

Exercices innovations et responsabilité

Exercices d'anglais - niveau 1re

Ces exercices innovations et responsabilité t'entraînent à parler de science avec précision, à comprendre des documents sur l'espace et les révolutions industrielles, puis à prendre position sur les limites du progrès.

Cette fiche d'exercices est à **télécharger en PDF et à imprimer gratuitement** : le bouton se trouve en bas de la page, sans inscription.

Les exercices

Exercices innovations et responsabilité : comprendre et débattre

Exercice 1 : associer les mots

Associe chaque mot anglais à sa traduction (a à h).

1. a breakthrough
2. space debris
3. a side effect
4. to launch
5. gene editing
6. accountable
7. privacy
8. the assembly line

a. la modification génétique – b. la vie privée – c. une percée – d. la chaîne de montage – e. un effet secondaire – f. lancer – g. responsable, qui doit rendre des comptes – h. les débris spatiaux

Exercice 2 : la famille de mots

Complète avec le mot de la même famille qui convient : innovative, innovation, responsibility, irresponsible, ethical, scientist.

1. The reusable rocket is a major ___ in space travel.
2. The company is known for its ___ products.

3. Many people think that editing human embryos is not ____.
4. It would be ____ to ignore the risks.
5. A ____ must think about the consequences of her discoveries.
6. Protecting the planet is everyone's ____.

Exercice 3 : remettre les événements dans l'ordre

Classe ces événements du plus ancien au plus récent.

1. Dolly the sheep is born.
2. The Outer Space Treaty is signed.
3. The Luddites destroy machines.
4. The World Wide Web is invented.
5. Mary Shelley publishes *Frankenstein*.
6. Neil Armstrong walks on the Moon.

Partie 2

Exercice 4 : vrai ou faux sur un article

Lis l'article puis dis si les affirmations sont vraies (True) ou fausses (False). Justifie avec le texte.

Above our heads, a silent traffic jam is growing. Old satellites, pieces of rockets and even a lost glove from a spacewalk are travelling around the Earth at about 28,000 kilometres an hour. At that speed, a fragment the size of a coin can destroy a satellite. In 2009, two satellites collided by accident and created thousands of new fragments. Scientists fear a chain reaction that could make some orbits unusable for decades. Several solutions are being tested: nets, magnets and even harpoons to catch old satellites. But the main problem is not technical. No international law forces companies to clean up after themselves, and nobody wants to pay for the mess. "Space is a common good," says one engineer. "If we treat it like a dustbin, our grandchildren will pay the price."

1. Space debris only includes old satellites.
2. Debris moves very fast.
3. A small fragment cannot damage a satellite.
4. A collision happened in 2009.
5. The main obstacle to cleaning space is technical.
6. The engineer compares space to a dustbin to criticise our behaviour.

Partie 3

Exercice 5 : lire une frise

Observe la frise puis réponds en anglais par des phrases complètes.



Quatre innovations marquantes.

1. Which innovation is the oldest on the timeline?
2. What appeared in 1913?
3. How many years separate the World Wide Web and CRISPR?
4. Which innovation belongs to the field of biology?
5. Choose one innovation and name one responsibility it raises.

Exercice 6 : pour ou contre l'homme augmenté ?

Classe chaque argument : pour (For) ou contre (Against) l'homme augmenté.

1. Bionic arms allow amputees to live independently.
2. Enhancements will create a new gap between rich and poor.
3. Brain implants could help paralysed people communicate.
4. Nobody knows the long-term effects of these implants.
5. Humans have always used tools to improve themselves.
6. Hackers could take control of connected implants.

Exercice 7 : choisir le bon mot

Choisis le mot qui convient.

1. The researchers carried out an (experience / experiment) on mice.
2. She is a brilliant (scientist / scientific).
3. Tourists can now travel into (space / the space).
4. We need to (control / check) the results before publishing them.
5. The project was (eventually / possibly) abandoned after ten years of work.
6. They did a lot of (research / researches) on gene editing.

Partie 4

Exercice 8 : corriger les erreurs

Chaque phrase contient une erreur. Recopie-la correctement.

1. No country can claims the Moon.
2. Dolly the sheep was cloned in Scotland in the 1996.
3. Scientists should be accountable of their discoveries.
4. The informations about the patients were stolen.
5. The Luddites were destroying machines because they were scared to lose their jobs.
6. Just because we can doesn't mean we must to do it.

Exercice 9 : traduire en anglais

Traduis ces phrases en anglais.

1. Aucun pays ne peut s'approprier la Lune.
2. Les débris spatiaux menacent les satellites.
3. Cette découverte pourrait guérir des maladies génétiques.
4. Les scientifiques doivent penser aux conséquences de leurs recherches.
5. Le principe de précaution consiste à attendre en cas de doute.
6. Seuls les plus riches pourront s'offrir ces implants.

Exercice 10 : traduire en français

Traduis ces phrases en français.

1. Space should be explored for the benefit of all countries.
2. Automation has already replaced many factory workers.
3. Editing an embryo also affects future generations.
4. The inventor of the Web chose not to patent it.
5. Just because we can doesn't mean we should.

