Unit 1 · Careers & Income Cheat Sheet

Unit 1 focus: compare pay, read a paycheck and understand deductions

1 HOW WORK PAYS

Term	Meaning / quick example
Hourly wage	Dollars per hour worked; annual pay depends on paid hours.
Salary	Annual base pay divided across pay periods.
Commission	Percent of sales; pay may vary each month.
Benefits	Noncash compensation: insurance, paid leave, employer match.

2 PAY-FREQUENCY CONVERSIONS

Frequency	Checks per year
Weekly	52
Biweekly (every 2 weeks)	26
Semimonthly (twice a month)	24
Monthly	12

Standard course counts. $\text{Pay per check} = \dfrac{\text{annual pay}}{\text{checks per year}}$. A $52,000 salary gives $2,000 gross biweekly.

3 HOURLY PAY & OVERTIME

For this example, hours above 40 in one workweek earn 1.5 times the regular wage. Eligibility varies.

Example: $20 per hour; 46 hours in one week.
Regular: $40(20) = 800$
Overtime: $6(1.5)(20) = 180$

Answer: $980 gross for the week

4 SALARY & COMMISSION

Use paid weeks, not automatically 52. Gross pay is before deductions.

Example: $21 per hour, 40 hours, 50 paid weeks.
Annual: $21(40)(50) = 42{,}000$
Commission: $2,000 base + 4% of $30,000 sales
Monthly: $2{,}000 + 0.04(30{,}000) = 3{,}200$

Answer: $42,000 yearly; $3,200 monthly

5 GROSS, NET & DEDUCTIONS

Term	Meaning / quick example
Gross pay	Total earnings before deductions.
Net pay	Gross minus all deductions; money received.
Withholding	Tax sent in advance; may differ from final tax owed.
Pre-tax deduction	May lower income-tax wages; payroll-tax treatment can differ.

6 READ A PAYCHECK

Deductions are fictional. Payroll tax uses the course model: 6.2% Social Security + 1.45% Medicare = 7.65% of wages shown; ignore wage caps.

Example: $2,000 gross per biweekly paycheck.
Taxes: $150 federal + $153 payroll + $90 state
Other: $60 health + $100 retirement
Total deducted: $150 + 153 + 90 + 60 + 100 = 553$

Answer: $1,447 net per check

Unit 1 · Careers & Income Cheat Sheet

More practice: taxes, benefits and the full value of a job offer

1 CHECK YOUR PAY STUB

Check	What to compare
Hours & rate	Match timecard; separate overtime by workweek.
Current period	One paycheck, not annual income.
YTD	Year-to-date totals since January 1.
Deductions	Check authorized benefits and tax amounts.

With steady $2,000 gross each period: $\frac{18{,}000}{2{,}000} = 9$ pay periods. Report discrepancies to payroll.

2 ILLUSTRATIVE TAX SLICES

Taxable income slice	Course rate
First $12,000	10%
Above $12,000 to $48,000	12%
Above $48,000 to $103,000	22%
Above $103,000 to $197,000	24%

Course single-filer model only; not current tax law. Standard deduction: $15,000. Taxable income = max(0, gross − eligible pre-tax amounts − deduction).

3 TAX: ADD THE SLICES

Assume $54,000 gross, $15,000 deduction, no other adjustments. Federal tax only.

Example: Taxable income = $39,000.
First slice: $0.10(12{,}000) = 1{,}200$
Next slice: $0.12(27{,}000) = 3{,}240$
Add: $1{,}200 + 3{,}240 = 4{,}440$

Answer: $4,440 federal income tax

4 MARGINAL VS. EFFECTIVE

Marginal: rate on the next taxable dollar: 12% in the example.
Effective: average tax rate; state the denominator.

On gross: $\frac{4{,}440}{54{,}000} \times 100\% \approx 8.22\%$
On taxable: $\frac{4{,}440}{39{,}000} \times 100\% \approx 11.38\%$

Only the income in a higher slice gets its higher rate.

5 WHICH JOB IS BETTER?

Assume equal hours, taxes ignored, equal other benefits; full employer match earned and vested.

Example: A: $52,000 + 5% match; $80 monthly health premium. B: $56,000; no match; $350 premium.
A value: $52{,}000 + 2{,}600 - 960 = 53{,}640$
B value: $56{,}000 - 4{,}200 = 51{,}800$

Answer: A adds $1,840 of annual value

6 REMINDERS & MISTAKES

✓ Do remember

- Compare commute, leave, schedule and growth too; B offers more cash before premiums.
- Employer match is retirement value, not take-home pay.

✗ Common mistakes

- “Higher bracket taxes all pay”: only the slice changes.
- Budgeting on gross: use net; benefits and taxes vary.
- Guaranteed overtime: do not assume it in a basic budget.