



1000016-Mr. Jemar Largo Dela Cruz

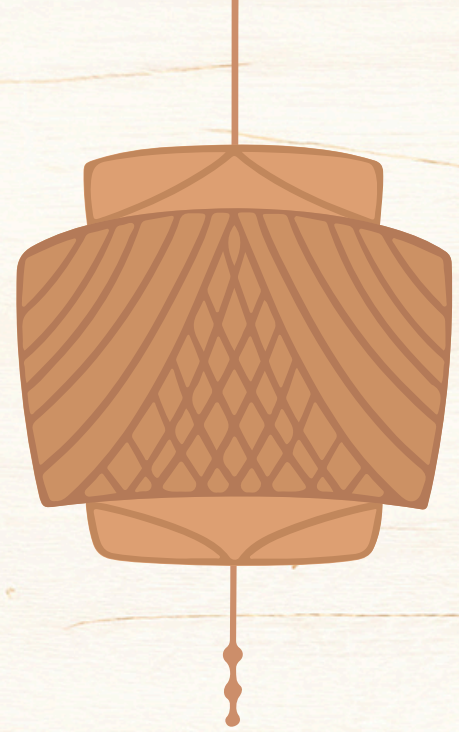
Academic ENglish



Objectives:

- By the end of this unit you will be able to
- understands relations between parts of text.
- use a variety of strategies for listening to a presentation .
- use visual effectively
- plan structures and give a clear presentation
- Notice particular features of abstracts from different fields of study.





Reading

Before we read:

Lead-in

Do you read popular science articles?
Why? On what occasions?





Reading

Unit 2 Popular Science Articles

Reading focus 1

The reading material below contains eight passages from two popular science articles. Read passages a–h quickly and match them to article titles 1 and 2.

1. Atheists turn to science during times of stress
2. Take a peek inside the brain's filing cabinet





Reading

Unit 2 Popular Science Articles

A

Gradually, a map emerged showing which neurons each noun and verb activates. The neural activity seems to occur in logical groups. Voxels active for animals such as dogs and fish tend to cluster close to one another, for instance. Other links are less easy to interpret: vehicles and animals are grouped together, perhaps because both are capable of movement.





Reading

Unit 2 Popular Science Articles

B

Farias speculates that a rationalist outlook would provide similar relief. 'Any kind of belief system helps you structure your perception of reality,' he says. 'It allows you to think of the universe in a particular meaningful way.' The researchers have begun a similar study using scientists who are religious to see how the two belief systems interact in response to stress.





Reading

Unit 2 Popular Science Articles

C.

Our brains are master organisers, able to make sense of the constant stream of visual information we encounter every day. A new map of the brain gives some insight into how it does this.





Reading

Unit 2 Popular Science Articles

D. A team of psychologists led by Miguel Farias at the University of Oxford asked 52 rowers to fill in a 'belief in science' questionnaire just before taking part in a competitive regatta. They gave the same test – in which participants had to score statements such as 'science is the most valuable part of human culture' – to a similar number of rowers at a training session. The questionnaire also assessed self-reported stress levels and degree of religious belief.





Reading

Unit 2 Popular Science Articles

E. Recent studies have suggested that the brain organises the things we see into categories, such as animals or faces. To determine how this categorisation works, Jack Gallant at the University of California, Berkeley, and colleagues identified the 1,705 most commonly used nouns and verbs in the English language.





Reading

Unit 2 Popular Science Articles

E. They then showed video clips of these objects and actions to four people as each lay in an fMRI scanner, and recorded the brain responses. The team divided the fMRI images up into tiny squares, or voxels. When a video clip of an object such as a butterfly was played, the fMRI recorded which voxels – and hence which groups of neurons – were active.





Reading

Unit 2 Popular Science Articles

F. Farias and colleagues discovered that those about to race were both more stressed, and rated their belief in science 14% higher than those who were simply training. Some caveats: the effect was modest, the team didn't measure whether the rowers' stress levels went down, and the subjects – competitive athletes who follow a rational training regime – are probably already scientifically minded. However, the findings reflect a growing body of psychological evidence that people find comfort in times of threat by moving closer to certain aspects of their world view – conservatives become more conservative, for example, liberals more liberal, religious believers more devout.





Reading

Unit 2 Popular Science Articles

G. It's well known that religious faith can help believers cope with stress and anxiety, by providing them with a sense of meaning and control at times of uncertainty. It now seems that a 'belief' in science and a rationalistic outlook might do the same for the non-religious.





Reading

Unit 2 Popular Science Articles

H. Gallant says the results suggest that the brain organises visual information by its relationship to other information. Each neuron appears to act as a 'filter' for placing data into multiple categories. The method opens a new door to looking at brain data, says John-Dylan Haynes of the Bernstein Center for Computational Neuroscience in Berlin, Germany.





Reading

Unit 2 Popular Science Articles

Answers:

Title 1 – Problems with
technology in schools

a – 1

b – 1

c – 1

d – 1

Answers:

Title 2 – Research agenda
for gun violence

e – 2

f – 2

g – 2

h – 2



Work in pairs. Note down the main points of each text from Activity 2 on the following spidergram. Student A: work with Text 1. Student B: work with Text 2.



Work in pairs. Note down the main points of each text from Activity 2 on the following spidergram. Student A: work with Text 1. Student B: work with Text 2.

Spidergram

Text 1

Who: teachers, students, administrators

What: computer use in schools

Where: Silicon Valley, California

When: present study period

Why: examine technology impact

How: interviews, observations, surveys

Text 2

Who: researchers, government, policymakers

What: gun violence research

Where: United States

When: current research agenda

Why: reduce gun violence

How: national research studies



Vocabulary focus I

6. Research can be divided into three stages: planning, process and analysing results. Read Texts 1–2 again and complete the table with expressions describing these stages.

Vocabulary focus 1

6 Research can be divided into three stages: planning, process and analysing results. Read Texts 1–2 again and complete the table with expressions describing these stages.

Example: *gave the same test (process) ...*

Planning	Process	Results
1. Identify the problem or opportunity. 2. Set objectives. 3. Develop a strategy. 4. Develop a plan. 5. Implement the plan. 6. Evaluate the results.	1. Identify the problem or opportunity. 2. Set objectives. 3. Develop a strategy. 4. Develop a plan. 5. Implement the plan. 6. Evaluate the results.	1. Identify the problem or opportunity. 2. Set objectives. 3. Develop a strategy. 4. Develop a plan. 5. Implement the plan. 6. Evaluate the results.



Vocabulary focus 1



6. Research can be divided into three stages: planning, process and analysing results. Read Texts 1–2 again and complete the table with expressions describing these stages.

