

Divide the page into 3 areas as shown:

1. Note-taking (during lecture)
2. Key Words and Questions for Self-Test (after lecture)
3. Summary (after lecture)

<p style="text-align: center;">← 2 1/2" →</p> <p>Key Words and Questions for Self-Test</p> <p>2. After the lecture: As soon after class as possible, identify key words and formulate questions based on the information in the note-taking column. This will help to clarify meanings, reveal relationships, establish continuity, and strengthen memory. The key words and questions also serve as a basis for self-testing.</p> <p>IMPORTANT: Note any gaps in your notes, and fill them in on the facing page.</p>	<p style="text-align: center;">← 6" →</p> <p>Note-taking Area</p> <p>1. During the lecture: Use the note-taking column to record the lecture using brief and concise telegraphic sentences.</p>
<p>Summary Area</p> <p style="text-align: left;">↑ 2" ↓</p> <p>3. Summarize and Connect: Reflect on the information presented during lecture. Ask yourself questions such as: What information is most important? What is the significance of these facts? How are they connected to one another? How can I apply them? How do they fit in with what I already know? Then write a paragraph summarizing and connecting the information from the note-taking column and any information you filled in.</p>	

Cornell Note-Taking Example: Natural Sciences

<p>Key Words and Questions:</p> <p>organism organ tissues cells organelles molecule atom</p> <p>What are the seven properties of life?</p> <p>What directs the pattern of growth and development of organisms?</p> <p>homeostasis</p> <p>What interaction drives evolutionary adaptation?</p>	<p style="text-align: center;">Lecture: Intro to the Study of Life</p> <p>Hierarchy of Bio Origin: Organism: unit of life Organ: specific arrang. of diff tissues Tissues: grps of sim cells forming a functional unit Cells: basic units of struc & func - lowest level of struc capable of performing all activ of life Organelles: specialized bodies of molecules in cell Molecule: 2 + atoms held together by covalent bonds Atom: chem building blocks of all matter</p> <p>Properties of Life:</p> <ol style="list-style-type: none"> 1. Order: all other characteristics of life emerge from orgnsm's complex orgnz'n 2. Reproduction: orgnsms reproduce own kind -- life from life 3. Growth and development: heritable programs (DNA) direct pattern of growth and development, producing orgnsm characteristic of species 4. Energy utilization: orgnsms take in nrg and transform it 5. Response to environment: orgnsms rspnd to chng in the extern enviro 6. Homeostasis: regulatory mechanisms maintain orgnsm's intern enviro w/in tolerable limits, but extern enviro may fluctuate. 7. Evolutionary adaptation: Life evolves as a result of interac'n orgnsm ←————→ enviro
<p>Summary</p> <p>Life is organized by levels of biological structure. These levels increase in complexity from the lowest (the atom, the chemical building blocks of all matter) to the most complex (the organism, the unit of life). Some properties are common to all life. These properties include order, reproduction, growth and development (directed by DNA), energy utilization, response to the environment, homeostasis, and evolutionary adaptation.</p>	

Cornell Note-Taking Example: Liberal Arts

<p>Key Words and Questions:</p> <p>Circadian rhythm Sleep Hallucination Sleep spindles Delta waves REM sleep</p> <p>What makes sleep different from other losses of consciousness such as coma?</p> <p>How many stages of sleep are there?</p> <p>How long does it take to go through an entire cycle of sleep?</p> <p>When a person is in very deep sleep, can anything wake them up?</p> <p>At what sleep stage do dreams occur? Why don't we act out our dreams?</p> <p>What happens to your breathing and heart rate during REM?</p> <p>What are two reasons humans sleep?</p>	<p>Lecture: Biological Rhythms and Sleep 7/31/06</p> <p>Circadian rhythm: biological clock; regular body rhythms (i.e. of temp. & wakefulness) that occur on a 24-hr cycle.</p> <p>Sleep: periodic, natural, reversible loss of consciousness ~every 90-100 min. pass through cycle of 5 distinct stages.</p> <p>Stage 1: slow breathing & irregular brain waves, may experience fantastic images or have sensations of falling or floating ~ hallucinations Hallucination: sensory experiences that occur w/out a sensory stimulus</p> <p>Stage 2: lasts ~ 20 minutes, sleep spindles, can be awakened w/out much difficulty Sleep Spindles: bursts of rapid, rhythmic brainwave activity</p> <p>Stages 3 and 4: slow-wave sleep, lasts ~ 30 minutes, hard to awaken.</p> <ul style="list-style-type: none">• Stage 3: transitional stage - brain starts to emit delta waves• Stage 4: deep sleep - your brain still processes meaning of certain stimuli <p>Delta Waves: large, slow brain waves associated with deep sleep</p> <p>Stage 5: REM, ~ 60 min. into sleep. Lasts ~ 10 min., brain waves rapid & saw-toothed, heart rate raises, breathing rapid and irregular. ~ 30 seconds, eyes dart around behind closed lids. REM: rapid eye movement sleep, a recurring sleep stage when dreams occur, often emotional and story-like. The brainstem blocks messages from the brain's motor cortex, leaving our muscles relaxed.</p> <p>Why Sleep?</p> <ol style="list-style-type: none">1. Protection: suits our ecological niche; unsafe for ancestors to leave caves at night2. Recuperation: helps restore body tissues, esp. in the brain.
<p style="text-align: center;">Summary</p> <p>Sleep is a natural, periodic and temporary loss of consciousness regulated by the body's circadian rhythms. It gives our bodies time to restore body tissues (especially in the brain) and was historically a protection mechanism for our ancestors. When humans sleep, we pass through a cycle of five distinct sleep stages every 90 to 100 minutes. As sleep begins (Stage 1), breathing slows and irregular brain waves emerge. A person may also experience visual or kinesthetic hallucinations. In Stage 2 sleep, the brain exhibits bursts of rapid, rhythmic brainwave activity (sleep spindles). Stages 3 and 4 are called slow wave sleep and last for about 30 minutes combined. Even in this deep sleep, our brain is able to process the meaning of some external stimuli. This is the reason we may wake up to the sound of our name or baby cries, and also how we stay in bed despite moving around throughout the night. About one hour after falling asleep, Stage 5 begins. Heart rate, breathing, and brainwaves become faster and rapid eye movements (REM) occur every 30 seconds. Vivid and story-like dreams may occur, but we remain motionless because the brainstem blocks messages from the active motor cortex of our brain. This five part cycle repeats several times throughout the period of sleep.</p>	