

## Hey Smart Scoopers

We're back with your weekly scoop of stories, facts, and fun, all designed to spark your curiosity and keep your thinking caps extra shiny.

This week, we've got five fresh and exciting scoops lined up just for you, covering everything from science and world affairs to smelly shoes and sneaky marketing.

So dive in, scroll on, and enjoy your SmartScoop fix for the week!

Scoop 1: Ancient Secret Codes: Welcome To Codebreaking Boot Camp

Scoop 2: Collective Locomotion: Nature's Hidden Choreography (Part1)

Scoop 3: Collective Locomotion: Nature's Hidden Choreography (Part2)

Scoop 4: Mosquitoes Invade Iceland: From Frostbites To Mosquito bites

Scoop 5: Group Project Tales: The Funny Side Of Group Projects

Can't wait for you to dig-in!

Happy scooping!

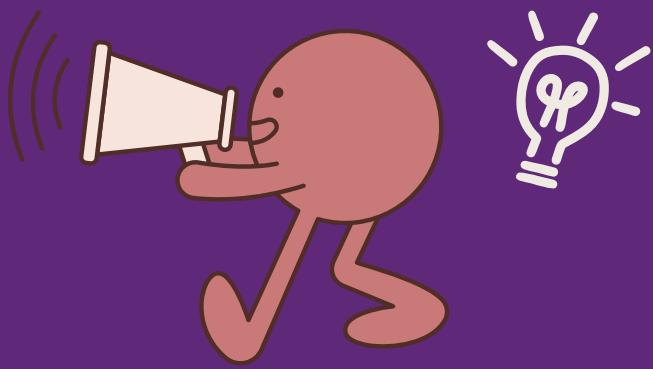
The SmartScoop Team

Our mascot, Blurt  
will follow us  
along the way.

Blurt /blurt/

noun:

A loud, round, super-curious character who just can't keep a fact in.



# Ancient Secret Codes

## WELCOME TO CODE-BREAKING BOOT CAMP

Before we start, try to decode this message:

**FKRFRODWH LV OLIH**

**Got it? No? Don't worry,**

By the end of this article, you'll be a master code-breaker.

Ancient people didn't just build monuments, they engineered secret codes too!

Here's how our ancestors encrypted their gossip, war plans, and secrets.

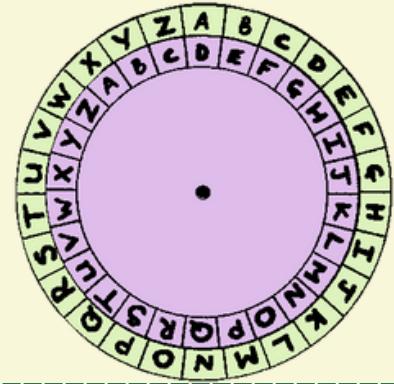
### THE CAESAR CIPHER (Rome, ~58 BC)

Julius Caesar wasn't just about conquering Europe. He needed to send secret military messages, so he invented one of history's first codes.

**How it works:** Shift every letter in the alphabet by the same number. Caesar usually used 3, so A→D, B→E, C→F, and so on.

**Why it's genius:** Your enemies intercept "DWWDFN DW GDZQ" and have no clue you just said "ATTACK AT DAWN."

**PUZZLE ANSWER:** FKRFRODWH LV OLIH = CHOCOLATE IS LIFE (shift of 3)



### MLECHITA VIKALPA (Ancient India, ~400 BC)

**TRY THIS PUZZLE:** Using this pairing: A↔Z, B↔Y, C↔X, D↔W, E↔V, F↔U, G↔T, H↔S, I↔R, J↔Q, K↔P, L↔O, M↔N, Decode: XIZARVHG.

**How it works:** You randomly pair up letters of the alphabet, then **substitute** each letter with its partner. So if A pairs with Z, then A becomes Z and Z becomes A. It's like a secret buddy system for the alphabet.

**Why it's genius:** Unlike Caesar's predictable shifting, these pairings could be completely random. You and your friend create your own unique alphabet pairing that nobody else knows. Ancient India's version of a custom password!

**PUZZLE ANSWER:** CRAZIEST (using the pairing system above)

### THE SCYTALE (Sparta, ~400 BC)

Spartans were tough warriors who apparently hated easy communication.

They used a wooden rod called a scytale (pronounced "SKITT-uh-lee")

Decode: KNRIGRLTOLOWKMXIOX

**How it works:** You wrap a strip of leather or parchment around a rod and write your message along the rod's length. When you unwrap it, the letters look like random gibberish. The recipient needs a rod of the exact same diameter to decode it.

**Why it rocks:** This is technically a **transposition cipher**, you're scrambling letter order, not changing the letters themselves. Fancy!