Topic	Text 1	Text 2
Research topic	Technology use in schools	Gun violence in the US
Where	Silicon Valley, California	United States
Method	Interviews, observations, surveys	National research agenda
Participants	Teachers, students, administrators	Researchers and policymakers
Purpose	Study classroom technology use	Reduce gun violence





Reading

Unit 2 Popular Science Articles

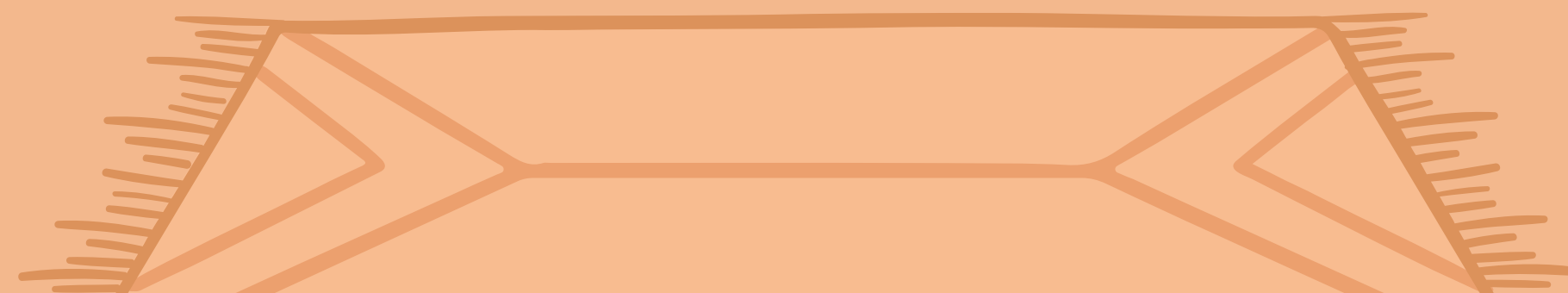
Skim the article below and summarise it in one or two sentences.





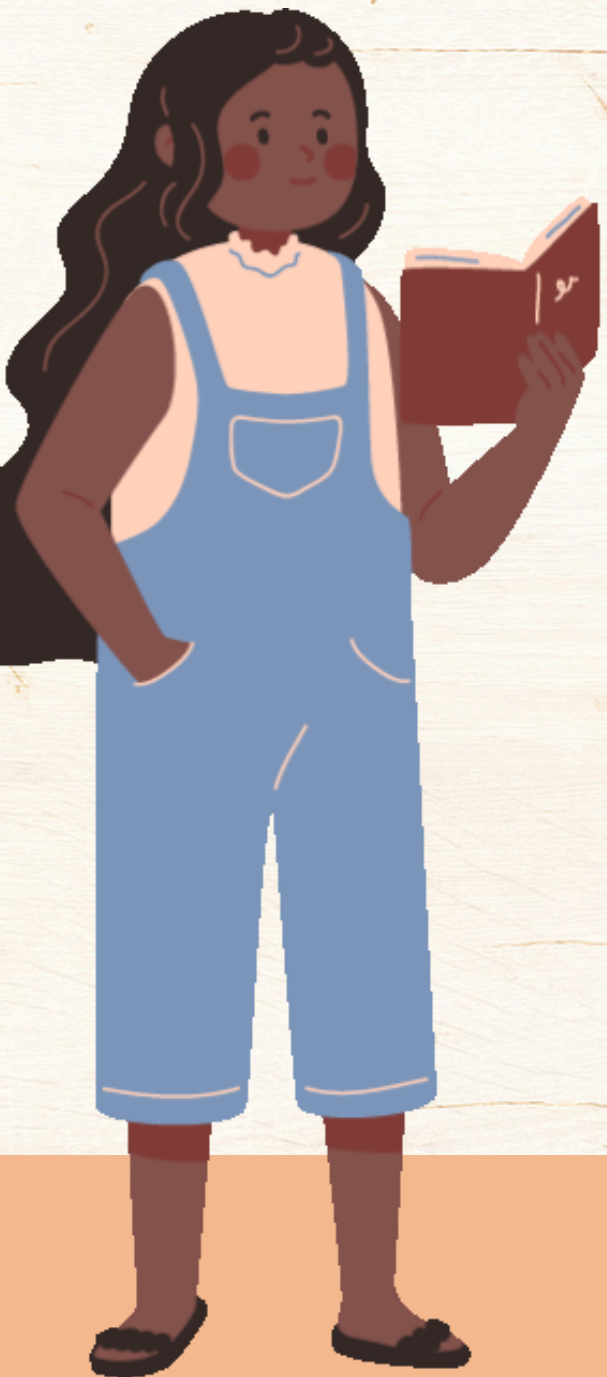
Research agenda set for curbing US gun violence

- Barack Obama asked for a new agenda for research into curbing gun violence, and now he has one.
- Just one problem: getting a Congress that rejected his plans for tighter gun laws in the wake of the Newtown massacre to provide the necessary cash.
- In January, Obama directed the Centers for Disease Control and Prevention (CDC) to identify pressing questions about reducing deaths and injuries caused by guns.

