

LICEO SCIENTIFICO 'ALBERT EINSTEIN'
PROGRAMMA SVOLTO
DI LINGUA E CIVILTÀ INGLESE
CLASSE 3 L
A. S. 2025/2026
PROF. PATRIZIA ZAMPETTI

PRIMO TRIMESTRE

EDUCAZIONE CIVICA

Storia del conflitto tra Israele e Palestina

PROGRAMMA DI LINGUA E LETTERATURA

Libri di testo :

“Language Hub” Advanced , di Jeremy Day e autori, ed. MacMillan
 Performer Heritage di Spiazzi Tavella , ed Zanichelli , vol. 1

Strutture grammaticali : UNIT 1,2,3

- Nominal clauses
- Comparative and superlative forms
- Narrative tenses
- Future in the past
- Future forms
- Negative inversions

Aree lessicali ;

- Clothes, fashion metaphors
- Veganism
- Seaweed farming in Bali
- Alternative fuels
- Word formations
- Give it a go
- Art techniques
- Ideas and inspiration
- Compound adjectives
- Nowhere phrases

Functions:

- Talking about style and fashion
- Comparing different trends
- Making a podcast or a vlog
- Pitch your own business ideas
- Talking about finding inspiration
- Talk about creative projects
- Describing a work of art
- Discuss a work of art
- Make predictions about the future
- Use persuasive language to sell something
- Discuss progress and society
- Evaluate costs and benefits
- Discuss renewable energy

Literature :

- The origins: The Iberians. Stonehenge, the Celtic Britain, The Romans, The Anglo-Saxons, The Vikings.
- The evolution of the English language
- The Middle Ages: The Norman Conquest and Feudalism, The Plantagenets, The Hundred Year War

SECONDO PENTAMESTRE

Grammatica : units 4,5

Conditionals without if
 Wishes and regrets
 The passive
 Passive reporting structures
 Past modals of speculations and deductions

Aree lessicali:

Science and technology
 Competition and cooperation
 Reporting verbs
 Motivation and manipulation

Functions :

- discussing improving the brain
- talking about future technology
- talking about regrets
- discussing intelligence.
- Discussing problem-solving tasks
- Discussing about ideas for solving a challenge
- Speculating about the past

Literature

- La ballata: caratteristiche principali. Analisi del testo : : "The Elfin Knight"
- Il poema narrativo: caratteristiche principali . G.Chaucer "The Canterbury Tales"
- Analisi dei testi: "The Prioress", "the story of the Prioress"
- The English Renaissance :
- Hans Holbein : analisi visuale del dipinto 'The Ambassador' come manifesto del rinascimento inglese.

Le scoperte geografiche e scientifiche, la nuova visione antropocentrica dell'universo. La dinastia dei Tudor. La riforma anglicana, la nascita della manifattura tessile e le enclosures, Maria la Sanguinaria . Elisabetta I e la sua politica interna ed estera. Elisabetta come icona : i ritratti.

L'origine e lo sviluppo del teatro. Struttura architettonica e caratteristiche del teatro elisabettiano.

- La struttura architettonica del Globe Theatre

Current Affairs :

Articles from New York Times

Katrin Behold : "Venezuela and its message to the world"

Sam Sifton: Minneapolis and the killing of Alex Pretty

Sam Sifton : Greenland' s future.

Presentazione sulla storia e la cultura dell'Iran

[Katie Rogers](#)[Tyler Pager](#)[Aaron Boxerman](#) and [Isabel Kershner](#) : Islamabad talks

Milano, 4 giugno 2026

Patrizia Zampetti

firma degli studenti

Classe 3C

Summer homework

Reading : Agatha Christie “Death on the Nile”, “*And Then There Were None*”

BBC SCIENCE

Read the following articles and sum them up in 300 words in a written text, if you want you can explore the links at the end of each article to know something new.

