



Textbook Analysis Matrix

CHEM 361 Inorganic Chemistry | 7 Books × 9 Dimensions | Data-Driven Curriculum Design

BOOKS ANALYZED (Short Name → Full Title)

Short Name	Full Title	Chunks	Type
Atkins	Inorganic Chemistry (Atkins/Shriver)	2,494	Comprehensive
Basset	Inorganic Chemistry (Basset)	446	Nomenclature-focused
Douglas	★ Descriptive Inorganic Chemistry (Douglas/McDaniel/Alexander)	1,495	Descriptive
House	★ Descriptive Inorganic Chemistry (House)	1,027	Descriptive
Housecroft	Inorganic Chemistry (Housecroft/Sharpe)	2,375	Comprehensive
Advanced	Advanced Inorganic Chemistry Applications	351	Advanced/Mechanisms
JD Lee	Concise Inorganic Chemistry (JD Lee)	565	Concise/Solid State

★ Two different "Descriptive Inorganic Chemistry" textbooks are included (Douglas edition + House edition)

TOTAL CHUNKS

8,753

from 7 textbooks

BEST OVERALL

House

Rating: 8/10

MOST READABLE

JD Lee

Flesch: 51.2

MOST VISUALS

Housecroft

74 figures

TOPIC COVERAGE QUALITY

Topic	Atkins	Basset	Douglas	House	Housecroft	Advanced	JD Lee
Coordination	excellent	excellent	fair	* excellent	good	excellent	good
Main Group	good	good	excellent	* excellent	excellent	limited	excellent
Solid State	fair	fair	limited	fair	fair	limited	* good
Thermo	good	limited	good	good	good	good	good

READABILITY METRICS

Metric	Atkins	Basset	Douglas	House	Housecroft	Advanced	JD Lee
Flesch Score	36.4	30.5	38.6	48.8	35.3	41.9	* 51.2
Avg Sent Len	19.3	31.0	16.9	16.6	21.0	15.8	* 14.0
Jargon/1000	18.6	* 12.6	16.2	13.7	20.2	28.1	29.0
Level	difficult	difficult	difficult	difficult	difficult	difficult	standard

VISUAL ELEMENTS

Aspect	Atkins	Basset	Douglas	House	Housecroft	Advanced	JD Lee

PROBLEM SOLVING

Aspect	Atkins	Basset	Douglas	House	Housecroft	Advanced	JD Lee

Density	medium	high	high	medium	* high	medium	medium
Figure Count	29	54	68	61	* 74	43	46
Integration	high	high	high	high	high	high	high

Examples	many	few	many	many	many	few	few
Step-by-step	✓	✓	✓	✓	✓	✓	✓
Self-check	✓	✓	✓	✓	✓	✓	✓

PEDAGOGY

Aspect	Atkins	Basset	Douglas	House	Housecroft	Advanced	JD Lee
Difficulty	advanced	intermed	intermed	intermed	intermed	advanced	intermed
Cog Load	high	medium	medium	medium	medium	high	medium
Why:What %	40%	40%	40%	40%	40%	50%	* 50%

REAL-WORLD APPLICATIONS

Aspect	Atkins	Basset	Douglas	House	Housecroft	Advanced	JD Lee
Density	frequent	frequent	occasional	occasional	frequent	occasional	occasional
App Count	13	4	8	5	* 21	10	5

META-BOOK SOURCE STRATEGY

UNIT 1 Main Group	PRIMARY House excellent MG + readable	THEORY JD Lee most readable	EXAMPLES Douglas many worked examples	VISUALS Housecroft 74 figures
UNIT 2 Coordination	PRIMARY Atkins excellent theory	PRACTICAL House excellent coord	NOMENCLATURE Basset systematic rules	MECHANISMS Advanced reaction mechanisms
UNIT 3 Solid State	PRIMARY JD Lee only "good" SS	BAND THEORY Atkins theoretical depth	APPLICATIONS Housecroft 21 applications	STRUCTURES Basset crystal diagrams

■ excellent/high/many
 ■ good/medium
 ■ fair/few
 ■ limited/low
 ■ * best in category