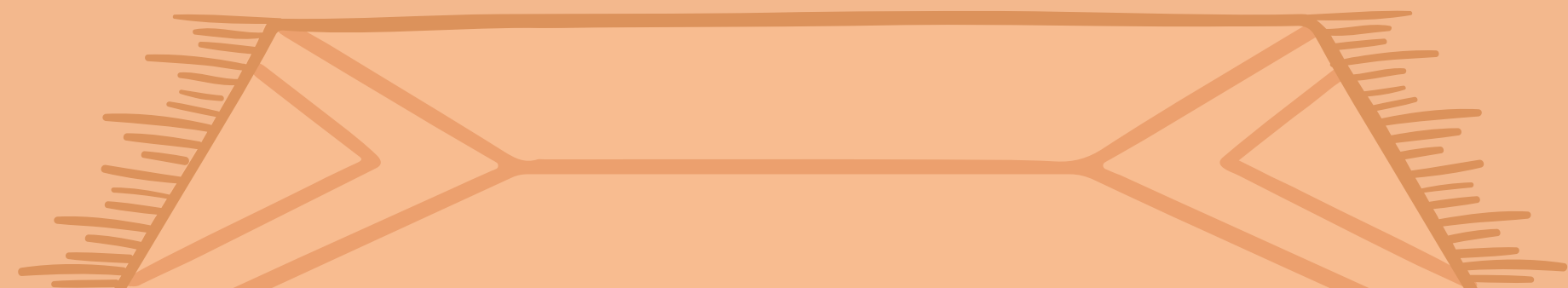




Research agenda set for curbing US gun violence

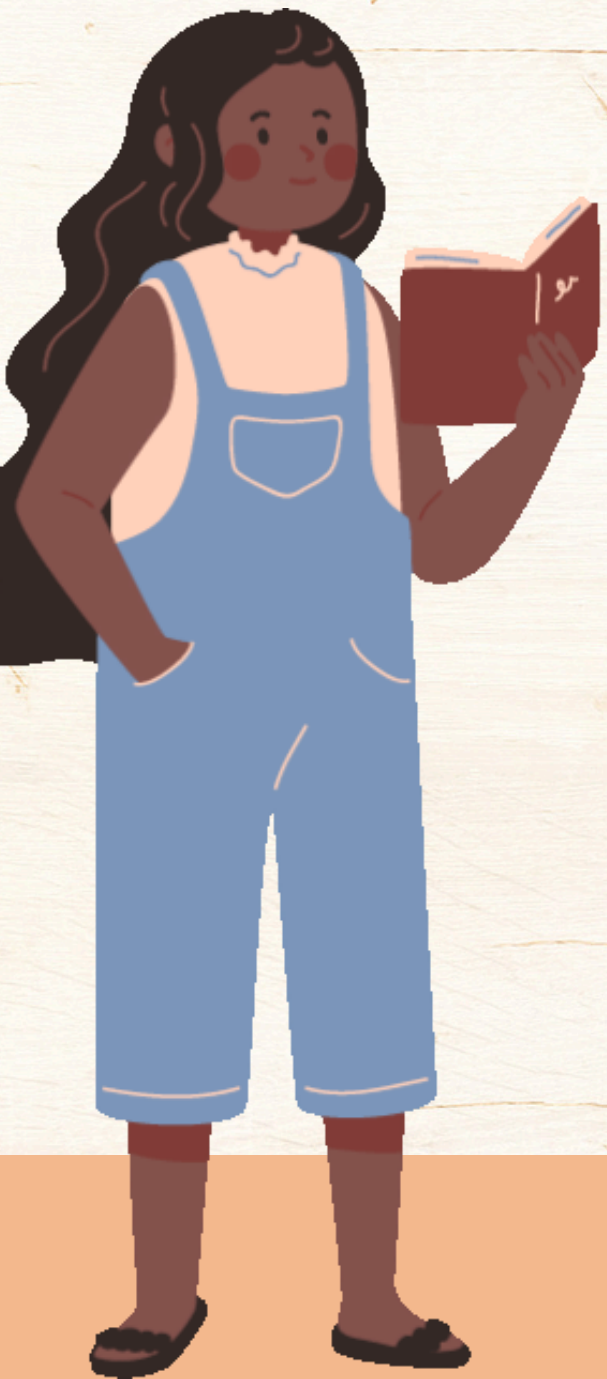


- Then Congressional allies of the National Rifle Association slashed the agency's annual budget by \$2.6 million – the exact sum it had been spending on gun violence research.
- Now an Institute of Medicine panel headed by Alan Leshner, CEO of the American Association for the Advancement of Science, has given the CDC a list of priorities for investigation, ranging from the potential of 'smart guns' that only their registered user can fire, to the effectiveness of childhood education programmes in reducing violence in later life.

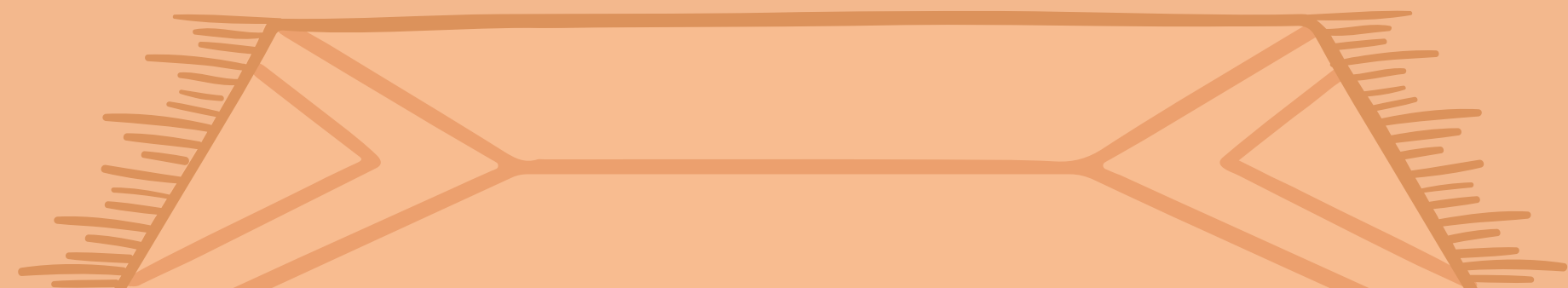




Research agenda set for curbing US gun violence



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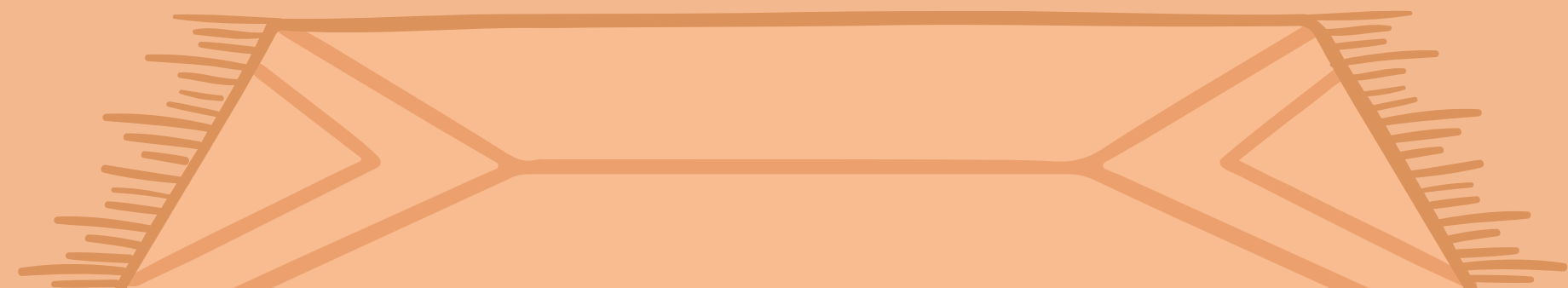
Research agenda set for curbing US gun violence



2 _____

Many previous studies have simply looked for correlations between policies across different countries or US states and their rates of gun violence, and so have not been able to demonstrate causation.

'We don't just need more research but more rigorous research,' agrees Garen Wintemute, who heads the Violence Prevention Research Program at the University of California, Davis.

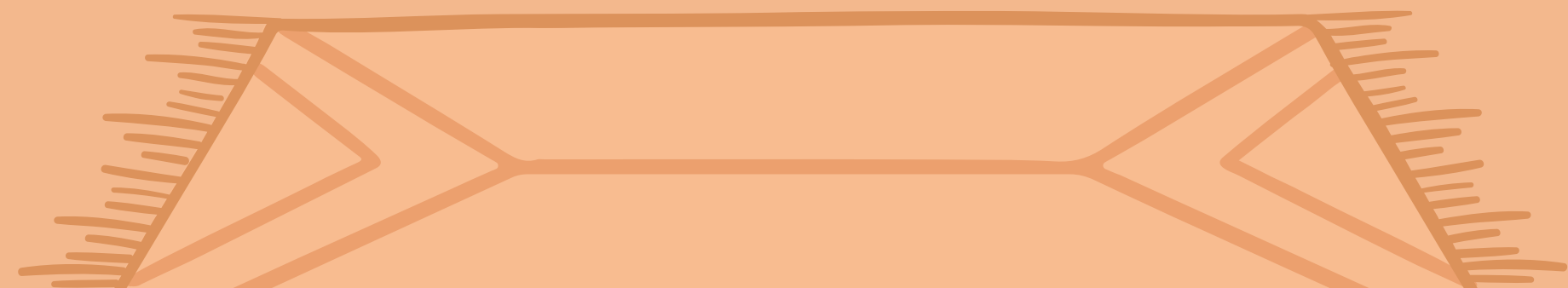


Research agenda set for curbing US gun violence



3 _____

Any addition to the CDC's budget would require Congressional approval, and that will be hard to obtain, given the gun lobby's powerful influence. 'Everything on this list has been controversial all along,' says Wintemute. 'That controversy will remain.'