1. We may have just cracked one of Stonehenge's greatest mysteries

A glacier may have carried the site’s massive Altar Stone part of the way from Scotland

SHAPE * MERGEFORMAT

[Michael Day](#)

Published: June 4, 2026 at 10:00 am

One of Stonehenge’s enduring mysteries is how its Altar Stone made the 700km (435-mile) journey from Scotland to southern England. Now, researchers think they may have part of the answer: a glacier helped transport it.

The massive six-tonne sandstone slab lies at the centre of the monument and is thought to have arrived on Salisbury Plain around 5,000 years ago. [Previous studies](#) traced the stone’s origins to northeast Scotland, but left unanswered how it covered such a vast distance.

After studying ancient ice flows, scientists at Sheffield Hallam University and Curtin University in Australia believe a glacier carried the Altar Stone from the Orcadian Basin in northeast Scotland to Dogger Bank during Britain's last ice age, between 33,000 and 11,700 years ago.

Dogger Bank, now submerged beneath the North Sea, once formed part of Doggerland – the vast prehistoric landmass that connected Britain to mainland Europe. Because the area contains no natural source of large stones, any boulders found there must have been carried in by glaciers.

Stonehenge, as seen from above

Sheffield Hallam University's [Dr Remy Veness](#), co-lead author of the paper in the [Journal of Quaternary Science](#), said: "We recently discovered that the origin of the Altar Stone is northeast Scotland, but how it travelled 700km to Salisbury Plain is widely debated.

"What is exciting about these findings is that they could imply that the people of Doggerland attached cultural significance to the Altar Stone long before it was incorporated into Stonehenge.

"The Altar Stone must have been significant enough [for people] to be willing to move the stone at least twice; first to save it from being submerged by rising sea levels at the end of the last ice age and then again to its final resting place on Salisbury Plains."

Co-lead author [Dr Anthony Clarke](#), from Curtin's School of Earth and Planetary Sciences, said the findings suggest glaciers carried the Altar Stone as far as Doggerland, leaving Neolithic people to transport it the rest of the way to Stonehenge.

"Our modelling shows glaciers may have transported rocks part of the way during the last Ice Age – potentially as far as Dogger Bank in the North Sea – but not into southern England, meaning the stone would still have needed to be moved hundreds of kilometres by people," said Dr Clarke.

While the study suggests glaciers carried the Altar Stone south, the researchers found no viable glacial pathway linking its Scottish source directly to Stonehenge. Instead, they believe Neolithic people transported the stone in stages, using a combination of overland, coastal and river routes.

They add that the feat of moving such a massive object over long distances points to a level of organisation and cooperation among Neolithic communities not previously fully appreciated.

"Transporting a stone of this size over such a long distance would have required planning, coordination and a deep understanding of the landscape – not to mention tremendous determination," Dr Clarke said.

Read more:

- [How we're about to solve the world's greatest archaeological puzzle](#)

- [Strange skeleton discovery could rewrite our history of the pyramids](#)
- [Scientists have found what sounds eerily like Atlantis off Australia's coast](#)

[Michael Day](#)

Michael Day is an award-winning freelance journalist and author. He has previously written for titles including The Independent and New Scientist

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Sum up these videos about ARTEMIS II

A) VIDEO WATCHING

For each video write a report :

- 1- What is this video all about? (40-80 words)
- 2- What did you learn? Did you learn something new? What? (30-60 words)
- 3- Would you recommend this video to a friend? Why? (max 15 words)

<https://www.bbc.com/news/videos/c4g7z2j2mr6o>

<https://edition.cnn.com/2026/04/16/science/video/ebof-artemis-ii-astronauts-short-interview>

Strange skeleton discovery could rewrite our history of the pyramids

Subtle markings on skeletons have thrown into question what we previously believed about who was buried in pyramids

SHAPE * MERGEFORMAT

Credit: karimhesham via Getty

[Hatty Willmoth](#)

Published: March 22, 2025 at 11:30 am

For centuries, scientists believed that only the elite were buried in pyramids. But a surprising recent discovery of ancient skeletons has thrown that idea into question.

[In a new study](#), researchers analysed the remains of people buried in Tombos, an archaeological site located in modern-day Sudan, bordering Egypt.

