

The Ever-Evolving World of Science

An invitation to question, experiment, and explore.



ELEVATING YOUR SCIENTIFIC MINDSET

THE EVOLUTION OF AN EXPLORER

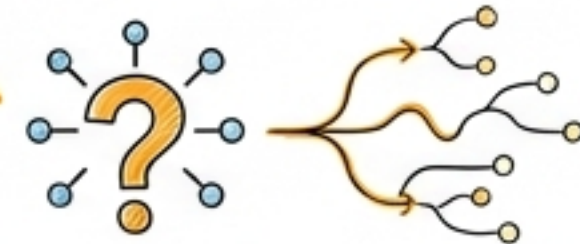
THE GOAL

GRADE 6 EXPERIENCE

Discovering isolated facts.



Asking deeper questions (How do things work? Why do events happen?).



THE SCOPE

Observing the immediate world.

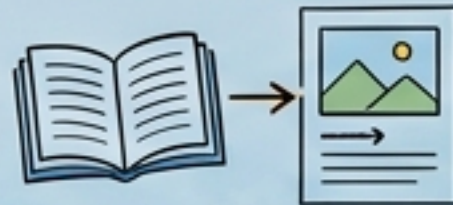


Understanding interconnected patterns in nature.



THE ACTION

Reading and identifying.



Stepping out of the classroom to perform hands-on experiments.



THE IMPACT

Individual learning.



Taking responsibility for human activities and addressing environmental challenges to build a sustainable world.



THE FLIGHT PATH OF INNOVATION



Simple Observation

Playful curiosity and basic observation of the natural world.



Scientific Translation

Early inventors systematically studying the mechanics of flight.



Modern Engineering

Engineers designing complex aircraft based on tested principles.

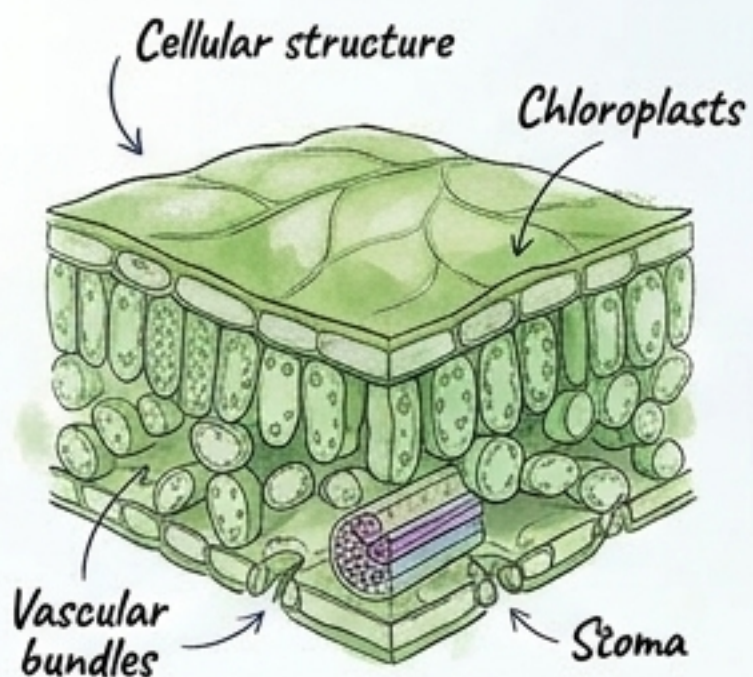


Learning takes flight when curiosity leads the way.
Real-world breakthroughs begin with simple questions.

