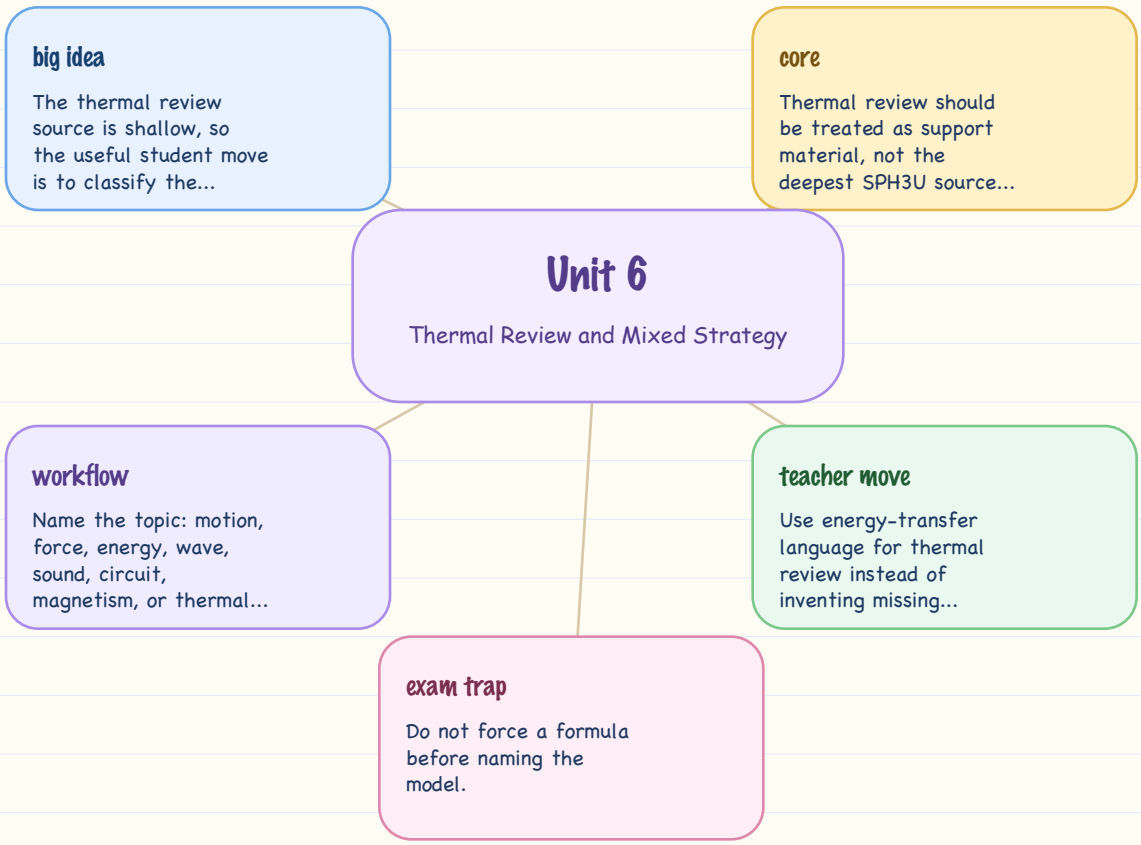
Unit 6 Visual Notebook

Thermal Review and Mixed SPH3U Strategy

DISTILLED FROM VIDEO

Diagram-first study pages using the same source-locked SPH3U workflows and teacher moves.



Visual Strategy

Step 1 classify topic → **Step 2** choose model → **Step 3** write knowns → **Step 4** answer with units

Use this when stuck

- Name the topic: motion, force, energy, wave, sound, circuit, magnetism, or thermal review.
- List known values with units.
- Draw a diagram or state the system.
- Choose the relationship that matches the model.
- Solve and check whether the answer is physically reasonable.

Video teacher tips

- Use energy-transfer language for thermal review instead of inventing missing formulas.
- Read the graph feature first: slope, area, intercept, or trend.

Example and Recall

Worked example pattern

Mixed-course model choice (Unit 6 distilled pattern: review source + course model selection)

Read the situation before selecting an equation.

If the problem involves force and acceleration, think $F_{net} = ma$.

If it involves a resistor circuit, think $V = IR$.

If it involves wave frequency and wavelength, think $v = f\lambda$.

Answer pattern: Situation first, equation second, numbers third.

Thermal review boundary (Unit 6 source note: sound/thermal content comes from junior-review parts)

Use the thermal source for vocabulary and energy-transfer intuition.

Keep claims conservative if the source does not provide a full derivation.

Flag any missing formula as a future supplement rather than inventing it.

Quick recall prompts

- Classify a mixed problem before calculating.
- Explain what kind of energy transfer is happening.
- Match equations to topics across the course.