Around 3,500 years ago, the ancient town of Tombos sat along the Nile River in a region called Nubia, which had been conquered by the Egyptian pharaoh Thutmose I (he ruled about 170 years before Tutankhamun).

Archaeologists analysed skeletons from several different burial sites at Tombos, looking for subtle marks where muscles and ligaments had been attached to the bones. These traces – called enthesal changes – can give archaeologists clues about how a person’s life physically altered their bones.

“Enthesal changes can’t tell us exactly what these people were doing, but they can tell us if they were more physically active or more like couch potatoes,” lead author [Dr Sarah Schrader](#), associate professor of archaeology at Leiden University, told *BBC Science Focus*.

Some of the skeletons were found to have very few marks, indicating that they lived more sedentary lives and likely belonged to wealthy nobility.

But other skeletons, buried in the same pyramids, were found to have markings that suggested they were physically active – which, the researchers concluded, could indicate they were from the labouring classes.

“This could potentially shake up what we know about the pyramids,” said Schrader. “In the past, we’ve just assumed that the people who were buried in there were the elite, because we know that the pyramids were designed for elite people. That still holds true, but maybe there were others being buried in the pyramids as well.”

This study was a re-analysis of older findings, originally published in 2012, and Schrader said she hoped it would prompt a re-examination of other skeletal remains found in pyramids.

“It may very well be that the same pattern is happening elsewhere,” she said. “We can’t just assume that things that we’ve done in the past still hold true.”

Couch-potato skeletons

So, how much do we know about the people buried in these Nubian pyramid tombs? A surprising amount.

“We know their names and the roles they had in colonised Nubia,” Schrader said. “They’re not kings or pharaohs or anything like that, but they were Egyptians that were brought down from Egypt to Nubia during a colonial period,”

[Dr Roland Enmarch](#) – Egyptologist at the University of Liverpool who was not involved in this research – told *BBC Science Focus* that, in this period, pyramids were mostly non-royal structures, rather than for pharaohs and kings.

“We’re very much looking at the later half of Egyptian history, when more impressive non-royal tombs would often have a pyramid as part of the mud-brick superstructure of the tomb,” he said.



The Meroe pyramids are another example of Nubian tombs in Sudan, dated between 720 and 300 BC - Credit: mtcurado via Getty

Deciphering the mystery of the active skeletons

As for the more physically active individuals, Schrader said her team thought these could be “labourers, or servants, or people who were associated with the high-status individual.”

These people would have been placed in the tombs to continue serving their masters in the afterlife, she explained. There was no evidence they were killed to be buried at the same time as their masters, she added, but were probably buried in the tombs later, when they died naturally.

However, that is not the only possible explanation. Some researchers have suggested that these high-activity individuals could have been nobles who chose to stay in good physical shape to reinforce their status.

But Enmarch told *BBC Science Focus* he thought this was unlikely, explaining: “I think it’s a generally recognised assumption – and it is an assumption – that in most societies, people higher up the social scale have less evidence of extreme physical wear.”

Read more:

- [We might finally know how the biggest Egyptian pyramids were built](#)
- [Were the Egyptian pyramids built by slaves?](#)
- [How have the Egyptian pyramids lasted so long?](#)

Uncovering Tombos's hidden lives

What made the study even more challenging was Tombos's colonial history – a place where Egyptian and Nubian cultures overlapped, intertwined, and shaped one another.

Schrader said her team's discovery "might be just a strange Tombos-Nubian thing, but it may be that this was a practice for all the pyramids. We don't know."

Regardless, it sheds some light on who was living in Tombos at that time. Previous archaeological research had suggested the city's inhabitants lived remarkably comfortable lives.



Nubian pyramids typically range in height from 6 to 30 meters. The Great Pyramid of Giza originally stood at approximately 146m (see main image)

“[Past studies indicated] they were very healthy and living to an old age; it really seemed rosy and picturesque,” said Schrader. “We were thinking, what are these people doing? This is a colonial environment, and it seems like it’s absolutely perfect. The skeletons could not be better.”

