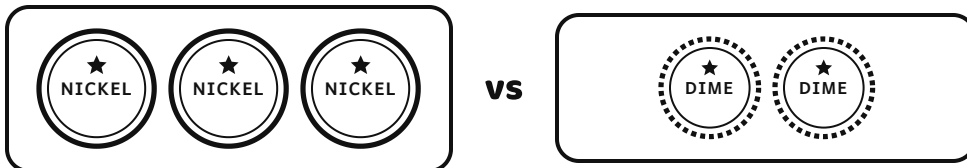
THE VILLAIN

Meet **Shortchange Sam**. His favorite trade: “Your one dime for my **five whole pennies** — five coins for one! Such a deal!”

Count it: five pennies make 5¢. One dime is 10¢. Sam is trying to take your money.

More coins does not mean more money — the only way to know is to count the values.

- 1** Sam dealt these piles. Circle the pile in each round that is worth **more**. Count both piles every time — Sam hides traps!

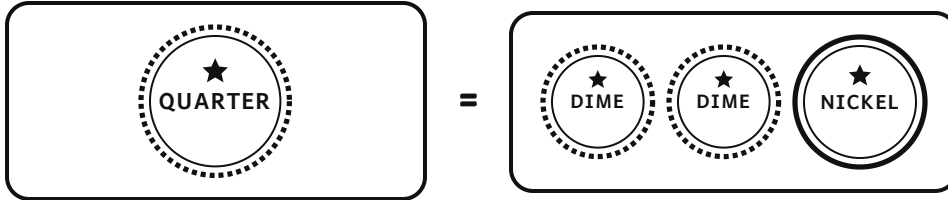


Same Money, Different Coins

One amount, many disguises.

LEARN

Money wears disguises. A quarter and a pile of two dimes + one nickel look totally different — but count them: both are exactly **25¢**.



A true agent recognizes an amount in **any** disguise.

- 1** Circle coins that make exactly **30¢**. (There may be coins left over!)



- 2** Draw your own way to make **20¢**. Draw circles and write the value inside each one, like **(10)**

draw your coins here...

- 3** Sam's trickiest offer yet: "I'll trade you my 25¢ pile for your 25¢ pile!" Who wins the trade? _____

The Dollar

One hundred cents, one famous symbol.

LEARN

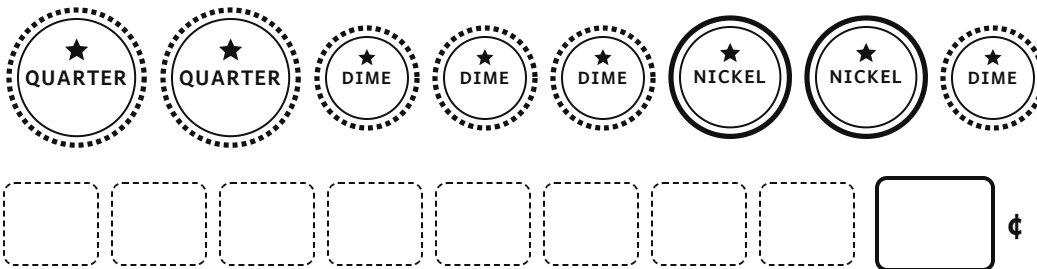
100 cents make 1 dollar. When an amount reaches 100¢, it earns a new name and a new symbol: **\$1.00**, said “one dollar.” The ¢ sign is for little cents; the \$ sign is for whole dollars.

Quarters build a dollar in four steps: **25, 50, 75, 100!** How many dimes or nickels it takes... that’s YOUR case to crack below.

- 1** Crack the dollar recipes (skip-count in your head to check!):

_____ quarters make a dollar. _____ dimes make a dollar. _____ nickels make a dollar.

- 2** Agent Penelope found this pile under the couch. Is it exactly one dollar? Count biggest-first — use the boxes to prove it!



Is it a dollar?
YES / NO
(circle one)

3 Write it both ways: 100¢ =
\$_____

4 A sticker costs 8¢. Is that the same as \$8?
YES / NO (circle one)

Making Change

The Bureau's magic trick: counting UP.

THE METHOD

You buy a 17¢ sticker and pay with two dimes (20¢). How much change comes back?

Don't count down — **count UP from the price to what you paid**, like climbing stairs: **17... 18, 19, 20**. You climbed **3 steps**, so your change is **3¢**.

Rule: the price is where you **STAND** — start counting on the **next** number. Cashiers do it exactly this way; say it out loud while you work!

- 1** Count UP from the price (it's printed in the solid box — start on the NEXT number!). Write your climbing numbers in the dashed boxes, then the change. You won't need every box.

price: 17¢	you pay: 20¢	17							change: ¢
price: 46¢	you pay: 50¢	46							change: ¢
price: 72¢	you pay: 75¢	72							change: ¢
price: 94¢	you pay: 100¢	94							change: ¢

TALL STAIRS

Big change? Climb in **jumps of 5 and 10!** Price 35¢, you pay 50¢: **35... 40, 45, 50** — three 5¢ jumps = **15¢** change.

- 2** Try tall stairs yourself — price **35¢**, you pay **50¢**:

35				change: ¢
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- 3** You're the cashier! The last customer's change was **6¢**. Which **TWO** coins do you hand back? _____

Sam's Swap Shop

Sam opened a shop?! Final mission: shop there and don't get cheated.

sticker

8¢

marble

15¢

skate wheel

45¢

space rock

62¢

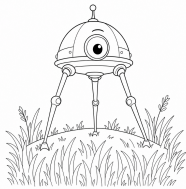
SAM'S SWAP SHOP — "ALMOST FAIR PRICES"

- 1 Penelope brings these coins. Count them — biggest first, Sam is watching! Can she afford the skate wheel?



Total: ¢ Can she buy it? YES / NO (circle one)

- 2 The Martian scout wants a sticker AND a marble. Adding two prices is just adding the numbers: $8¢ + 15¢ = \underline{\hspace{2cm}}$



- 3 How much MORE is the space rock than the skate wheel? Tall stairs from 45 — use the boxes!

45 more: ¢

- 4 Sam's last stand: "40¢ takes at least SIX coins!" Prove him wrong — what is the **fewest** number of coins that makes exactly 40¢?

CASE CLOSED: an agent who counts can never be short-changed. Nice work, Agent Penelope.