**PUZZLE ANSWER:** KNRIGRLTOLOWKMXIOX = KILL KING TOMORROW MIDNIGHT



**There are more ancient codes like Atbash (reverse the alphabet), Pigpen (letters replaced by simple grid shapes), Polybius (letters mapped to number pairs in a 5x5 grid).**

These ancient codes taught us the basics: **Substitution** (Caesar, Atbash, Mlechita Vikalpa),

**Transposition** (Scytale), **Encoding systems** (Polybius), and **Visual encryption** (Pigpen).

Modern encryption is just these old tricks boosted by deep math and computers.

**Try it Yourself:** Pick your favourite code and send a secret message to your friends.

Will they crack it?



# Collective Locomotion

## NATURE'S HIDDEN CHOREOGRAPHY



Double Scoop



Have you ever watched a flock of starlings twist and turn through the sky like a living shape shifting cloud? Or seen a school of fish dart away from danger as if they share one brain? Welcome to the fascinating world of collective locomotion, where groups of animals move together in ways that seem almost magical.



Beautiful Starlings Murmuration

### What Is Collective Locomotion?

Collective locomotion is when groups of creatures coordinate their movement without a central leader telling everyone what to do. No conductor, no boss, no group chat, just thousands or even millions of individuals following simple rules that create breathtaking patterns.

#### The Murmuration Mystery



**Starlings** (bird) create some of nature's most spectacular displays, called **murmurations**. Up to a million birds can swirl through the sky in synchronized waves, changing direction in the blink of an eye. Here's the wild part: scientists discovered that each bird only pays attention to its **seven nearest neighbours**. That's it! Seven birds out of potentially hundreds of thousands. By following three simple rules: stay close to your neighbours, match their speed, and avoid collisions.

#### Flash Mob Of Fish Schools



**Fish** have been mastering collective locomotion for about 400 million years, so they've had plenty of practice. A school of fish can include thousands of individuals moving as one shimmering mass. When a predator attacks, the school can split apart and reform in seconds, or create a "bait ball" (a swirling sphere of fish that confuses predators). The coolest part? Fish use a row of sensors along their bodies that detect water movements to "feel" what their neighbours are doing.

#### Ants: The Tiny Engineers



**Ants** show us collective locomotion on a whole different level. Fire ants can link their bodies together to form living rafts when floods hit, keeping the colony alive for weeks on the water. Army ants build bridges out of their own bodies so their colony-mates can cross gaps and these bridges self-adjust based on traffic flow! Each ant is just following local rules: stay if crowded, move if not. None sees the big picture, yet together they build structures any engineer would admire.

#### Most collective motion follows just a few simple rules

**Separation** – don't bump into your neighbors.

**Alignment** – move in the same direction and speed as those around you.

**Cohesion** – stay close to the group (safety in numbers!).



With these tiny rules comes stunning patterns and intelligence. It's a perfect example of how nature solves problems, not with complicated instructions or a big boss, but with simple rules that scale up beautifully.

# Collective Locomotion

## NATURE'S HIDDEN CHOREOGRAPHY



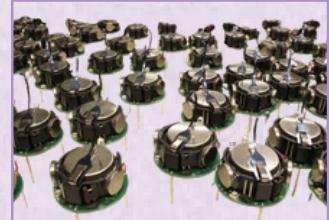
Double Scoop

### But Why Does This Matter?

Collective locomotion in nature is inspiring a new generation of technologies in **robotics, materials science, and AI systems**. Researchers and engineers are mimicking these natural systems to create machines that can move, adapt, and cooperate efficiently.

#### Swarm Robotics

Bird flocks and fish schools have influenced swarm robotics, where multiple small robots communicate and move together without a central controller. One cutting-edge approach combines actual animals with robots in what's called "**bio-hybrid swarms**", imagine locusts and tiny robots moving together.



A Kilobot swarm



Cockroach inspired robot

#### Bio-Inspired Robotic Locomotion

Nature's diversity has influenced technologies like gecko-inspired climbing robots (Stickybot) and cockroach-like search-and-rescue robots (CRAM). These machines imitate the adaptability and energy efficiency of animal motion, enhancing performance on uneven or confined terrains.

#### Collective Learning and Smart Systems

Collective motion concepts have also informed **AI** and **machine learning**, where "robotic swarms" share experiences to improve performance. This collective learning mirrors how fish or ants adapt as a group, helping robots self-optimize in unpredictable environments.