But this re-analysis revealed a more complex picture than that, she said, and a Tombos with a broader social landscape.

“It wasn’t only a super elite, healthy, no-traumatic-lesion sort of environment,” said Schrader. “There were hard labourers living, working and dying there.”

She said this study provided “some interesting questions for future research” as archaeologists reassess what they know about the pyramids.

Read more:

- [Some \(very creepy\) secrets of Mayan human sacrifices have been uncovered](#)
- [Ancient DNA holds clues to Higgs Bison cave painting mystery](#)
- [Why do we have to dig so deep to uncover ancient ruins?](#)

About our experts:

Dr Sarah Schrader is an associate professor at the Faculty of Archaeology and is the Head of the Laboratory for Human Osteoarchaeology at Leiden University, the Netherlands. Her research focuses on the excavation and analysis of human skeletal remains to address stress, everyday life, social inequality, health and disease, diet and nutrition, resilience and frailty, migration, physical activity, and more.

Dr Roland Enmarch is an Egyptologist at the University of Liverpool. He graduated from Oxford with a BA in Oriental Studies (Ancient Egyptian with Akkadian), and a DPhil specialising in Middle Egyptian pessimistic poetry, arriving at Liverpool in 2004. As well as continuing to work on literary laments, he also studies quarrying and expeditionary inscriptions, particularly those from the alabaster quarries at Hatnub.

[Hatty Willmoth](#)

A global food crisis is nearing – and the warning signs are buried beneath your feet

The world's soils are degrading fast, and until now we've had almost no way of knowing what's happening underground

SHAPE * MERGEFORMAT

Photo credit: Getty

[Fred Pearce](#)

Published: May 31, 2026 at 12:00 pm

Soils are the world's most pervasive ecosystems, and arguably its most complex and important. They're home to more than half the planet's [species](#). But they're also one of the ecosystems we know the least about.

We can see the surface, but short of digging endless holes, there's remarkably little we can discover about what lies beneath.

No remote-sensing satellite can measure the moisture in soil, its carbon content, or its stockpile of nutrients. Even farmers are often operating blind, reliant on lessons from prior harvests.

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But, if a small group of British researchers are right, the solution lies in seismology. Techniques developed to monitor earthquakes and look for oil can be harnessed to interrogate the structure of the world's soils – cheaply, quickly and potentially on a global scale – for the first time.

Soon, the researchers say, they could be creating 3D maps of the world's soils, using little more than hammer blows on a metal sheet and a mobile phone to hear the blows' reverberations within the soil.

Earth Rover Program scientists performing seismic soil sampling in a forest in Los Llanos, Colombia - Image credit: Earth Rover Program

The revolutionary technique, which they dub 'soilsmology', could help farmers grow more crops while doing less environmental damage, aid governments in warding off famines, and allow scientists and climate negotiators to accurately measure the changing carbon content of the world's soils.

The masterminds of the [Earth Rover Program](#) are currently at work on a handful of farms in England, Kenya and Colombia. Their aim is to create a “global soilcast” by surveying the soils that cover – and make fertile – much of Earth.

A drought of information

Soils are complex living entities, often compared to coral reefs in the ocean. They form over millennia as inert rock is broken down by weathering, allowing microbes and [fungi](#) to create organic matter that becomes a rich habitat for all manner of life.

“A teaspoon of healthy soil holds more living organisms than there are people on planet Earth,” says [Dr Bruce Lascelles](#), a soil consultant and former president of the British Society of Soil Science.

But soils vary hugely, from the nutrient-rich black earths of Ukraine (which was, until recently, one of the world’s great cereal-growing and exporting regions), to crumbling drought-stricken sands on the fringe of the Sahara desert; and from the frozen soils of the Arctic tundra to the thin, nutrient-poor soils often exposed by tropical deforestation.

Without soil, there would be few plants on the land and nothing for us or animals to eat. Even in today’s industrialised farming systems, 99 per cent of humanity’s food is derived from plants growing in different kinds of soil.

Yet we know staggeringly little about these life-giving ecosystems. “Soils have long been the Cinderella of the sciences,” says Lascelles.