Research agenda set for curbing US gun violence



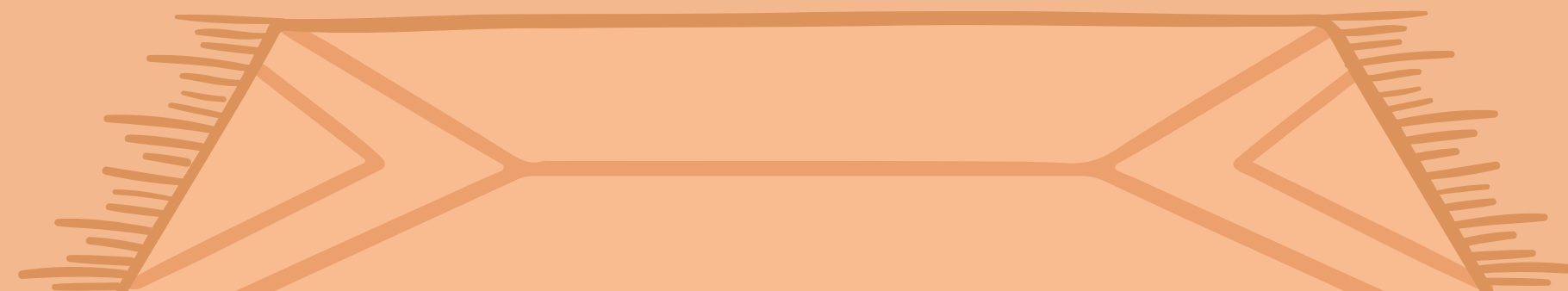
Activity 7 – Summary (1–2 sentences)

Text 1:

The research shows that even though schools have computers, teachers and students do not always use them widely. Traditional teaching practices still influence how technology is used in classrooms.

Text 2:

The article proposes a research agenda to study gun violence in the United States and encourages scientific research to help develop effective prevention policies.



FOLLOW UP

- Search online for a recent popular science article. Summarise its contents.



LISTENING

Before you read a text, ask and answer the following questions:

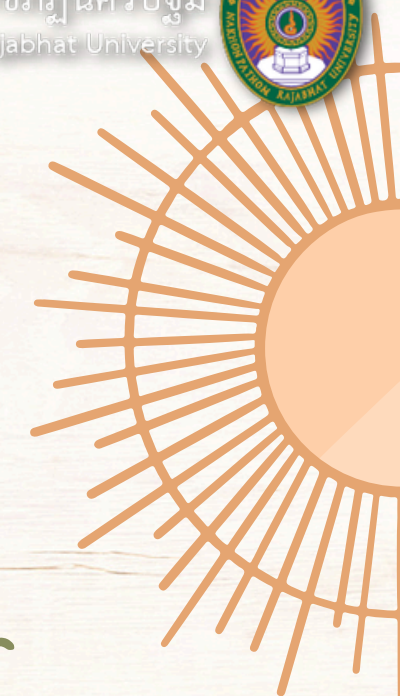
Are you reading only for general content? For data? For specific information or for general thematic concerns? For arguments that support or contest your thesis in a writing assignment? For information that you know you'll need for an assignment, or for information to get you thinking about what you'll need?



LISTENING

Lead-in

1. What three 'golden rules' of research ethics did the presenter in Lesson 2 mention in his presentation? What do you think of them?
2. You are going to listen to a speaker talking about some reasons for unethical behaviour in research. What do you think he will mention?





LISTENING

Answers:

1. What three “golden rules” of research ethics did the presenter mention? What do you think of them?

Possible golden rules:

Be honest in research

Do not falsify data

Give proper credit to sources

Opinion:

I think these rules are very important because they help keep research trustworthy and fair.

2. What do you think the speaker will mention about unethical behaviour in research?

The speaker may mention:

- pressure from companies
- desire for money or funding
- competition between researchers
- conflicts of interest

LISTENING

Listen to short extracts from the presentation and tick the phrases you hear.

1

- a. Well, you, no!
- b. Well, you know
- c. Well, you, now

2

- a. in law courts
- b. in low coats
- c. in law courts

3

- a. they are
- b. here are
- c. there are

4

- a. many of you wear this
- b. many of you are aware of this
- c. many of you know where it is

5

- a. something is used
- b. some of them is this
- c. some of the issues

6

- a. They made tracks by the money.
- b. They may be tractable, the money.
- c. They may be attracted by the money.





LISTENING

Listen to short extracts from the presentation and tick the
phrases you hear.

Skills Development Focus

Activity 3 – Tick the phrases

- 1.b – Well, you know
- 2.a – in law courts
- 3.c – there are
- 4.b – many of you are aware of this
- 5.c – some of the issues
- 6.c – They may be attracted by the money





LISTENING

Read the unfinished sentences and guess how they might end in the presentation. Then listen to the whole sentences and check your ideas.

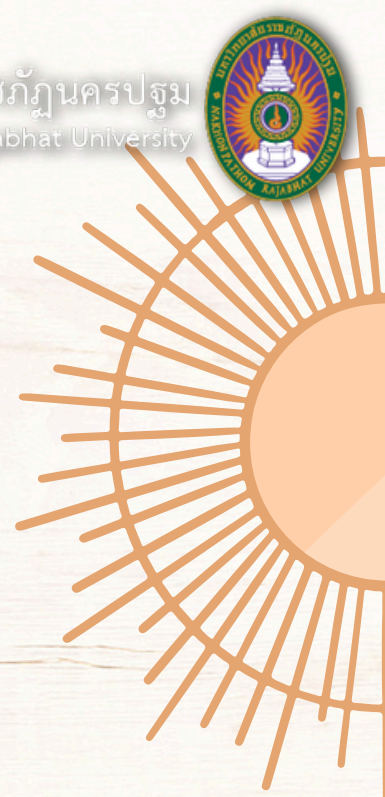
- Why are researchers sometimes ...
- There can be conflicts ...
- Just in most countries – in Russia, in Britain, in the United States – big corporations ...
- And sometimes the big corporations want certain results ...
- The researchers may want ...
- They may be tempted to ...
- On the other hand, they lose ...
- They lose the respect of ...
- And there are cases which finish in ...