The Natural World

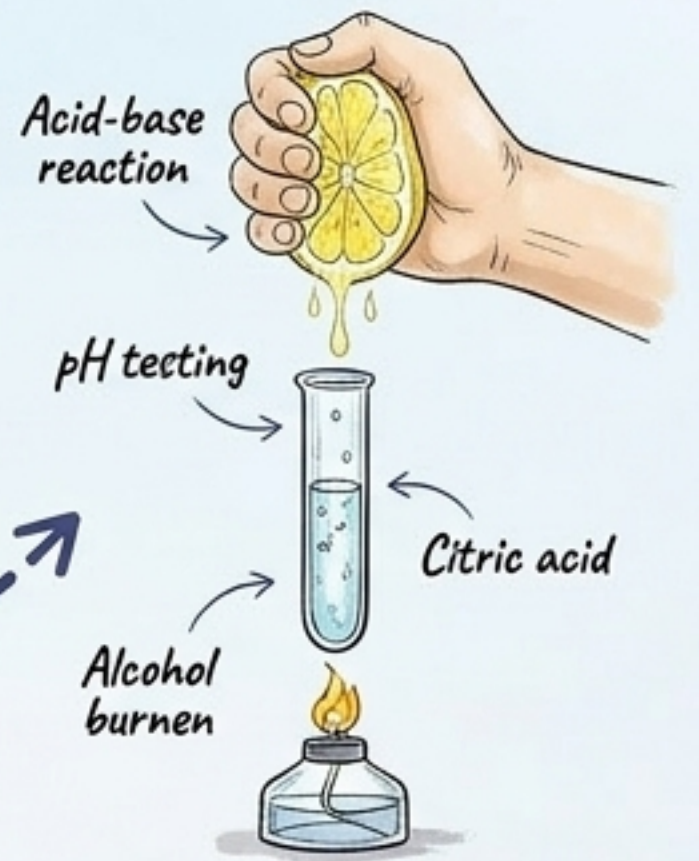
Biology

Looking at tiny cells inside a leaf.



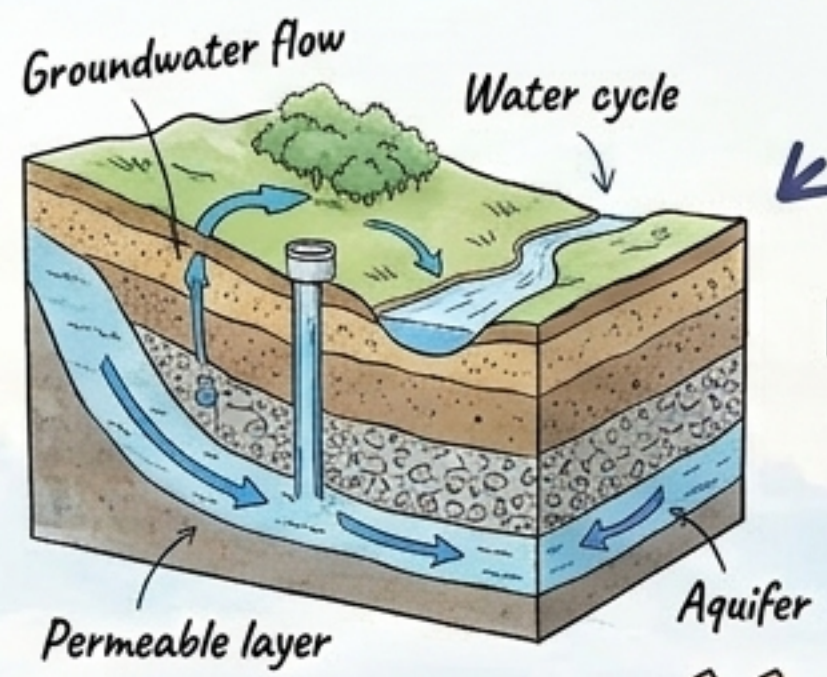
Chemistry

Testing materials at home (Why are some fruits sour?).



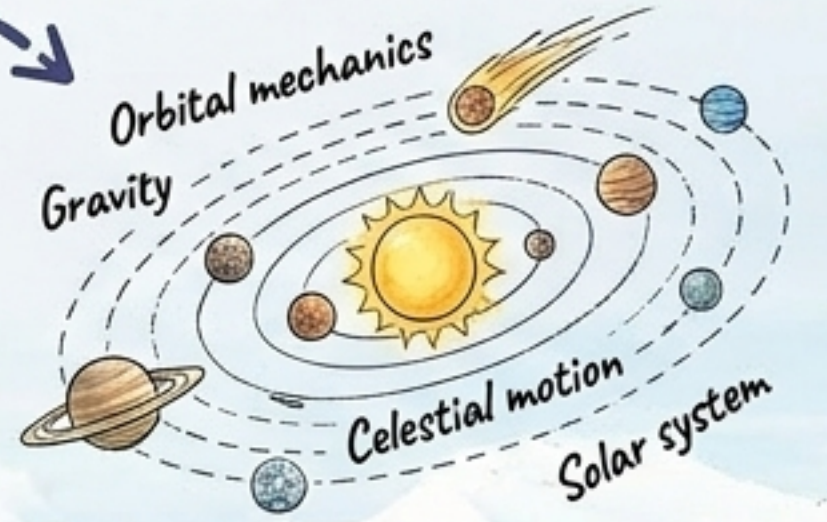
Earth Sciences

Discussing how water flows underground.



Physics

The movement of the Sun and the stars.