Soils are a blind spot for environmental regulators, too. We have national conservation laws and international treaties aimed at protecting biodiversity, the climate, forests, oceans and water and air quality. “But not soils,” says Lascelles.

Down the ages, farmers have learned, through trial and error, which soils will grow the biggest harvests. But there are still large gaps in their knowledge.

The fertility of soils from one field to the next – even one square metre to the next – can differ hugely. But exploring these differences scientifically to make the most of the land is often prohibitively expensive.

If farmers knew more, they could fine-tune their methods, cutting the need for expensive fertiliser, for instance, and avoid over-intensive cultivation that destroys their most precious resource.



Advances in robotic farming, such as this AI-powered tulip-farming robot, will benefit from better soil science - Image credit: Getty Images

It's not just farmers who face an information drought. Soils are a major factor in the global carbon budget. They contain more than a third of the planet's terrestrial carbon – [three times more](#) than the atmosphere.

But, unlike forests and other ecosystems, we have very little data on how soil carbon interacts with the atmosphere, and whether soils are contributing to [climate change](#) by releasing it, or helping prevent climate change by capturing it.

Indeed, soils remain, as a recent [European Union report](#) noted, “the hidden part of the climate cycle.”

What we do know is that soils are under threat as never before. They're being widely eroded on farms by wind and water (especially after harvest when there's no vegetation cover), as well as being damaged by compaction from heavy farm equipment.

More soils are eroded when forests and other natural vegetation is removed, or through overgrazing of grasslands by livestock.

Even without erosion, they're under siege.

Intensive agriculture drains soils of nutrients such as nitrogen and phosphorus that are essential for plant growth.

Farmers try to replace lost nutrients with chemical fertilisers. But often they use too much, resulting in pollution and a decline in other vital soil features.

Many soils also suffer from other forms of pollution, such as industrial poisons like heavy metals, acid rain, a build-up of salt brought onto fields by irrigation water, and a rising tide of microplastics, which poison the organisms that sustain healthy soils.



Deforestation can cause all kinds of damage to soil, including erosion, nutrient loss and decreasing its water-holding capacity - Image credit: Getty Images

About 40 per cent of the world's soils are categorised as “degraded”, a figure that rises to 75 per cent in Europe. Every minute a further 20 hectares are reckoned to suffer, says [Dr Rattan Lal](#) of Ohio State University, an influential voice in the field of soil science.

Each year, some [75 billion tonnes](#) of soil are presumed lost worldwide.

Some estimates suggest that the combination of poor farming and climate change could unleash some 50 billion tonnes of carbon into the atmosphere by 2050, accelerating global warming in a dangerous feedback loop that causes further soil-carbon loss.

Soils can recover in time, thanks to their living inhabitants. But it can take up to a thousand years to produce an inch of new soil. Lal calls soil degradation “a global public health emergency”, because the damage threatens the world’s ability to feed itself.

Ecologically, soil degradation is a “silent global crisis”, agrees [Dr Harun Warui](#), an agroecologist at the Heinrich Böll Stiftung Foundation in Kenya.

So, whether our concern is the day-to-day management of individual fields, national planning for future food security, or using nature to help fix climate change, we badly need to know what’s going on beneath the surface of our soils.

Read more:

- [Some experts now think fungi are conscious. Here's what convinced them](#)
- [Scientists have found what sounds eerily like Atlantis off Australia's coast](#)
- [One of Earth's oldest mysteries keeps getting weirder](#)

Ultrasound for the ground

Enter: a brand-new technique for mapping soils. Using seismology – the science of tracking sound waves through solid structures – researchers can find and assess key attributes such as a soil’s density, depth, moisture content and fertility.

The Earth Rover Program – the name is a nod to the high-tech NASA space rovers that explore the surfaces of other planets – is a collaboration between soil scientists and geophysicists more used to helping oil companies find hydrocarbons underground.

Its genesis came four years ago, when soil scientist [Simon Jeffery](#) of Harper Adams University was introduced to geophysicist Tarje Nissen-Meyer, then at Oxford and now at the University of Exeter, by environmental activist George Monbiot.



