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AP Chemistry Contents

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Unit 1 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

1.1 Moles and Molar Mass

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U1/1.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

1.2 Mass Spectra of Elements

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U1/1.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

1.3 Elemental Composition of Pu

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U1/1.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

1.4 Composition of Mixtures

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U1/1.4.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

1.5 Atomic Structure and Electron

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U1/1.5.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

1.6 Photoelectron Spectroscopy

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U1/1.6.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

1.7 Periodic Trends

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U1/1.7.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

1.8 Valence Electrons and Ionic C

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U1/1.8.png}
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Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 2 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

2.1 Types of Chemical Bonds

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U2/2.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

2.2 Intramolecular Force and Pote

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U2/2.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

2.3 Structure of Ionic Solids

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U2/2.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

2.4 Structure of Metals and Alloys

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U2/2.4.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

2.5 Lewis Diagrams

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U2/2.5.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

2.6 Resonance and Formal Charge

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U2/2.6.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

2.7 VSEPR and Hybridization

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U2/2.7.png}
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Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 3 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

3.1 Intermolecular and Interparti

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.2 Properties of Solids

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.3 Solids, Liquids, and Gases

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.4 Ideal Gas Law

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.4.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.5 Kinetic Molecular Theory

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.5.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.6 Deviations from Ideal Gas Law

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.6.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.7 Solutions and Mixtures

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.7.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.8 Representation of Solutions

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U3/3.8.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

3.9 Separation of Solutions and M

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U3/3.9.png}
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Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 4 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

4.1 Introduction for Reactions

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U4/4.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.2 Net Ionic Equations

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U4/4.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.3 Representations of Reactions

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U4/4.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.4 Physical and Chemical Chang

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.5 Stoichiometry

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U4/4.5.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.6 Introduction to Titration

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U4/4.6.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.7 Types of Chemical Reactions

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U4/4.7.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.8 Introduction to Oxidation-Red

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U4/4.8.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

4.9 Oxidation-Reduction (Redox)

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U4/4.9.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 5 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

5.1 Reaction Rates

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.2 Introduction to Rate Law

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.3 Concentration Changes Over T

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.4 Elementary Reactions

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.4.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.5 Collision Model

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.5.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.6 Reaction Energy Profile

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U5/5.6.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.7 Introduction to Reaction Mecl

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.7.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.8 Reaction Mechanism and Rate

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.8.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.9 Pre-Equilibrium Approximati

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.10 Multistep Reaction Energy P

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U5/5.10.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

5.11 Catalysis

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U5/5.11.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 6 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

6.1 Endothermic and Exothermic

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.2 Energy Diagram

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.3 Heat Transfer and Thermal Ec

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.4 Heating Curve

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.4.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.5 Calorimetry

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U6/6.5.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.6 Introduction to Enthalpy of R

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.6.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.7 Hess's Law

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.7.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.8 Standard Enthalpies of Forma

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.8.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

6.9 Bond Enthalpies

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U6/6.9.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 7 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

7.1 Introduction to Equilibrium

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U7/7.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.2 Direction of Reversible Reacti

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U7/7.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.3 Reaction Quotient and Equilib

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U7/7.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.4 Calculating the Equilibrium C

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U7/7.4.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.5 Magnitude of the Equilibrium

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U7/7.5.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.6 Properties of the Equilibrium

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.7 Calculating Equilibrium Conc

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U7/7.7.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.8 Introduction to Le Châtelier's

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.9 Le Châtelier's Principle

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U7/7.9.png}
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Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.10 Introduction to Solubility Eq

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U7/7.10.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.11 Common Ion Effect

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U7/7.11.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

7.12 pH and Solubility

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 8 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

8.1 Introduction to Acids and Bas

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.2 pH and pOH of Strong Acids a

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U8/8.2.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.3 Weak Acid and Base Equilibri

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U8/8.3.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.4 Acid-Base Reactions and Buffe

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.5 Acid-Base Titrations

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.6 Molecular Structure of Acids a

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.7 pH and pKa

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.8 Properties of Buffers

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.9 Henderson-Hasselbalch Equat

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.10 Buffer Capacity

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

8.11 Titration Curves

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

Unit 9 Preview

Unit Preview

Example

How to use

This preview is your **map**. Use the TOC to jump into any Topic page. Fill each Topic page later — the links already exist.

Topics in this Unit

9.1 Introduction to Entropy

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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\includegraphics[width=\linewidth]{diagrams/U9/9.1.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.2 Absolute Entropy and Entropy

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.3 Gibbs Free Energy and Therm

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.4 Thermodynamic and Kinetic C

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.5 Free Energy and Equilibrium

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.6 Free Energy of Dissolution

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.7 Coupled Reactions

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.8 Galvanic (Voltaic) and Electrol

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.9 Cell Potential and Free Energy

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.10 Cell Potential Under Nonstan

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

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```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs

9.11 Electrolysis and Faraday's La

Main Notes

Definition

Key Idea

Write the core definition/idea here.

Equation

Must-Know Relationship

(equation / proportionality / unit analysis)

Example

Micro Example

(one short worked example or quick check)

Diagram / Figure

Diagram Placeholder

Drop an image later:

```
\includegraphics[width=\linewidth]{diagrams/U9/9.11.png}
```

Extra Notes

⋆ traps

⋆ quick rules

⋆ units/signs