“ Scientific ideas in one area consistently inspire discoveries—or prompt new questions—in completely different fields. ”

ANATOMY OF AN OBSERVATION

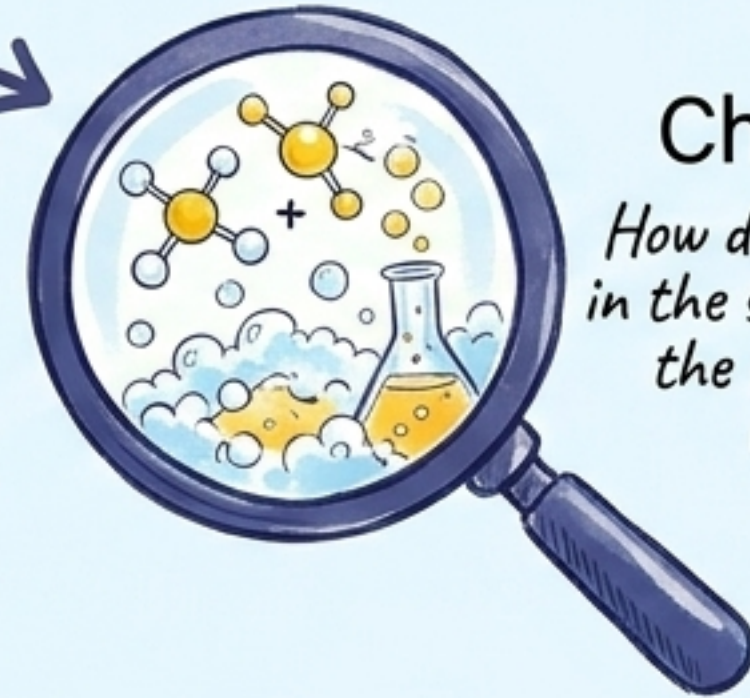
Biology

What organic compounds make up the turmeric plant?



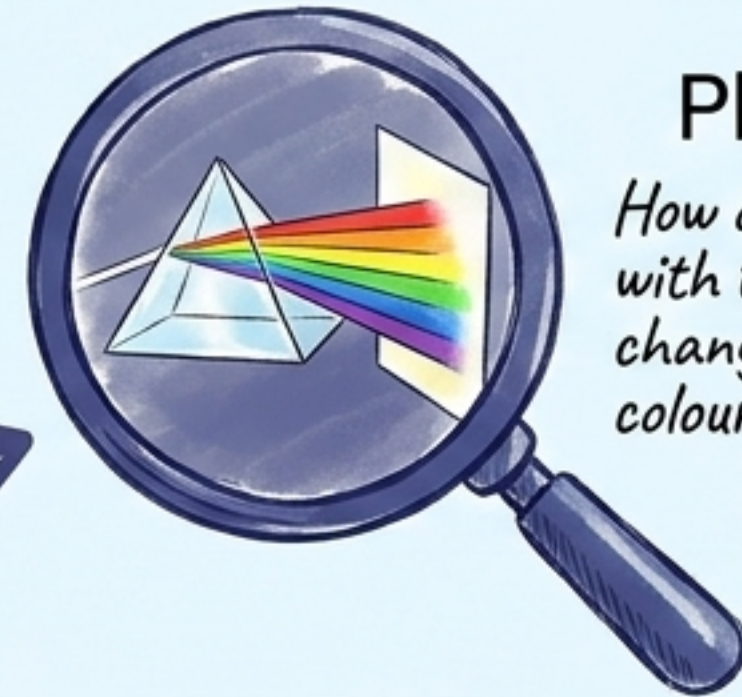
Chemistry

How do the materials in the stain react with the soap used for washing?



Physics

How does light interact with the chemical change to alter the colour we see?



A scientist doesn't just see a dirty shirt; they see a multidisciplinary physics, chemistry, and biology puzzle.

The Cosmic Clockwork

Earth's Rotation on its Axis:

Creates the cycle of day and night, allowing early humans to use shadows to tell time long before digital watches.

Earth orbiting the Sun & Moon orbiting Earth:

The carefully balanced movements that create the fascinating phenomena of eclipses.

Generating Light:

Asking questions about the nature of light and shadows gives us a deep understanding of the universe, and allows us to read at night when the Sun goes down.



The Art of the “Whys” Person



How do we ensure getting equal shares of cake?



My essay is too long.

*THE ANSWER:
Just make it half!*



I cannot fit this in the envelope.



I cannot dance to such a long song.

Key Insight: Great scientists don't just answer questions—they cultivate the imagination to ask amazing questions no one else has thought of.

Activity 1.1: Question the Answer

There are no wrong questions. Let your imagination run wild.
(Avoid obvious math like "What is $32+10$?")

Answer: Because the cat's teeth were crooked.

Question:

Answer: Just add some milk.

Question:

Answer: Don't panic, I have my towel.

Question:

Answer: 42.

Question:

Experiments might confirm what we think—but they mostly lead to additional questions.
Happy Exploring!