#### Real World Application

**Drone swarms** that can search disaster areas or monitor forests

**Medical microrobots**: particle swarms mimicking bacterial swimming to target tumours.

**Disaster response**: collective ground robots mapping rubble zones safely.

**Agricultural robotics**: distributed machines managing crops with ant-like efficiency.

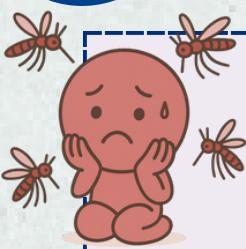
**Self-driving car algorithms** based on how fish avoid collisions



Honestly, humans should take notes from starlings, ants and fish. They manage traffic with zero honking, zero lane-cutting, and zero chaos.

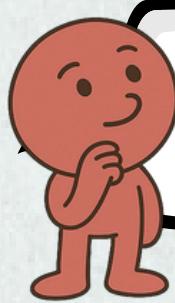
# Mosquitoes Invade Iceland

## FROM FROSTBITE TO MOSQUITO BITE

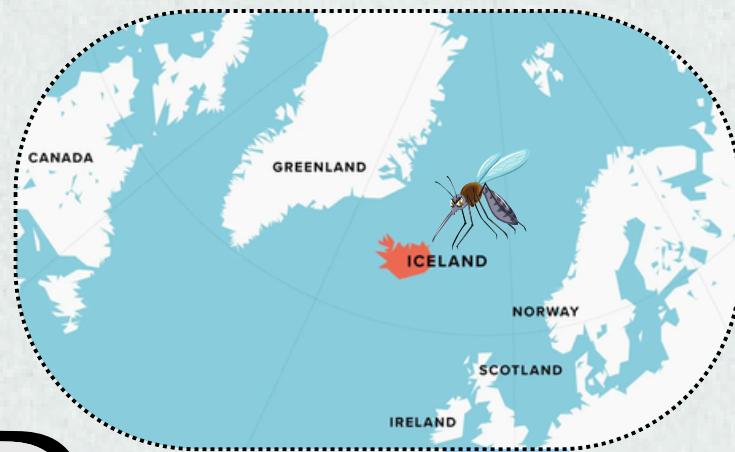


This October, scientists confirmed that mosquitoes have been spotted in Iceland for the first time in the country's history. That's right! mosquitoes have finally crashed the party in one of the last two places on Earth that didn't have them. Antarctica, you're officially the only mosquito-free zone left. Penguins, enjoy it while it lasts!

The story begins... with insect enthusiast Björn Hjaltason in Kjós, near Reykjavík (capital of Iceland), spotted a "weird fly" on his wine-soaked moth traps. Sensing it was special, he sent it to entomologist Matthias Alfredsson, who confirmed the buzz: three mosquitoes (two females and one male) of species *Culiseta annulata*. The first ever found in Iceland.



You might be thinking,  
"Okay, cool, they found three  
mosquitoes.  
Why does this matter?"



Here's why: Iceland's frozen, inhospitable winters have protected it from mosquitoes for basically forever. The country has been too cold for these bloodsuckers to survive, breed, and establish themselves. And their presence now raises some serious questions.



Studies have shown that the Arctic region is warming at four times the rate of the rest of the planet, and Iceland has experienced record heat this year. Glaciers have been collapsing and fish from warmer, southern climes such as mackerel have been found in the country's waters.



Still, some scientists think the mosquitoes just hitched a ride on ships or planes. Maybe it's climate change... maybe it's mosquito tourism.

For Icelanders, these mosquitoes are more of a biting nuisance than a deadly threat. And for the rest of us, it's a reminder that our planet is changing in ways big and small. It's a reminder that climate changes = ecosystem changes.

## THE FUNNY SIDE OF GROUP PROJECTS



Listen, we need to talk about group projects. You know, that special form of academic task where teachers decide that four people working together equals four times the productivity. Spoiler alert: Hmm..Ahmm...it doesn't. Let's be honest, group projects are proof that chaos has a sense of humour. It's four times the confusion, random messaging, and "well...hmm...who was supposed to do that again?".

## The Cast of Characters (You Know Them All)

## The Ghost

Their dedication to vanishing would make supernatural beings proud. They appear once in the chat to say "Sounds good!" and poof! Back only on presentation day, confused but confident whispering, "Wait... what's this topic again?".



## The Overachiever

Before anyone finds the topic brief, they've built a 47-slide deck, color-coded notes, and a 'vision doc.' It's been two hours.



Their text:  
"Just a quick draft 😊  
It's basically a thesis."

## The Night-Before Hero

A true legend. Their motto: 'I'll start after dinner.' Dinner ends. Midnight hits. Snacks open. At 10PM, they begin their magnum opus! By sunrise, it technically meets the word count and somewhat meets the brief of the project...



