

# Chapter 11

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## Current Liabilities and Payroll

### T Questions

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1. A *current* liability is one that is payable within the coming year or within the company's normal operating cycle if longer than a year. All other liabilities are *long-term*.  
  
A *contingent* liability is a potential liability that has not yet materialized but may do so in the future. Thus, it is not yet an actual liability.
2. The company reports current liabilities for the
  - short-term note payable of \$21,000,
  - interest payable of \$875 ( $\$21,000 \times .10 \times 5/12$ ).
3. Retailers act as collecting agents for the state. Stores charge their customers sales tax, but the sales tax belongs to the state. The store has a liability to pay the state the amount of tax collected.
4. *Current portion of long-term debt* is the amount of the principal of long-term debt due within one year. This amount is the current maturity of long-term notes payable or bonds payable that must be paid in installments. Because this amount is due within one year, it is reported as a current liability on the balance sheet.
5. At the beginning of the school term, tuition collected in advance is a *liability* of the school because it is an unearned revenue. At the end of the term, the tuition is a *revenue* because the tuition has been earned.
6. The company's warranty expense for the year is \$18,000 ( $\$300,000 \times .06$ ), the estimate based on the current year's sales. The *matching principle* demands that this expense be matched against the period's revenues.
7. Service businesses sell their employees' services, so employment compensation is their major expense of doing business, just as cost of goods sold is the largest expense in merchandising.
8. The compensation of the factory supervisor is the company's payroll expense. The company would debit the salary to Salary Expense. The compensation of the outside consultant would be debited to Consulting Expense.
9. Two elements of an employer's payroll expense in addition to salaries, wages, commissions, and overtime pay are *payroll taxes* and *benefits*.
10. FICA taxes are Social Security taxes, paid by employees and employers. The funds provide retirement, disability, and medical benefits.
11. Required deductions—Employee withheld income tax and FICA tax  
Optional deductions—Union dues, insurance payments, savings plans, and gifts to charities.
12. The employer pays state and federal unemployment taxes. These tax funds aid unemployed workers.

13. FICA tax of \$5,600 (8 % of \$70,000) was withheld from this employee's pay during the year.

If the employee earns \$77,000, total Social Security tax is \$6,029 ( $\$75,000 \times .08 = \$6,000$ ) + [ $(\$77,000 - \$75,000) \times .0145 = \$29$ ].

14. Three internal control features designed to safeguard payroll cash are:

- (1) the separation of the responsibility for hiring and terminating employees from the responsibility for distributing paychecks.
- (2) the requirement that each employee wear a photo ID badge.
- (3) the designation of an employee from the home office as the occasional distributor of paychecks.

These controls help ensure that cash is paid only to bona fide employees.

## T Daily Exercises

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(5 min.) **DE 11-1**

### Similarities:

Both *accounts payable* and *short-term notes payable* are current liabilities of known amount.

### Differences:

An *account payable* is an amount owed on open account with no promissory note. Accounts payable do not bear interest expense.

A *note payable* is a more formal arrangement than an account payable. The debtor usually signs a promissory note, which serves as evidence of the debt. Notes payable bear interest expense.

Journal					
DATE		ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
20X1					
June	30	Inventory		8,000	
		Note payable, Short-Term			8,000
		Purchased inventory on a one-year, 10% note.			
Dec.	31	Interest Expense ( $\$8,000 \times .10 \times 6/12$ )		400	
		Interest Payable			400
		Accrued interest expense at year end.			
20X2					
June	30	Note Payable, Short-Term		8,000	
		Interest Payable		400	
		Interest Expense ( $\$8,000 \times .10 \times 6/12$ )		400	
		Cash			8,800
		Paid note payable and interest at maturity.			

*Req. 1*

Balance Sheet December 31, 20X1		
ASSETS	LIABILITIES	
	Current liabilities:	
	Note payable, short-term	\$8,000
	Interest payable	
	( $\$8,000 \times .10 \times 6/12$ )	400

Income Statement Year Ended December 31, 20X1	
Revenues:	
Expenses:	
Interest expense ( $\$8,000 \times .10 \times 6/12$ )	\$400

*Req. 2*

The 20X2 income statement will report:

Interest expense ( $\$8,000 \times .10 \times 6/12$ )..... \$400

(10 min.) **DE 11-4**

Req. 1

Procter and Gamble signed the note payable to *borrow money*. P & G received cash.