Earth Rover Program co-founder

Professor Simon Jeffery - Image credit: Earth Rover Program

There was an instant meeting of minds. Nissen-Meyer was keen to find ways of using seismology to help heal the planet, rather than using it to find yet more oil. Jeffery was set on improving scientific understanding of the ecology of farm soils, to make their exploitation more sustainable.

The trio found a ready audience among other scientists, including British geographer [Dr Andy Jarvis](#), the director of the billion-dollar Future of Food initiative at the [Bezos Earth Fund](#) (set up by former Amazon boss, Jeff Bezos).

Jarvis arranged for a \$4m (almost £3m) grant from the Bezos fund, to help turn trials in tracking vibrations travelling through the ground into a system for globally mapping the layers, density, moisture and carbon content of the soil beneath our feet.

Currently, the system creates a seismic signal by tapping a hammer onto a small piece of ordinary metal on the ground and detecting the sound waves produced using several sensors placed nearby.

Earth Rover Program research scientists and researchers at the Center for Ecosystem Restoration – Kenya (CERK) perform seismic soil sampling using a seismic box and lines of buried geophone sensors - Image credit: Earth Rover Program

Jeffery likens the 3D soil maps his team are producing to ultrasound imaging of the human body. And the technique is just as quick. Each sounding takes just 10 seconds.

However, says Jeffery, “the plan is to develop the system such that in the future people will be able to place their mobile phone on the soil and walk around it, using their footsteps to generate the seismic signals and the accelerometer in their phones to collect and decipher them.”

Individual farmers will be able to map in 20 minutes what would once have taken several days and teams of diggers, he says.

The unique system is also cheap. In the past, a single sensor to measure seismic reverberations might cost around £700 (approx \$940). But this expensive kit is redundant when every smartphone has an accelerometer that, with a simple app, can be turned into a seismological device.

Equipped with just their phone, says Jarvis, farmers could soon be able to “see exactly where to irrigate or fertilise; governments could monitor carbon stock transparently; and all of us could understand, at last, the living, breathing world underfoot.”

Soil's untapped potential

But taking measurements is just the start. The researchers are hoping to develop machine-learning techniques so that [AI](#) can extrapolate survey data to model entire landscapes.

Then forecasts can be created of how the soil might respond to current exploitation, new threats or, more hopefully, the better management that their soil data could help stimulate.

Scientists from Colombia and UK in a research plot in Palmira, Colombia - Image credit: Earth Rover Program

The Earth Rover manifesto puts it this way:

“As our insight deepens, we can strengthen the natural relationships between plants and microbes, enhance nutrient recycling, improve carbon stocks and reduce compaction, erosion and dependence on synthetic inputs. Thereby developing a new approach to farming that delivers higher yields with lower environmental impacts.”

Modern farming techniques such as [robotics](#) and remote navigation of farm equipment allow farmers to micromanage soil cultivation – potentially varying their inputs plant by plant.

But without the knowledge of what lies beneath the surface of their soils, these techniques can’t achieve anything like their full potential.

The plan is ultimately to sell the Earth Rover system to high-tech commercial farmers. The profits will then be used to enable cheap seismological analysis of soils for small farmers across the world.

For now, the researchers are testing techniques and monitoring soils on a handful of farms. On [Roddy Hall](#)'s turkey farm near Exeter in Devon, for instance, they're watching how his organic methods, sustained over 30 years, improve soils.

Hall is delighted to be a guinea pig for the technology. "The soil is everything we do," he says.

Seismology, he believes, will "deepen our understanding of the complexity of the soil. It's terribly exciting and the machinery required is tiny, smaller than my phone."

The team is also working on an agricultural research station in Colombia, a vineyard in France and on seven farms in Kenya, including several run by Forest Foods, a pioneering commercial regenerative farm company.

Dr Peter Mosongo, a soil scientist at the Centre for Ecosystem Restoration – Kenya (CERK), a partner in the work, says seismic surveys conducted by African farmers could transform livelihoods.