SLEEP STAGES: MISSION – DECODE YOUR SLEEP

Student Worksheet | N1 • N2 • N3 • REM

Learning Objectives

- Identify and sequence N1, N2, N3, and REM.
- Match EEG and physiological features to the correct sleep stage.
- Interpret a simple hypnogram and explain changes across a night of sleep.
- Apply sleep-stage knowledge to a clinical-style patient case.

Quick Reference: The Four Sleep Stages

Stage	Sleep depth	EEG / key feature	Eye movement	Muscle tone
N1	Lightest sleep	Theta activity begins	Slow/rolling	Slightly reduced
N2	Light–moderate	Sleep spindles; K-complexes	Usually absent	Reduced
N3	Deep sleep	High-amplitude delta / slow-wave activity	Absent	Low but not paralyzed
REM	Distinct active sleep	Low-amplitude mixed-frequency EEG	Rapid	Very low / atonia

Mission 1A – Match the Clues

A. Sleep spindles and K-complexes are characteristic.

B. High-amplitude, low-frequency delta activity dominates.

C. Rapid eye movements occur and skeletal muscle tone is greatly reduced.

D. Theta activity begins as the person transitions from wakefulness.

A. _____

B. _____

C. _____

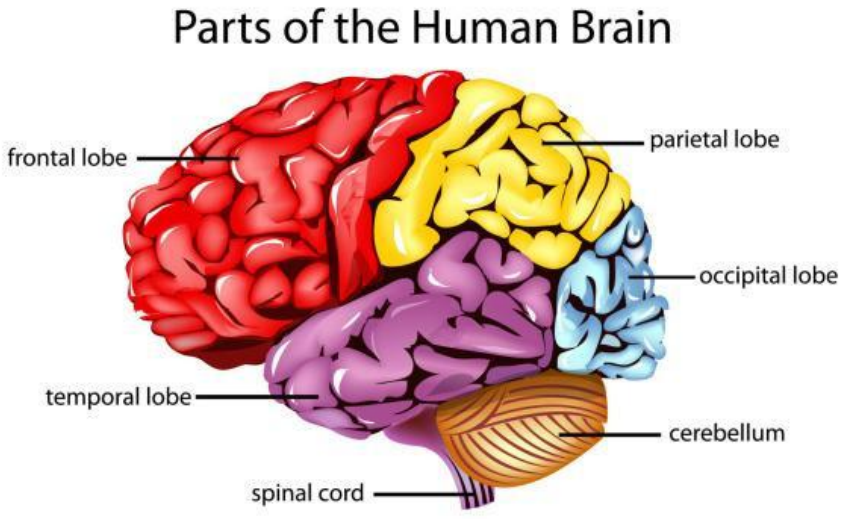
D. _____

Mission 2 – Be the Brain: Sleep Stage Acting Game

Your group will receive one stage. Act it out without saying the stage name. Other groups must identify it.

Stage	Possible action	What should notice	Scientific explanation
N1	Gently drift off; occasional twitch/startle		
N2	Pretend to sleep more steadily		
N3	Deep, still sleep; difficult to wake		
REM	Act as if dreaming while keeping the body still		

Transition from wakefulness to sleep	Easy to awaken	Rapid eye movement + little movement	REM with muscle atonia
Very low responsiveness	Slow-wave/delta activity	Sleep spindles and K-complexes	Less responsive



Mission 3 – EEG Detective

Match the brain wave with each sleeping stage