Req. 2

Journal				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
20X1				
Dec. 31	Interest Expense ( $\$100,000 \times .12 \times 45/360$ )		1,500	
	Note Payable			1,500
	Accrued interest expense at year end.			

Req. 3

BALANCE SHEET

Current liabilities:

    Note payable, short-term ( $\$98,000 + \$1,500$ )..... \$99,500

Req. 4

Journal				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
20X2				
Jan. 15	Interest Expense ( $\$100,000 \times .12 \times 15/360$ )		500	
	Note Payable			500
	To record interest expense.			
15	Note Payable, Short-Term			
	( $\$98,000 + \$1,500 + \$500$ )		100,000	
	Cash			100,000
	To pay note payable at maturity.			

(5-10 min.) **DE 11-5**

Req. 1

Journal				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	Promotion Expense ( $1,000,000 \times \$.0015$ )		1,500	
	Air Traffic Liability			1,500
	Air Traffic Liability		300	
	Cash ( $200,000 / 1,000,000 \times \$1,500$ )			300

Req. 2

Air Traffic Liability	
300	1,500
Bal.	1,200

*Req. 1*

<b>Journal</b>				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	Cash ( $\$600,000 \times .30$ )		180,000	
	Notes Receivable ( $\$600,000 - \$180,000$ )		420,000	
	Sales Revenue			600,000
	To record sales on account.			
	Warranty Expense ( $\$600,000 \times .05$ )		30,000	
	Estimated Warranty Payable			30,000
	To accrue warranty expense.			
	Estimated Warranty Payable		22,000	
	Cash			22,000
	To pay warranty claims.			

*Req. 2*

Estimated Warranty Payable	
22,000	30,000
Bal.	8,000

This amount must be estimated because the company does not know in advance exactly how much it will have to pay to satisfy warranty claims.

Warranty expense = \$30,000

The *matching principle* addresses this situation.

The warranty expense for the year does not necessarily equal the year's cash payments for warranties. Cash payments for warranties do not determine the amount of warranty expense for that year. Instead, the warranty expense is estimated and matched against revenue during the period of the sale, regardless of when the company pays for the warranty claims.

1. These are contingent liabilities because at the time of the note Harley-Davidson, Inc., was not liable for any of these product losses.
2. In the United States, the contingency can become a real liability if the user of a Harley-Davidson product suffers a loss for which the company is responsible.  
  
Harley-Davidson must pay for all losses up to \$3 million and all losses above \$25 million. The company is insured against losses between \$3 million and \$25 million.
3. Outside the United States, the contingency becomes a real liability the same way—if a Harley-Davidson user suffers a loss for which the company is responsible.  
  
Outside the United States, Harley-Davidson must pay only for losses above \$25 million because the company is insured against losses up to \$25 million.

(5 min.) **DE 11-9**

LABOR COST

Most Important	Middle	Least Important
Accounting firm, because the business sells its labor.	Wendy's uses lots of labor but less than an accounting firm.	Toyota Motor Corporation, because production is largely automated.

(10 min.) **DE 11-10**

1. Straight-time pay for 40 hours.....	\$600
Overtime pay for 10 hours: $[10 \times (\frac{\$600}{40} \times 1.5)]$ .....	<u>225</u>
Total pay.....	<u>\$825</u>
2. Total pay.....	\$825.00
Less: Withheld income tax ( $\$825 \times .09$ ).....	\$74.25
FICA tax ( $\$825 \times .08$ ).....	<u>66.00</u>
Net pay.....	<u>\$684.75</u>

(10 min.) **DE 11-11**

Straight-time pay for 40 hours.....	\$ 600.00
Overtime pay for 10 hours: $[10 \times (\frac{\$600}{40} \times 1.5)]$ .....	<u>225.00</u>
Total pay to employee.....	825.00
Employer payroll taxes:	
FICA tax ( $\$825 \times .08$ ).....	\$66.00
State unemployment tax ( $\$825 \times .054$ ).....	44.55
Federal unemployment tax ( $\$825 \times .008$ ).....	6.60
Pension ( $\$825 \times .06$ ).....	49.50
Health insurance ( $\$60 / 4$ ).....	15.00
Disability insurance ( $\$8 / 4$ ).....	<u>2.00</u>
Total expense of employer.....	<u>183.65</u>
	<u>\$1,008.65</u>

(10 min.) **DE 11-12**

a.

<b>Journal</b>				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	Salary Expense (see DE 11-10)		825.00	
	Employee Income Tax Payable (see DE 11-10)			74.25
	FICA Tax Payable (see DE 11-10)			66.00
	Salary Payable to Employee			684.75
	To record salary expense.			

b.