## The Realist

Calm, organised, and permanently done with everyone's nonsense. Tracks deadlines, begs for updates, and quietly debates doing it all alone. The group's glue and its exhausted soul.

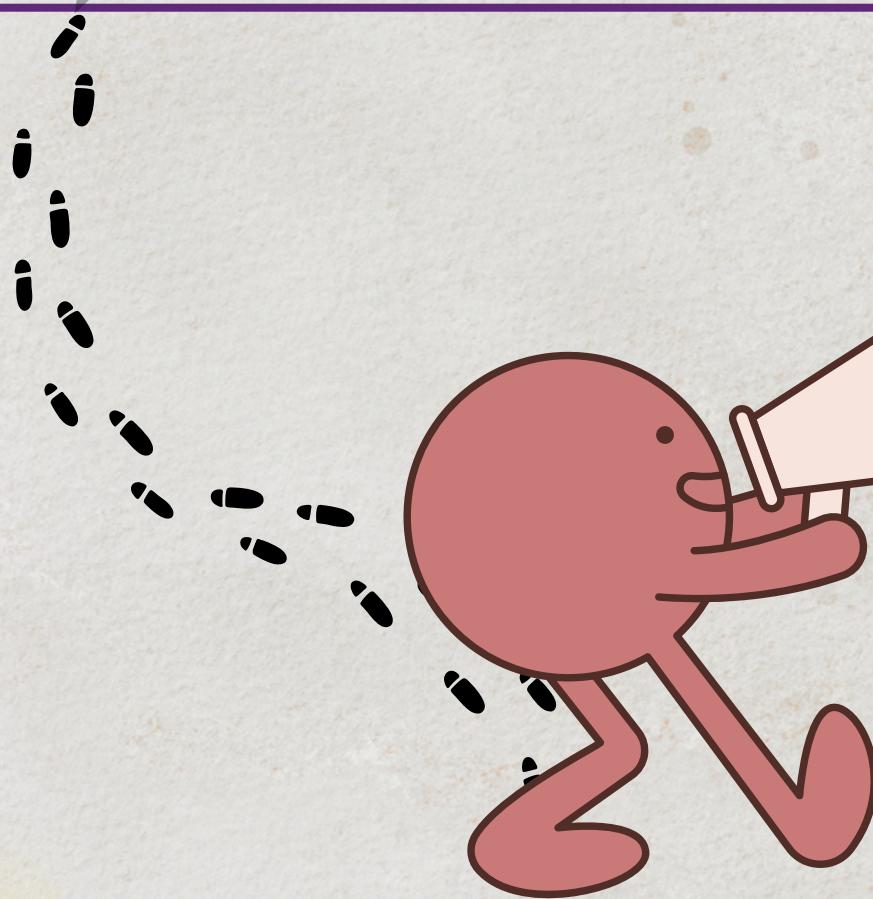


## Presentation Day: Chaos

One reads straight off the slides like they're casting a spell, another speed runs their part, Someone says "umm" 48 times and The Ghost nods like they totally helped. The teacher smiles, the class claps! Somehow the group lands a B+ and hears, "Excellent teamwork!" from the teacher. Sure. Let's go with that.



Group projects won't make you love **teamwork** always but they'll train you for every chaotic meeting of your adult life. So grab your laptop, brace for drama, and remember: deadlines fade, slides glitch, but the inside jokes with friends will last forever.



Flamingos are  
born grey!

*They only turn pink because  
of the shrimp they eat...*



**That's a wrap for this week, folks!  
Keep that curious brain of yours buzzing.....**

Got some feedback or want to share something with us?

Write to us here:

[smartscoopteam@gmail.com](mailto:smartscoopteam@gmail.com)

<https://www.smartscoop.in>

We'd love to hear from you! Mostly Blurt tbh..



The freshest finds for clever minds!!!

## SOURCES

[The Hindu](#)

[Economic Times](#)

[The New York Times](#)

[NPR](#)

[The Ken](#)

[The Finshots](#)

[Tech Crunch](#)

[NewsforKids](#)

[Wikipedia](#)

[Wikibio](#)

[Studiobinder](#)

[BBC News](#)

[CNN](#)

[Reuters](#)

[The Guardian](#)

[Bloomberg](#)

[Times of India](#)

[The Wire](#)

[Science News](#)

[National Geographic](#)

[Live Science](#)

[Popular Science](#)

Please write to us for any content modification or removal. We do not intend to violate any copyrights.

All credit goes to the original owner.

### Declaration on the Use of AI

All content has been curated, authored, and refined through multiple stages of human writing and review to ensure clarity, accuracy and age-appropriateness. This content is not AI-generated; all pages have been manually edited and finalised by our editorial team. Generative AI was used for editing and creating a few images to improve engagement.