





# THE REAL ALCHEMY: HOW NATURE TURNS ENERGY INTO LIFE



Have you ever wished you could turn ordinary things into something amazing—like a magician? Long ago, people called alchemists tried to do just that. They believed everything in the world was connected and could change from one form to another. While they didn't really turn ordinary metals into gold, they inspired us to ask important scientific questions:

**How does change happen? What makes things move? How are we all connected?**

**Let's dive into these questions!**

**CLICK HERE**



For exciting  
Science Games

## THE SCIENCE OF MOVEMENT: WHY THINGS DON'T JUST STOP



Now think about a rolling football. Once you kick it, it keeps going. That happens because of momentum, the force that helps an object keep moving once it has started.

But the ball won't roll forever. Why? Because of inertia, which means objects like to stay the way they are unless something changes them. Grass, air, and your foot slows it down.

Animals in the food chain depend on this too. A cheetah builds momentum to catch prey. A squirrel stays still, using inertia to avoid being noticed.

When you visit a park and sit at the top of a slide, your body is full of potential energy—energy that is stored and ready to be used.

The moment you push off and start sliding, that stored energy changes into kinetic energy, the energy of movement.



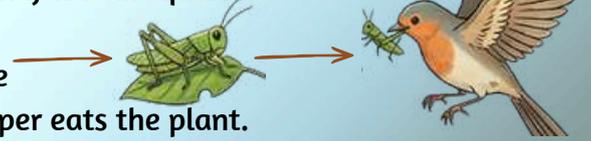


## NATURE'S OWN ALCHEMY: THE ECOSYSTEM



Look through a forest, a park, or even your backyard...  
Nature is always busy, even if it looks quiet.

Plants use sunlight to make their own food. A grasshopper eats the plant. Then a bird eats the grasshopper.



This is called a food chain, and it helps energy move from one living thing to another.

In nature, nothing is wasted. When leaves fall to the ground, tiny organisms in the soil break them down. These nutrients go back into the earth and help new plants grow. What looks like something old and dead is actually helping new life begin. It may seem like magic, but it's really science at work.



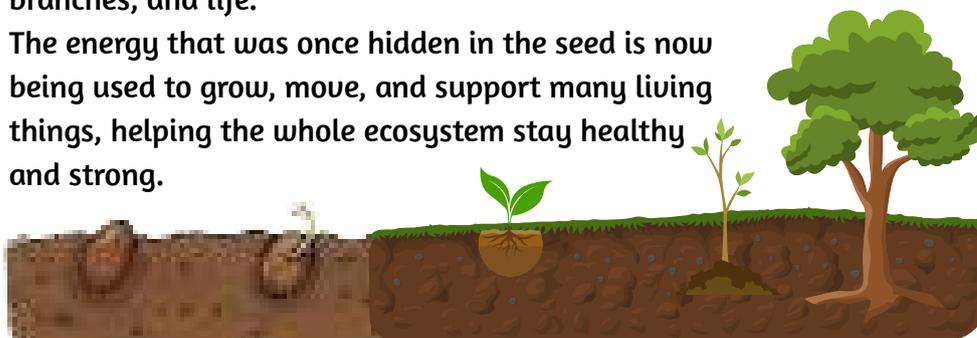
Nature is always changing, recycling, and renewing itself—just like a kind of real-life alchemy happening all around us.



## HIDDEN ENERGY, BUSY ENERGY

Nature uses this kind of energy change all the time. A tiny seed may look still and quiet, but inside, it is packed with stored energy. When the seed gets sunlight, water, and nutrients from the soil, it begins to grow. It pushes out roots, sprouts upward, and slowly reaches toward the sky. Over time, it becomes a tall tree filled with leaves, branches, and life.

The energy that was once hidden in the seed is now being used to grow, move, and support many living things, helping the whole ecosystem stay healthy and strong.



## THE REAL TREASURE

The alchemists were right about one thing: the world is always changing. But the changes they imagined as magic are actually happening through science every single day.