LISTENING

Read the unfinished sentences and guess how they might end in the presentation. Then listen to the whole sentences and check your ideas.

- Activity 4 – Complete the sentences
- Why are researchers sometimes tempted to behave unethically?
- There can be conflicts of interest in research.
- Just in most countries – in Russia, in Britain, in the United States – big corporations fund research projects.
- And sometimes the big corporations want certain results from the research.
- The researchers may want funding or career success.
- They may be tempted to change or hide research results.
- On the other hand, they lose their professional reputation.
- They lose the respect of other researchers and the public.
- And there are cases which finish in law courts.
-

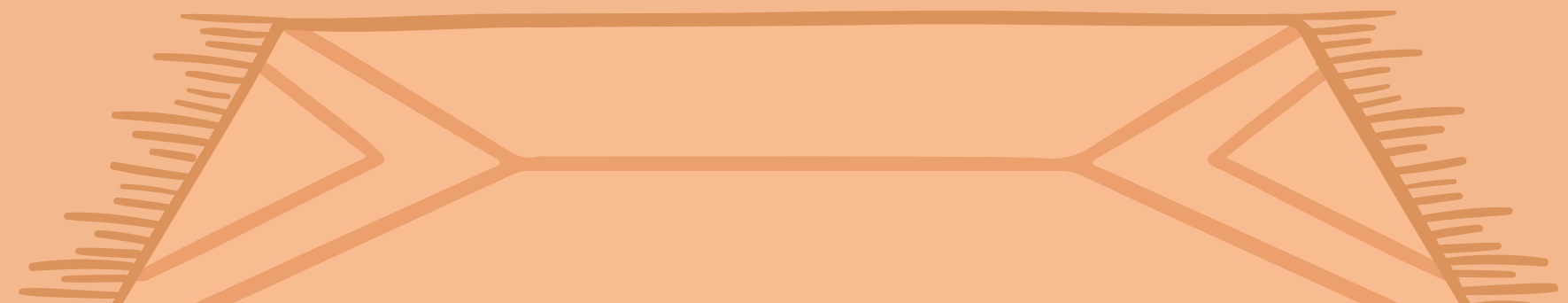
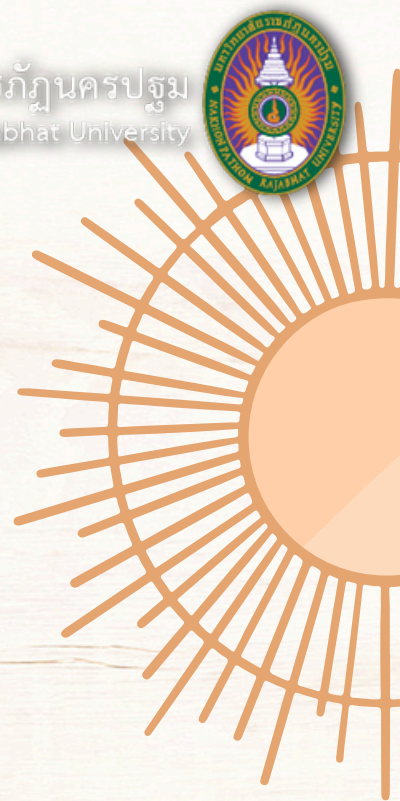


LISTENING

Listening for specific information

Think about what you heard in Activity 4 and answer the questions.

1. What reason(s) for unethical behaviour in research does the speaker mention?
2. What sort of unethical behaviour can this result in?



LISTENING

Listening for Specific Information

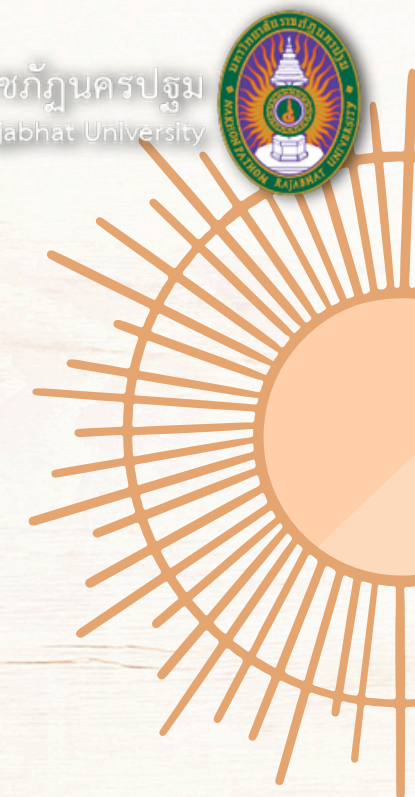
Activity 5

1. What reasons for unethical behaviour does the speaker mention?

- Pressure from companies
- Desire for money or funding
- Conflicts of interest

2. What sort of unethical behaviour can this result in?

- Changing research results
- Hiding important information
- Publishing misleading findings



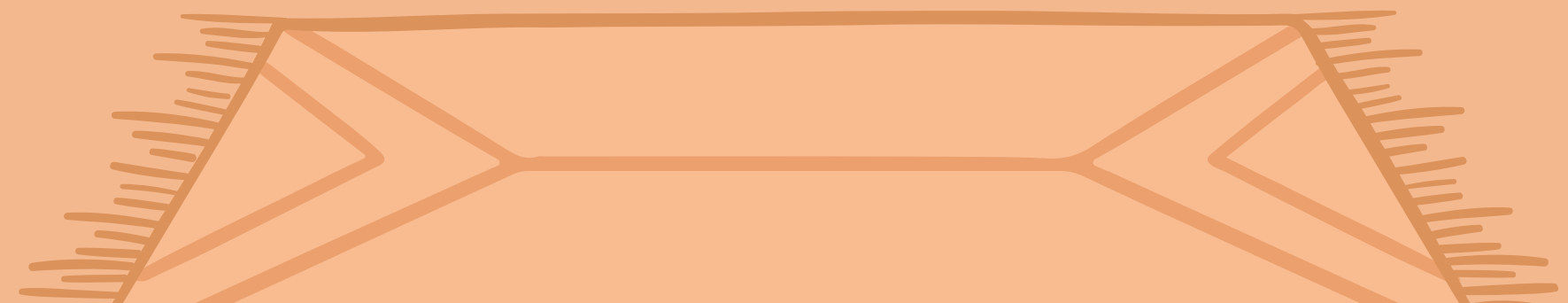
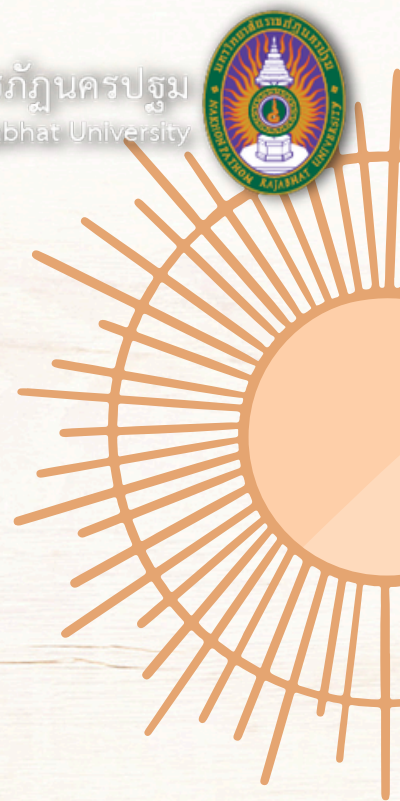
LISTENING

Work in groups (A, B and C). Listen to another part of the presentation and answer the questions.

