

MEGA-PROMPT #1

The Instant Differentiation Engine

Standards Alignment

NGSS 5-ESS2-1: Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

DCI ESS2.C: The Roles of Water in Earth's Surface Processes

Step 1: Copy and paste this mega-prompt into ChatGPT, Claude, or Gemini:

ROLE:

You are an experienced 5th-grade teacher who specializes in differentiating science content for diverse learners.

TASK:

Take the passage I provide and create THREE versions of it:

1. BELOW GRADE LEVEL (Grades 2-3 reading level)
2. ON GRADE LEVEL (Grade 5 reading level)
3. ABOVE GRADE LEVEL (Grades 6-7 reading level)

RULES:

- All three versions must teach the SAME core science concepts
- Below level: shorter sentences, simpler vocabulary, define key terms in parentheses
- On level: keep close to the original complexity
- Above level: add academic vocabulary, more complex sentence structures, and deeper cause-and-effect connections
- Each version should be a complete, standalone passage (not a summary)
- Do NOT change any scientific facts

FORMAT:

Label each version clearly with the level name and approximate reading level. Add a brief teacher note under each version suggesting one way to use it in class.

Step 2: Then paste the passage below (or use the separate Water Cycle passage document):

Demo Passage: Earth's Water Cycle

Right now, the water in your glass may have once fallen as rain on a dinosaur. That is because Earth does not create new water. Instead, the same water moves through a process called the water cycle, traveling between the atmosphere, the hydrosphere, and the geosphere over and over again. Understanding how these Earth systems interact helps scientists explain weather, predict floods, and protect drinking water for communities around the world.

The water cycle begins when the sun heats the surface of oceans, lakes, and rivers. This energy causes liquid water to evaporate, which means it changes from a liquid into an invisible gas called water vapor. Water vapor is lighter than the surrounding air, so it rises into the atmosphere. Plants also release water vapor through tiny openings in their leaves in a process called transpiration. Together, evaporation and transpiration move enormous amounts of water from Earth's surface into the air every single day.

As water vapor rises higher into the atmosphere, the air becomes cooler. Cool air cannot hold as much moisture as warm air. When the vapor cools enough, it condenses, meaning it changes back from a gas into tiny liquid droplets. These droplets cling to small particles of dust or pollen floating in the air, forming clouds. If the temperature is cold enough, the water may freeze into ice crystals instead. This step—condensation—is what makes clouds visible in the sky.

Over time, the water droplets and ice crystals inside clouds combine and grow heavier. When they become too heavy for the air to hold, they fall back to Earth as precipitation. Precipitation can take the form of rain, snow, sleet, or hail, depending on the temperature of the air between the cloud and the ground. Most precipitation lands in the ocean, but some falls on land, where it flows over the surface as runoff into streams and rivers. Some of it soaks into the ground and becomes groundwater, slowly moving through soil and rock until it reaches underground reservoirs called aquifers.

The water cycle shows how the atmosphere, hydrosphere, and geosphere are connected. Heat energy from the sun drives evaporation. Gravity pulls precipitation back to the surface and moves water downhill through rivers. The shape of the land—mountains, valleys, and plains—determines where water collects. Even living things play a role: forests slow down runoff, and wetlands filter water before it enters lakes and rivers. No part of this system works alone.

Because the water cycle is a continuous loop, every drop of water that evaporates will eventually return to Earth's surface. This cycle has been running for billions of years, long before humans existed. By studying the water cycle, scientists can better understand how changes in one part of the system—like rising temperatures or the loss of forests—can affect water availability for people, animals, and plants everywhere on the planet.

Live Demo Refinement Suggestion

After the AI generates the three versions, type this follow-up to show the audience how to refine:

"Make the below-level version suitable for ELL students who are at an intermediate English proficiency level."

MEGA-PROMPT #2

The Station Rotation Builder

Standards Alignment

Texas TEKS ELA 3.9(D)(iii): Recognize characteristics and structures of informational text, including organizational patterns such as cause and effect.

Texas TEKS ELA 3.10(B): Describe how the author's use of text structure contributes to the author's purpose.

Step 1: Copy and paste this mega-prompt into ChatGPT, Claude, or Gemini:

ROLE:

You are a 3rd-grade ELA teacher designing a station rotation lesson for a 60-minute reading block with 20-25 students.

TASK:

Create a complete 4-station rotation for the following objective:

"Students will identify cause-and-effect relationships in informational text and explain how signal words help readers understand the author's organizational pattern."

Texas TEKS: ELA 3.9(D)(iii) and 3.10(B)

RULES:

- Station 1 must be TEACHER-LED (small group instruction)
- Station 2 must be INDEPENDENT PRACTICE
- Station 3 must be COLLABORATIVE/PARTNER WORK
- Station 4 must be a HANDS-ON or CREATIVE task
- Each station should take approximately 15 minutes
- All materials must be things a typical classroom already has (no special purchases)
- Include clear student-facing directions for each station
- Each station must directly practice the objective, not just be loosely related

FORMAT:

For each station provide:

1. Station name and type (teacher-led, independent, collaborative, hands-on)
2. Materials needed
3. Step-by-step student directions (written at 3rd-grade reading level)
4. What the finished product looks like
5. Early finisher extension task

Step 2: That's it! The objective is already embedded in the prompt. Just paste and go.

Live Demo Refinement Suggestion

After the AI generates the four stations, type this follow-up to show the audience how to refine:

"Rewrite Station 4 to include a digital option using Chromebooks in case the hands-on materials aren't available."

Why This Demo Works

Different grade (3rd vs. 5th) — shows the framework scales across grade levels

Different subject (ELA vs. Science) — shows it works across content areas

Different standards framework (TEKS vs. NGSS) — shows it's not platform- or state-specific

Same 4-part mega-prompt structure — reinforces that the skill is transferable

Pre-Demo Checklist

- ☐ Open this document in a tab you can quickly switch to
- ☐ Have ChatGPT / Claude / Gemini open in another tab (logged in, free tier)
- ☐ Pre-test both prompts at least once to know what the output looks like
- ☐ Have a Google Doc open to demonstrate the "Save to Google Doc" step
- ☐ If live demo fails, have pre-generated outputs saved as backup screenshots