<b>Journal</b>				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	Payroll Tax Expense		117.15	
	FICA Tax Payable (DE 11-11)			66.00
	State Unemployment Tax Payable (DE 11-11)			44.55
	Federal Unemployment Tax Payable (DE 11-11)			6.60
	To record employer's payroll taxes.			

c.

<b>Journal</b>				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	Pension Expense (DE 11-11)		49.50	
	Health Insurance Expense for Employees (DE 11-11)		15.00	
	Disability Insurance Expense for Employees (DE 11-11)		2.00	
	Employee Benefits Payable			66.50
	To record employee benefits payable by employer.			

(10 min.) **DE 11-13**

Gross pay.....		\$8,000	
Less: Payroll taxes:			
Withheld income tax (\$8,000 × .15).....	\$1,200		
FICA tax [\$75,000 ! (\$8,000 × 9)] × .08.....	240	(1,440)	
Pension contribution (\$8,000 × .05).....		(400)	
Health insurance.....		(200)	
Net pay.....			<u>\$5,960</u>

(10 min.) **DE 11-14**

<b>Journal</b>				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	Salary Expense		1,000	
	Payroll Tax Payable			230
	Employee Union Dues Payable			20
	Salary Payable to Employee			750
	To record salary expense.			
	Payroll Tax Expense		110	
	Payroll Tax Payable			110
	To record employer's payroll taxes.			
	Health Insurance Expense for Employees		90	
	Employee Benefits Payable			90
	To record employee benefits payable by employer.			

(10 min.) **DE 11-15**

1.	Net (take-home) pay.....	\$9,384.30
2.	Office Salary Expense.....	\$ 4,464
	Sales Salary Expense.....	<u>9,190</u>
	Total salary expense.....	<u>\$13,654</u>
3.	Employees paid:	
	a. Federal income tax.....	\$3,167.76
	b. FICA tax.....	861.94
4.	Employer's expense for:	
	a. Employee federal income tax.....	\$ 0
	b. FICA tax (same amount as employee).....	861.94
5.	Employees who earned less than \$75,000:	
	Chen } Their FICA tax is 8% of total gross pay	
	Dean }	
	Ellis }	
	Employees who earned more than \$75,000:	
	Trimble – FICA tax is \$ 0	

(10 min.) **DE 11-16**

Gross pay.....		\$23,210.00
Employer payroll taxes:		
FICA tax (\$23,210 × .08).....	\$1,856.80	
State unemployment tax (\$7,000 × .054).....	378.00	
Federal unemployment tax (\$7,000 × .008)..	<u>56.00</u>	2,290.80
Pension (\$23,210 × .07).....		1,624.70
Health insurance (\$140 × 12).....		<u>1,680.00</u>
Total payroll expense.....		<u>\$28,805.50</u>

(5-10 min.) **DE 11-17**

1. Internal controls to safeguard payroll disbursements:
  - Separate the duties of hiring and firing employees from the duties of accounting for payroll and distributing paychecks.
  - Require employees to wear an identification badge.
  - Have a formal time-keeping system.
2. Using two payroll bank accounts limits the number of outstanding checks for the bank reconciliation. This decreases accounting expense.

Another control for efficiency in the payroll area is the use of computers, which compute amounts and prepare reports.

(10 min.) **DE 11-18**

Blumenthal's Balance Sheet December 31, 2000	
Current liabilities:	
Accounts payable	\$44,140
Current portion of long-term debt	20,000
Salary payable to employees	9,384
Unearned revenue	4,430
Employee withheld income tax payable	3,168
Interest payable	1,116
Employee FICA tax payable	862
Employer FICA tax payable	862
United Way charities payable	155
Union dues payable	85
Total current liabilities	\$84,202

(5-10 min.) **DE 11-19**

*Req. 1*

Taxes Payable -	amounts owed to the government for taxes
Short-term Debt -	amount owed on short-term notes payable
Accounts Payable -	amounts owed to suppliers for products or services that IBM purchased on open account
Compensation and Benefits Payable -	accrued expenses for employee salaries, wages, and benefits that IBM has incurred but not yet paid
Unearned Revenue -	IBM's liability to provide customers with goods or services for which the customers have paid IBM in advance
Other Accrued Expenses and Liabilities -	all other accrued expenses incurred but not yet paid

*Req. 2*

IBM will pay these liabilities no later than December 31, 2000. This is clear because these liabilities are reported as current liabilities on the balance sheet.