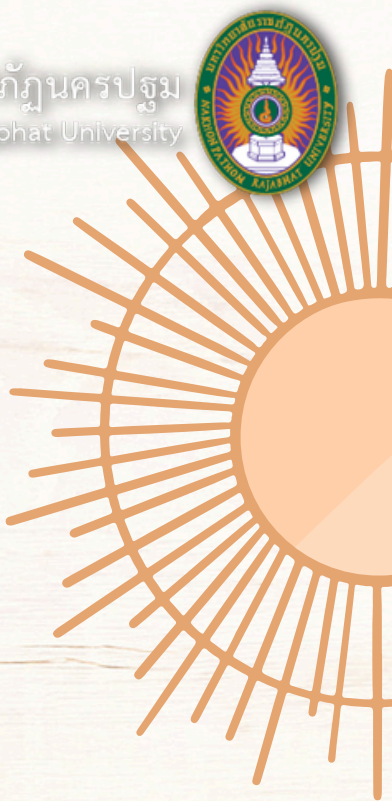
Group A: What new reason(s) for unethical behaviour in research does the speaker mention here?

Group B: What example of unethical behaviour does the speaker focus on in this part?

Group C: Make notes on what the speaker says about this example of unethical behaviour.



LISTENING



Activity 6

Group A

New reason:

Competition between researchers and pressure to publish results.

Group B

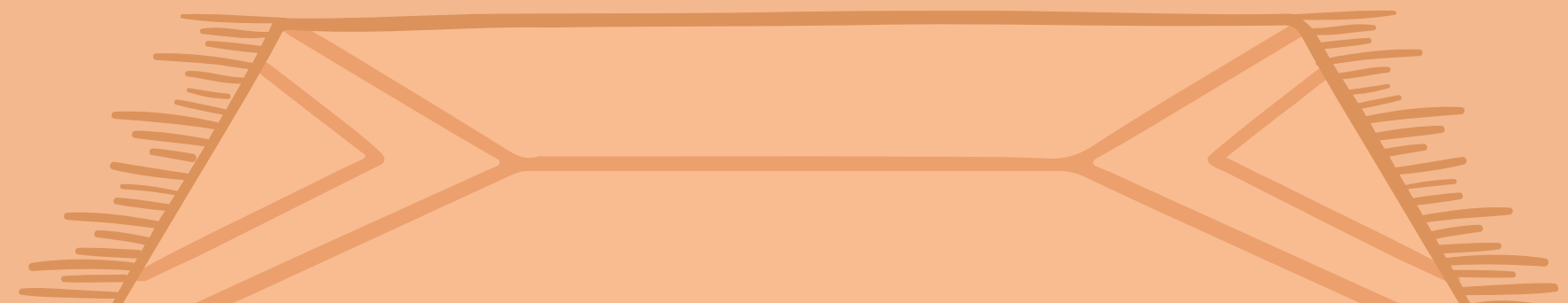
Example of unethical behaviour:

Falsifying or manipulating research data.

Group C

Notes:

- Some researchers change results to satisfy sponsors.
- This damages scientific credibility.
- It can lead to legal problems and loss of reputation.





Speaking

Work in pairs. Look at slides A–C on page 118. How can the slides be improved? Use the Slides Checklist to guide you. Use phrases from the Language Support boxes on opinions on page 109 and agreement and disagreement on page 111 to help your discussion.

In my opinion, there is too much information on one slide. It is worth having three slides.

Tip:

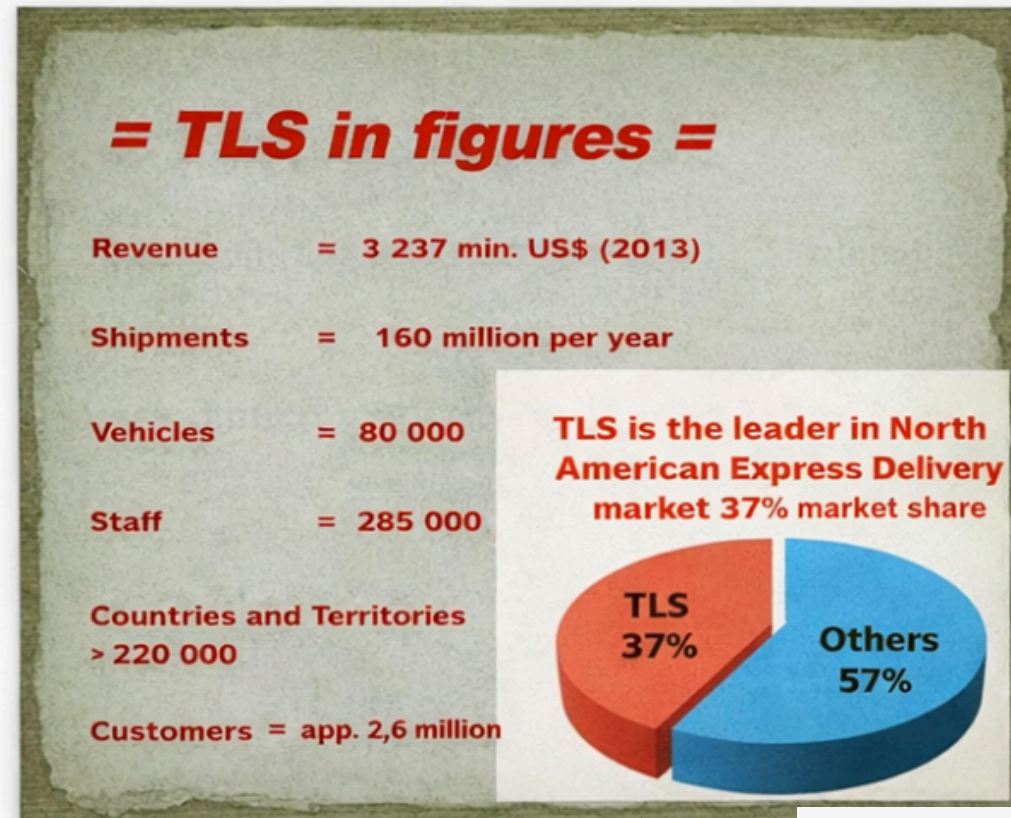
If you have several slides related to the same topic, repeat the heading on each slide. You may also need to number the slides in case the audience would like you to go back to a certain slide.





Speaking

A



B



C





Speaking

Plan a five-minute presentation with the use of slides. Choose from the options below.