When we look closely, we see that our planet is like a giant experiment where everything is linked, always transforming, always in action. And the best part is that we get to explore it, question it, and be part of the discovery.



## Story Time



# FRIENDS FOREVER CLUB

I started the Friends Forever Club on a Monday morning—right after my shoelaces tripped me before school assembly. That’s when I realized friendships, like shoelaces, can be a little messy but always worth having. The club had one simple rule: friends can be anyone, anywhere, and even covered in fur. I was the president, secretary, and only member, so the meetings ended very quickly.

At school, the club stayed in my backpack. I practiced being a good friend by sharing pencils, saving seats at lunch, and laughing at jokes even when they weren’t very funny. When homework tried to scare me and when my stubborn locker never opened, I whispered, “We can do this,” to myself.

At home, my sibling Sam joined the club without asking. Sam and I argued about almost everything—TV shows, chores, and socks—but when it was time to clean up, we worked together like a team. We especially agreed on snacks. Once, we shared the last cookie very carefully. Sam got the bigger piece but I pretended not to notice.

Grandpa Joe was our wise helper. He said best friends don’t have to be the same age. Grandpa told funny stories, laughed at his own jokes, and gave advice that actually helped. When I was worried about a math test, he smiled and said, “Numbers are just shy. Be brave, and they’ll behave.”

Then there was Pixel, my dog, who came to every meeting. Pixel showed friendship by wagging his tail, stealing shoes, and cheering everyone up. If I was sad, Pixel sat next to me. If I was happy, Pixel jumped like popcorn. If Grandpa Joe sneezed, Pixel wagged anyway.

One afternoon, we all sat together in the living room. Sam passed snacks, Grandpa Joe told stories, and Pixel guarded the crumbs. That’s when I understood something important. Friendship isn’t about being the same. It’s about caring, helping, and choosing each other every day.

The Friends Forever Club still has only one name on paper. But at school, at home, and even in the backyard, I know I’m never really alone.





# ARE YOU A MONEY DETECTIVE?



## Hello Detectives!

Last time, you solved the mystery of Needs vs Wants and learned how to plan a simple budget. With this edition, we investigate a brand-new money concept.

**Your Mission:**  
Learn the Tricks to Handle Money Like a Pro!

## Part 1: The Power of Choices



Every time you spend money, you are also choosing NOT to buy something else. This is called Opportunity Cost — the value of what you give up when you make a choice.

**Money Fact:** Smart people don't just ask, "What do I want now?", they also ask, "What am I giving up?"

## ACTIVITY 1- THE CHOICE CHALLENGE



You have ₹150. You either buy a movie ticket OR save the money for a video game.

Your Choice: \_\_\_\_\_

Opportunity Cost: \_\_\_\_\_



You spend ₹80 on fast food after school OR use it to buy art supplies that you need later.

Your Choice: \_\_\_\_\_

Opportunity Cost: \_\_\_\_\_



## Part 2: The Secret of “Pay Yourself First”

Many adults make this common mistake! They spend first and try to save from what is left. Money detectives do the opposite, they SAVE FIRST and SPEND LATER.

This is known as the “Pay Yourself First” rule. Saving a small amount regularly may seem tiny today, but over time it turns into a big advantage.

### ACTIVITY 2- HELP MEENA WITH HER PLAN

Meena gets ₹400 per month. She decides to follow the “Pay Yourself First” rule and saves ₹100 immediately. Help her plan the rest wisely so she doesn't overspend.



| Use of Money             | Amount (₹) |
|--------------------------|------------|
| Savings (kept first!)    | ₹100       |
| School snacks            | ₹_____     |
| Transport                | ₹_____     |
| Fun money (games/treats) | ₹_____     |

**HINT-BOX**  
Check that the total is ₹400, and remember, the fun money should be less than savings. That's how detectives stay in control!

### DETECTIVE THINKING CORNER

Crucial reflection questions:



Do I really need this now?



What am I giving up if I buy this?



Will Future Me be happy with this decision?