**T Exercises**

(5-10 min.) **E 11-2**

(5-15 min.) **E 11-1**

Sales recorded initially in a separate account from sales tax:

Journal						
DATE		ACCOUNTS AND EXPLANATIONS	POST. REF.		DEBIT	CREDIT
Mar.	31	Cash ( $\$200,000 \times 1.05$ )			210,000	
		Sales Revenue				200,000
		Sales Tax Payable				
		( $\$200,000 \times .05$ )				10,000
Apr.	6	Sales Tax Payable			10,000	
		Cash				10,000

Sales tax recorded initially in the Sales Revenue account:

Journal					
DATE		ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Mar.	31	Cash		210,000	
		Sales Revenue ( $\$200,000 \times 1.05$ )			210,000
Mar.	31	Sales Revenue			
		$[\$210,000 - (\$210,000 \times 1.05)]$		10,000	
		Sales Tax Payable			10,000
Apr.	6	Sales Tax Payable		10,000	
		Cash			10,000

1.

Accrued Payroll Liabilities			
Payments	262,874	Beg. bal.	25,068
		Expense	265,000
		End. bal.	27,194

The ending balance agrees with the balance given in the text.

2. Gift certificates outstanding are *unearned revenues* that Pier 1 has collected in advance.



(5-10 min.) **E 11-5**

(10 min.) **E 11-6**

Journal				
DATE		ACCOUNTS AND EXPLANATIONS	POST. REF.	CREDIT
20X2				
Apr.	1	Equipment		15,000
		Note Payable, Short-term		15,000
Dec.	31	Interest Expense		
		(\$15,000 × .08 × 9/12)	900	
		Interest Payable		900
20X3				
Apr.	1	Note Payable, Short-term		15,000
		Interest Payable		900
		Interest Expense		
		(\$15,000 × .08 × 3/12)	300	
		Cash [\$15,000 + (\$15,000 × .08)]		16,200

Req. 1

Journal				
DATE		ACCOUNTS AND EXPLANATIONS	POST. REF.	CREDIT
20X4				
a.	Sept.	1	Cash (\$12,000 ! \$480)	11,520
			Note Payable, Short-term	11,520
			(Discount = \$12,000 × .08 × 6/12 = \$480)	
b.	Dec.	31	Interest Expense	
			(\$12,000 × .08 × 4/12)	320
			Note Payable	320
20X5				
c.	Mar.	1	Interest Expense	
			(\$12,000 × .08 × 2/12)	160
			Note Payable	160
		1	Note Payable	
			(\$11,520 + \$320 + \$160)	12,000
			Cash	12,000

Req. 2

Tic-Toc Watch Repair	
Balance Sheet (partial)	
December 31, 20X4	
Current liabilities:	
Note payable, short-term (\$11,520 + \$320)	\$11,840

(5-10 min.) **E 11-7**

Note X –

The company is a defendant in lawsuits brought against the marketing and distribution of its products. Damages of \$9.1 million are claimed against the company, but management denies the charges and is vigorously defending itself. Management does not believe that any liabilities resulting from them will significantly affect the company's financial position.

*Note:* Any note that captures the essence of the situation is acceptable.

(10-15 min.) **E 11-8**

$$\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}} = \frac{\$490,000}{\$260,000} = 1.88$$

Ciliotta should pay off \$30,000 of current liabilities. Then the current ratio will be:

$$\frac{\$490,000 - \$30,000}{\$260,000 - \$30,000} = \frac{\$460,000}{\$230,000} = 2.00$$

(10-15 min.) **E 11-9**

Gross pay: $\$750 + (\$80,000 \times .10)$		\$8,750.00
Deductions:		
Charitable contribution	\$ 25.00	
Health insurance	22.50	
Income tax ( $\$8,750 \times .10$ )	875.00	
FICA tax [ $(\$75,000 - \$72,140) \times .08$ ]	<u>228.80</u>	<u>(1,151.30)</u>
Net pay		<u>\$7,598.70</u>

(10-15 min.) **E 11-10**

*Req. a (gross pay and net pay)*

Straight-time earnings for 40 hours ( $40 \times \$6$ )	\$240.00	
Overtime pay for the next 10 hours:		
$10 \text{ hours} \times \$6 \times 1.5$	<u>90.00</u>	
Total gross pay for the week		\$330.00
Deductions:		
Withheld income tax ( $\$330 \times .07$ )	\$ 23.10	
FICA tax ( $\$330 \times .08$ )	26.40	
United Fund contribution	<u>5.00</u>	
Total deductions		<u>(54.50)</u>
Net pay		<u>\$275.50</u>