1. A short presentation on a subject of your choice.
2. The beginning of your final presentation.





Speaking

Make a maximum of five slides to support your presentation.

Include the name of your presentation, an overview of the presentation, at least one main-body slide, and a conclusion slide.

Tip:

One of the most typical mistakes many presenters make is to put too many words on a slide. Use key words. Do not read the text from the slides, talk to the audience.





Speaking

Work in pairs. Complete the facts below about the human body,
using the numbers from Activity 9.

Some interesting facts about the human body

- 1 Nerve impulses to and from the brain travel as fast as _____ miles per hour.
- 2 The human brain cell can hold five times as much information as the *Encyclopedia Britannica*. The storage capacity of the brain in electronic terms is between three or even _____ terabytes.
- 3 _____ of the brain is water.
- 4 The human body has _____ miles of blood vessels.
- 5 Sneezes regularly exceed _____ miles per hour.
- 6 Your nose can remember _____ different scents.
- 7 It takes _____ muscles to smile and _____ to frown.
- 8 You use _____ muscles to take one step.
- 9 Bone has been found to have a tensile strength of _____ pounds per square inch (psi) while steel is much higher at 70,000 psi.
- 10 The feet account for _____ of all the human body's bones.
- 11 _____ cells die in the human body every minute.



Speaking

Work in pairs. Complete the facts below about the human body, using the numbers from Activity 9.



Activity 10 – “Some interesting facts about the human body.” 

Nerve impulses to and from the brain travel as fast as 170 miles per hour.

The storage capacity of the brain, in electronic terms, is between three and 1,000 terabytes.

75% of the brain is water.

The human body has 60,000 miles of blood vessels.



Speaking

Work in pairs. Complete the facts below about the human body, using the numbers from Activity 9.



Sneezes regularly exceed 100 miles per hour.

Your nose can remember 50,000 different scents.

It takes 17 muscles to smile and 43 to frown.

You use 200 muscles to take one step.

Bone has been found to have a tensile strength of 24,000 pounds per square inch (psi) while steel is much higher at 70,000 psi.

The feet account for one quarter (25%) of all the human body's bones.

300 million cells die in the human body every minute.



Speaking

Work in pairs and swap your diagrams. Try to describe your partner's visual. Use phrases from the Language Support box below.



Speaking

Language Support: referring to visuals

- If you look at the figure, ...
- As you can see, the figure shows/gives ...
- As the figure/diagram shows, ...
- As can be seen, ...
- Look at this flowchart/diagram.
- The horizontal axis represents ...
- The table/diagram summarises the data ...
- As the line graph/diagram shows, there was an upward trend in ...



Writing

Fill in the gaps in the abstract in Activity 12 with a suitable linking word/phrase from the list. There is one extra word which you do not need to use.

also

however

as a result

secondly

initially

thirdly

in contrast

finally

overall





Writing

Correct logical order used in research abstracts:

1. Initially
2. Secondly
3. Thirdly
4. However
5. As a result
6. Also
7. Finally
8. Overall





Writing

Match the highlighted words in the abstract to their synonyms 1-10 below.

1 assumed

2 influences

3 communication

4 improved, made better

5 will probably have

6 became higher

7 aim

8 given to

9 parts

10 study



Writing

14. Match highlighted words with synonyms

1. assumed → supposed

2. influences → affects

3. communication → interaction

4. improved, made better → enhanced

5. will probably have → is likely to have

6. became higher → increased

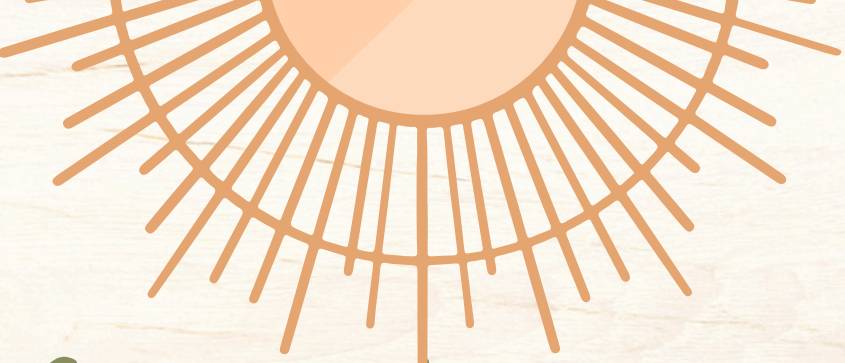
7. aim → objective

8. given to → conducted among

9. parts → aspects

10. study → research





Writing



Complete the sentences below with the highlighted words/phrases from the abstract.

- 1 The main purpose of the article is to describe the enhanced procedure of the research.
- 2 This article is motivated by a series of experiments on the _____ between peers in a group.
- 3 Previous research indicates that the tension between the two countries has _____.
- 4 The article aims to _____ some aspects of the problem described.
- 5 We conclude that a wider use of the gadget can be _____.
- 6 We can foresee that the study _____ to have similar results in other settings.
- 7 The poll has been _____ a group of University teachers.
- 8 The _____ of the study is to examine the reasons for such behaviour.
- 9 It is demonstrated how global warming _____ the environment.
- 10 The paper presents moral _____ of the biotechnological experiments.

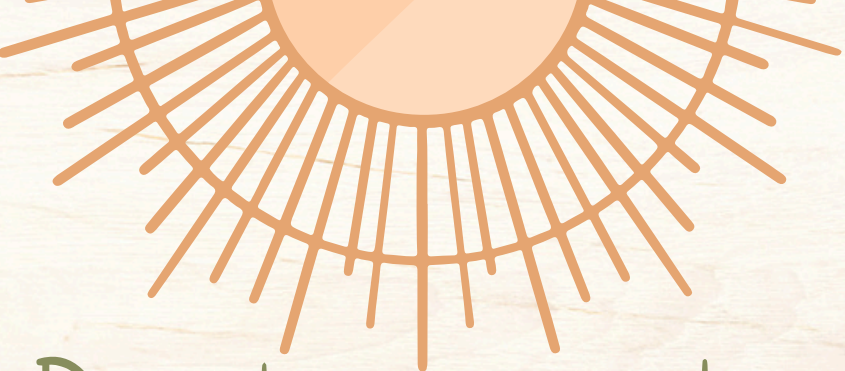


Writing



15. Complete the sentences

1. The main purpose of the article is to describe the enhanced procedure of the research.
2. This article is motivated by a series of experiments on the interaction between peers in a group.
3. Previous research indicates that the tension between the two countries has increased.
4. The article aims to examine some aspects of the problem described.
5. We conclude that a wider use of the gadget can be beneficial.
6. We can foresee that the study is likely to have similar results in other settings.
7. The poll has been conducted among a group of University teachers.
8. The objective of the study is to examine the reasons for such behaviour.
9. It is demonstrated how global warming affects the environment.
10. The paper presents moral aspects of the biotechnological experiments.