**That's how real money detectives think!**

## ANSWER KEY

### Activity 1:

Answers will differ. Students must correctly identify the trade-off.  
Example Answer:

- Choice: Movie → Opportunity Cost: Saving for the video game.
- Choice: Art supplies → Opportunity Cost: Fast food treat.

### Activity 2:

One Possible Budget:

Savings ₹100  
School snacks ₹120  
Transport ₹140  
Fun money ₹40

Answers will differ.



# BRAIN BRAWL: THINK, TWIST, TRIUMPH

## PUZZLE 1: THE VANISHING NUMBER VAULT

A secret vault opens only when the missing number is entered.

$$2 \rightarrow 6$$

$$4 \rightarrow 20$$

$$6 \rightarrow 42$$

$$8 \rightarrow ?$$



Challenge: Find the missing number and explain the rule that connects each pair.

## PUZZLE 2: THE GROWTH EXPLOSION

A student observes this pattern:

- A plant grows 2 cm on Day 1
- 4 cm on Day 2
- 8 cm on Day 3. Now, assume that the pattern continues...

Challenge:

1. How much will the plant grow on Day 6?
2. In science, this type of growth is known as \_\_\_\_\_?
3. Why is this kind of growth not sustainable in real life?



## PUZZLE 3: THE GRAMMAR GLOW-UP

Good writers don't just avoid mistakes, they choose the best sentence. This puzzle tests how well you understand the subject-verb agreement and correct verb forms.

Challenge: Each question has one sentence that is grammatically correct and sounds the best. Pick the suitable option.

1.
  - A. Everyone in the class have finished the test.
  - B. Everyone in the class has finished the test.
  - C. Everyone in the class are finishing the test.
2.
  - A. I enjoy to read mystery books at night.
  - B. I enjoy reading mystery books at night.
  - C. I enjoy read mystery books at night.
3.
  - A. The team was excited about their victory.
  - B. The team were excited about their victory.
  - C. The team are excited about their victory.

[CLICK HERE](#)  to play online



# SCIENCE & US: CAREERS, CURIOSITIES, AND DAILY LIFE

## Anti-aging Therapy

"I will invent a medicine to make elderly people feel young and healthy again. If they take this medicine, they will not experience any side effects. It will cure diabetes and cancer. The product will be priced below ₹60 and will be available in every medical shop."

Saravin  
Class 8 Chennai



## The Digital Tongue

"I am going to invent an affordable spoon that changes the taste of food. It features taste sensors similar to those on our tongues. If I eat bitter gourd, the spoon changes the taste to mango. The goal is to provide nutritious food to children."

Pragadeesh  
Class 6 Chennai



## The Shadow-Charged Companion

"I will invent a robot that can talk, play, cook, clean, ride a bike, write, and even box. It will use darkness to charge its battery. It will also help me fly safely back to my home. Most importantly, it will have the capacity to change its face to look like any person I choose, so I never have to miss the people I love."

M.S Nithish  
Class 5 Chennai



## Temporal Paradox

"I am going to invent a Time Travel Machine. This machine is designed for one person at a time. It can travel to any era, from BC to AD, and even into the far future. By using this machine, you can foresee your own success or failure. If you discover that you are in trouble in the future, you can return to the present and mend your ways to change your destiny."

Pavana Sri  
Class 6 Chennai



## ANSWER KEY

### PUZZLE 1

72

Rule: Each number follows this rule:  
 $n \times (n+1)$

- $2 \times 3 = 6$
- $4 \times 5 = 20$
- $6 \times 7 = 42$
- $8 \times 9 = 72$

### PUZZLE 2

1. Day 6 Growth - 64 cm
2. Type of Growth - Exponential growth
3. Why Unsustainable - Limited resources (space, nutrients, energy) prevent endless exponential growth in nature.

### PUZZLE 3

1. B — "Everyone" is singular → has
2. B — "Enjoy" is followed by a gerund (-ing form) → reading
3. A — "Team" is a collective noun acting as one unit → was