

MANAGERIAL ACCOUNTING · CHAPTER 1 · PRODUCT VS. PERIOD COSTS

The Board Forge — Assessment

Work these on your own, then we'll go through them together on the screen.

Name _____

Date _____

Section _____

Wickfield Candle Co. — the month of June

Wickfield poured candles all June. Here are its seven costs for the month:

Wax	\$17,000	Factory rent	\$4,000
Wicks	\$1,000	Delivery of finished candles to customers	\$1,200
The two pourers' wages	\$9,000	The bookkeeper	\$2,500
The factory supervisor's salary	\$5,000		

PART 1 — SEVEN QUESTIONS

1 + 2 Product or period? And which cost category?

For each of Wickfield's seven costs, mark whether it is a **product cost** or a **period cost**, then name its **cost category** — Direct materials, Direct labor, Overhead, Selling, or Administrative.

COST	AMOUNT	PRODUCT / PERIOD	COST CATEGORY
Wax	\$17,000	Product	Direct materials
Wicks	\$1,000	Product	DM or O/H*
Delivery of finished candles to customers	\$1,200	Period	Selling
The two pourers' wages	\$9,000	Product	Direct labor
The bookkeeper	\$2,500	Period	Administrative
Factory rent	\$4,000	Product	Overhead
The factory supervisor's salary	\$5,000	Product	Overhead

* **Wicks** are a direct material by definition, but the cost per candle is so small that many shops stop tracing it and treat wicks as an **indirect material — Overhead**. Accept either. **Wax** is the clean contrast: unambiguously direct. Both are product costs, so the Product/Period answer is Product either way.

3 The cost of a candle, and where those costs end up.

Wickfield **made 10,000 candles** in June and **sold 8,000**. Work the cost of a candle, then the two places those product costs land.

Total product cost for June

\$36,000

Cost of one candle

\$3.60

per candle

Cost of the candles that sold

\$28,800

Cost of the candles still on the shelf at month end

\$7,200

SHOW YOUR WORK

4 June's income, and what one misfiled cost does to it.

Every candle sold for **\$5**. Work June's income. Then work it again **as if the factory rent were a period cost** instead of a product cost.

Total period cost for June

\$3,700

June net income

\$7,500

June net income with the rent treated as a period cost

\$6,700

SHOW YOUR WORK

5 Reclassify a cost. Circle one.

A **period cost** is reclassified as a **product cost**. Some of this month's candles are unsold. This month:

- ☐ A Net income falls.
- ☒ B Net income rises and the value of unsold candles rises.
- ☐ C Nothing changes until the candles sell.
- ☐ D The value of unsold candles falls.

A MONTH LATER — JULY

6 A new month. Product or period?

In **July**, Wickfield poured **20,000 candles**. Two new costs appear this month. Mark each cost **product** or **period**.

COST	AMOUNT	PRODUCT / PERIOD
Wax	\$22,000	Product
Delivery of candles to customers	\$1,500	Period
The two pourers' wages	\$12,000	Product
Factory power and light	\$1,000	Product
Advertising	\$2,000	Period
Wicks	\$2,000	Product
Factory rent	\$4,000	Product
The bookkeeper	\$2,500	Period
The factory supervisor's salary	\$5,000	Product

7 Cost first, then price.

Wickfield sets its **sales price at 40% above what a candle costs to make**. Work the price of one July candle.

Total product cost for July

\$46,000

Product cost per candle

\$2.30

 per candle

Sales price per candle (cost + 40%)

\$3.22

 per candle

SHOW YOUR WORK

THE BOARD FORGE — ASSESSMENT · PART 2

Post four transactions on the horizontal statements model

Same company, Wickfield Candle Co. Post each transaction across the statements.

How to fill it in: in every account that moves, write the dollar amount and its direction (+ up or – down). Write **NA** where a statement does not move. In the Cash Flow column, when cash moves, also circle **OA** (operating), **IA** (investing), or **FA** (financing).

1. Wickfield paid **\$1,800** cash for a magazine advertisement.
2. Wickfield paid **\$2,400** cash for the factory's electricity bill.
3. Wickfield bought **\$6,000** of wax on account.
4. Wickfield sold candles for **\$5,000** cash. Those candles cost **\$3,000** to make. *Post this in two rows: first the sale, then the cost of the candles that sold.*

Transaction	BALANCE SHEET										INCOME STATEMENT					STATEMENT OF CASH FLOWS	
	ASSETS					=	LIAB.	+	STOCKHOLDERS' EQUITY								
	Cash	+	Accts. Rec.	+	Inventory	=	Accts. Pay.	+	C. Stk.	+	Ret. Earn.	Rev.	−	Exp.	=		Net Inc.
1 · \$1,800 magazine ad	−1,800	+	NA	+	NA	=	NA	+	NA	+	−1,800	NA	−	+1,800	=	−1,800	−1,800 OA
2 · \$2,400 factory electricity	−2,400	+	NA	+	+2,400	=	NA	+	NA	+	NA	NA	−	NA	=	NA	−2,400 OA
3 · \$6,000 wax on account	NA	+	NA	+	+6,000	=	+6,000	+	NA	+	NA	NA	−	NA	=	NA	NA
4a · sold candles for \$5,000 (the sale)	+5,000	+	NA	+	NA	=	NA	+	NA	+	+5,000	+5,000	−	NA	=	+5,000	+5,000 OA
4b · those candles cost \$3,000 (the expense)	NA	+	NA	+	−3,000	=	NA	+	NA	+	−3,000	NA	−	+3,000	=	−3,000	NA

Assets = Liabilities + Stockholders' Equity across the balance sheet · Revenue – Expenses = Net Income across the income statement. Transaction 2 is the one to think hardest about: is the factory's electricity a cost of running the business this month, or a cost of the candles?