Writing



Describing research

Think about the research you are carrying out or have already completed. Finish the sentences below to describe it.

- We conducted a study of _____.
- Numerous research in the area show _____.
- Our objective was to examine _____.
- Firstly, _____ used.
- Secondly, _____ was examined.
- In addition, _____ was/were demonstrated.
- Overall, _____.
- Finally, the following conclusion was drawn: _____.



Writing

16. Describing research (example answers)

You can write something like this:

We conducted a study of students' learning behaviour in online classes.

Numerous research in the area show that digital tools improve learning efficiency.

Our objective was to examine how technology affects student participation.

Firstly, a questionnaire was used.

Secondly, student performance data was examined.

In addition, differences between groups were demonstrated.

Overall, technology improved participation and motivation.

Finally, the following conclusion was drawn: digital learning tools can significantly support modern education.



Writing

Lesson 2

Abstracts from different fields of study



Writing

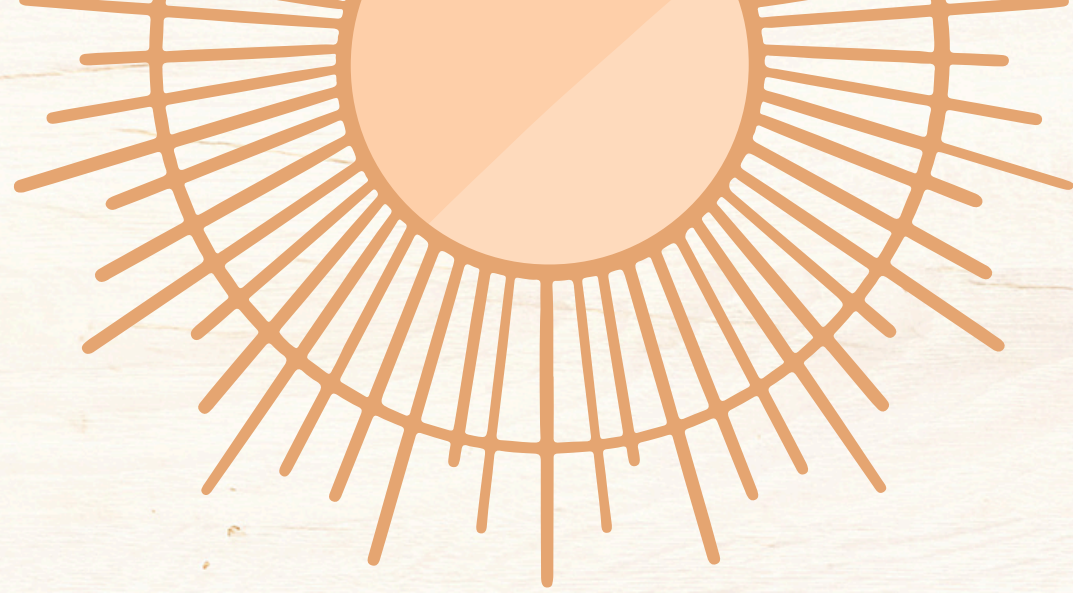
Lead-in

There are eight words connected with abstracts hidden below. Work in pairs to find them. Say what each word means.

(Word search puzzle)

Words found in the grid include examples such as results, abstract, background, conclusion, links, etc.





Writing

Spot the difference

Match abstracts A–C to fields of study 1–3.

1. Pure Science
2. Social Sciences
3. Humanities





Writing

A

In this article I consider whether Hegel is a naturalist or an anti-naturalist with respect to his philosophy of nature. I adopt a cluster-based approach to naturalism, on which positions are more or less naturalistic depending how many strands of the cluster naturalism they exemplify. I focus on two strands: belief that philosophy is continuous with the empirical sciences, and disbelief in supernatural entities.



Writing

A

I argue that Hegel regards philosophy of nature as distinct, but not wholly discontinuous, from empirical science and that he believes in the reality of formal and final causes insofar as he is a realist about universal forms that interconnect to comprise a self-organising whole. Nonetheless, for Hegel, natural particulars never fully realise these universal forms, so that empirical inquiry into these particulars and their efficient-causal interactions is always necessary. In these two respects, I conclude, Hegel's position sits in the middle of the naturalism/anti-naturalism spectrum.

Writing

B

This research assessed phonological and morphological awareness in dyslexic university students. We tested 44 dyslexic university students in phonological and morphological awareness tasks and compared their performances. In the phonological awareness tests, the dyslexic university students performed at the same level as their reading level controls. In contrast, they systematically outperformed their reading level controls in the morphological awareness tasks and almost reached the proficiency level of the chronological age controls. The results show that dyslexic university students develop their morphological awareness more than their phonological awareness. These findings add to the evidence indicating that morphological awareness is not deficient in dyslexia and could instead play a beneficial role in the development of literacy skills in this population.



Writing

C

A process capable of producing large amounts of energy by a nuclear fusion process between nickel and hydrogen, occurring below 1,000 K, is described. Experimental values of the ratios between output and input energies obtained in a certain number of experiments are reported. The occurrence of the effect is justified on the basis of existing experimental and theoretical results. Measurements performed during the experiments allow for the exclusion of neutron and gamma ray emissions.



Writing

Correct Answers

Exercise 2 – Match abstracts to fields

1. Pure Science → C

2. Social Sciences → B

3. Humanities → A

✓ Explanation

- A discusses philosophy and Hegel → Humanities
- B studies dyslexic students → Social Sciences
- C discusses nuclear fusion experiment → Pure Science



Writing

3. Read the abstracts again and match them to statements 1-8.

The abstract ...

1. includes the following parts: Aims, Results.
2. includes the following parts: Aims, Approach, Conclusion.
3. includes the following parts: Aims, Approach, Results, Conclusion.
4. discusses the approach of a well-known theorist.
5. is written in the passive voice.
6. is written in the first person singular.
7. presents opinions.
8. describes objective results.



Writing

Exercise 3 – Match statements

- 1.includes: Aims, Results → B
- 2.includes: Aims, Approach, Conclusion → A
- 3.includes: Aims, Approach, Results, Conclusion → B
- 4.discusses the approach of a well-known theorist → A
- 5.written in passive voice → C
- 6.written in first person singular → A
- 7.presents opinions → A
- 8.describes objective results → B

Writing



Language focus

4. In the abstracts, find words/phrases similar in meaning to definitions 1-7. The letters show you in which abstract the word is used.

1. think about, reflect, give attention (A) _____
2. in connection with something (A) _____
3. accept, use (A) _____
4. component, aspect, feature (A) _____
5. judge the importance or value of something (B) _____
6. reasons for believing that something is or is not true (B) _____
7. show that something is right or reasonable (C) _____

Writing



Exercise 4 – Words from the abstracts

1. think about → consider (A)
2. in connection with something → with respect to (A)
3. accept, use → adopt (A)
4. component / aspect → strand (A)
5. judge the importance/value → assessed (B)
6. reasons for believing something → evidence (B)
7. show something is right → justified (C)



Thank you!