*Req. b (employer's payroll entry)*

<b>Journal</b>				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	Wage Expense		330.00	
	Employee Income Tax Payable			23.10
	FICA Tax Payable			26.40
	Employee United Fund Contribution Payable			5.00
	Wages Payable			275.50

(10-15 min.) **E 11-11**

(10 min.) **E 11-12**

<b>Journal</b>				
DATE	ACCOUNTS AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	<i>Entry for payroll taxes:</i>			
	Payroll Tax Expense		7,636.20	
	FICA Tax Payable			
	(\$88,400 × .08)			7,072.00
	State Unemployment Tax			
	Payable (\$9,100 × .054)			491.40
	Federal Unemployment Tax			
	Payable (\$9,100 × .008)			72.80
	<i>Entry for benefits:</i>			
	Health Insurance Expense for			
	Employees		2,062.15	
	Life Insurance Expense for			
	Employees		351.07	
	Pension Expense (\$92,000 × .08)		7,360.00	
	Employee Benefits Payable			9,773.22

<b>Income statement:</b>	
Expenses:	
Salary expense	\$900,000
Payroll tax expense (\$900,000 × .09)	81,000
<b>Balance sheet:</b>	
Current liabilities:	
Salary payable	\$ 4,000
Payroll tax payable	1,000

(5-15 min.) **E 11-13**

	December 31				
	20X1	20X2	20X3	20X4	20X5
Current liabilities:					
Current portion of long-term debt.....	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Interest payable.....	450,000	360,000	270,000	180,000	90,000
Long-term liabilities:					
Long-term debt.....	4,000,000	3,000,000	2,000,000	1,000,000	—

Interest computations:

20X1	\$5,000,000	× .09	=	\$450,000
20X2	4,000,000	× .09	=	360,000
20X3	3,000,000	× .09	=	270,000
20X4	2,000,000	× .09	=	180,000
20X5	1,000,000	× .09	=	90,000

(15-20 min.) **E 11-14**

Wilson Sporting Goods	
Balance Sheet (partial)	
December 31, 20X1	
Current liabilities (partial):	
a. Estimated warranty payable ( $\$1,000,000 \times .034$ )	\$ 34,000
b. Current portion of long-term note payable	20,000
Interest payable ( $\$200,000 \times .09 \times 1/12$ )	1,500
c. Unearned sales revenue	9,000
d. Employee withheld income tax payable	
( $\$195,000 \times .09$ )	17,550
FICA tax payable ( $\$195,000 \times .08 \times 2$ )	31,200
State unemployment tax payable ( $\$195,000 \times .054$ )	10,530
Federal unemployment tax payable	1,560
( $\$195,000 \times .008$ )	
Total current liabilities (partial):	\$125,340
Long-term liabilities (partial):	
Note payable ( $\$200,000 - \$20,000$ )	\$180,000

*Req. 1*

Current ratio reported by PepsiCo =

	20X2		20X1	
Total current assets	\$4.6	=	1.24	
Total current liabilities	\$3.7			
			\$4.1	=
			\$4.8	=
				0.85

The current ratio increased dramatically in 20X2.

*Req. 2*

	20X2	
Current ratio without reclassification of current liabilities as long-term	\$4.6	=
	\$3.7 + \$2.1	0.79

It appears that PepsiCo reclassified the current liabilities as long-term in order to keep the current ratio from going too low.

*Req. 1*

Analysis of T-accounts is helpful.

Short-term Debt Payable			
		Dec. 31, 20X1 Balance	228
20X2 Payments	X	20X2 Borrowing	1,106
		Dec. 31, 20X2 Balance	707

$$\begin{aligned} \$228 + \$1,106 - X &= \$707 \\ X &= \$627 \text{ million} \end{aligned}$$

During 20X2, PepsiCo paid off short-term debt of \$627 million.

*Req. 2*

Salary Payable			
		Dec. 31, 20X1 Balance	334
20X2 Payments	3,200	20X2 Expense	X
		Dec. 31, 20X2 Balance	327

$$\begin{aligned} \$334 + X - \$3,200 &= \$327 \\ X &= \$3,193 \text{ million} \end{aligned}$$

PepsiCo's salary expense during 20X2 was \$3,193 million.