Partie 5

Exercice 11 : production guidée

Rédige un essai de 150 à 180 mots : **Should there be limits to scientific progress?**

1. Introduction : accroche (Frankenstein ou une découverte récente) et problématique.
2. Un paragraphe sur les bienfaits du progrès, avec un exemple.
3. Un paragraphe sur les risques, avec un exemple (espace ou bioéthique).
4. Une conclusion qui dit qui doit fixer les limites.
5. Utilise au moins deux expressions de la responsabilité (*should be held accountable, it is our responsibility to...*).

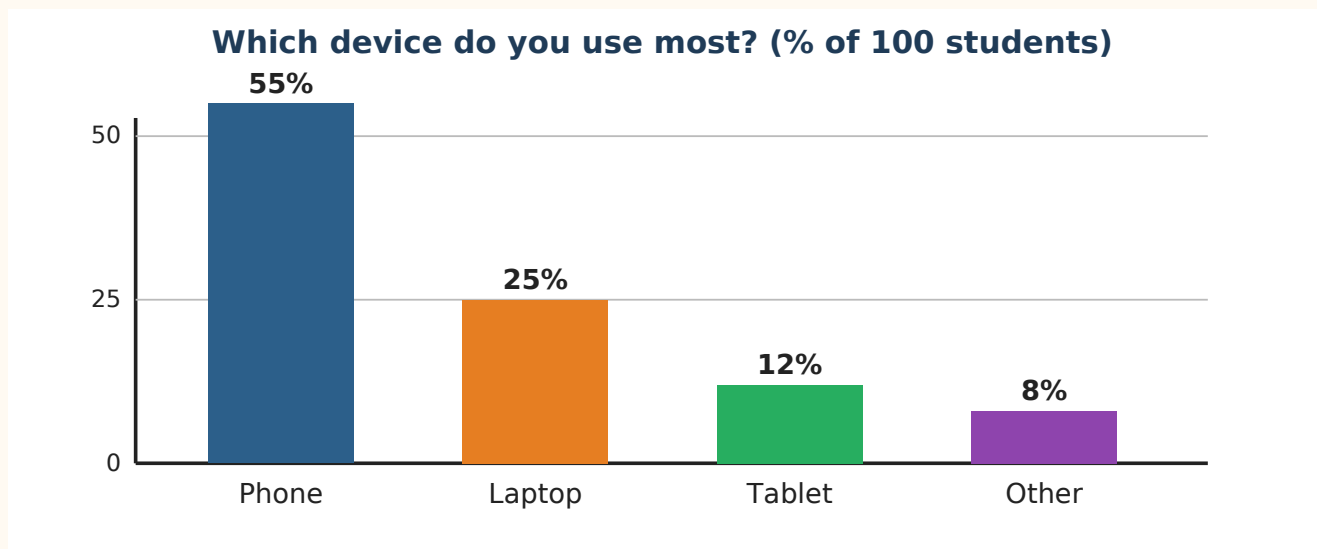
Exercice 12 : exprimer la probabilité

Complète chaque phrase avec *must*, *might* ou *can't*.

1. AI _____ replace some jobs in the future, but nobody is sure.
2. This robot _____ be broken: it is not moving and no light is on.
3. She _____ be the inventor: she is only twelve!
4. The new drug _____ have side effects: the tests are not finished.
5. He has worked in the lab for twenty years, so he _____ know the risks.
6. Fifty thousand euros for a phone? That _____ be a mistake.

Exercice 13 : lire un graphique

Observe le graphique d'un sondage fictif, puis réponds par des phrases complètes en anglais.



A class survey

1. Which device do most students use?
2. What percentage of students use a tablet?
3. How many students use a laptop or a tablet?
4. True or false: more than half of the students use a phone most.
5. Write a sentence about the "Other" bar.

Exercice 14 : comparatifs et superlatifs

Complète avec la forme correcte de l'adjectif entre parenthèses.

1. Smartphones are _____ (cheap) than computers.
2. This is _____ (important) invention of the century.
3. Electric cars are _____ (quiet) than petrol cars.
4. The more we use plastic, _____ (bad) the pollution is.
5. The _____ (fast) technology changes, the _____ (hard) it is to keep up.

6. Of all the inventions, the printing press is _____ (influential).

Exercice 15 : cause ou conséquence ?

Le mot ou groupe de mots en gras introduit-il une cause (C) ou une conséquence (R) ?

1. Many jobs have disappeared **because of** automation.
2. The battery exploded. **As a result**, the phone was recalled.
3. **Since** data can be stolen, we must protect our passwords.
4. The factory pollutes the river; **therefore**, fish are dying.
5. **Due to** a software error, the rocket crashed.
6. He was careless with the code, **so** thousands of users lost their data.

Exercice 16 : le village solaire

Lis le texte, puis réponds aux questions en anglais.

In 2019, the village of Eastwick in northern England decided to build its own solar farm. Local people paid for the panels, and the profits now go to the school. Not everyone agreed at first: some farmers feared the panels would spoil the landscape. After a public meeting, the panels were placed on an old car park instead of a field. Today, the village produces more electricity than it uses, and neighbouring towns are copying the idea.

1. When did the village decide to build a solar farm?
2. Who paid for the panels?
3. Why were some farmers worried?
4. How was the problem solved?
5. What do the profits pay for?
6. Why are neighbouring towns interested?

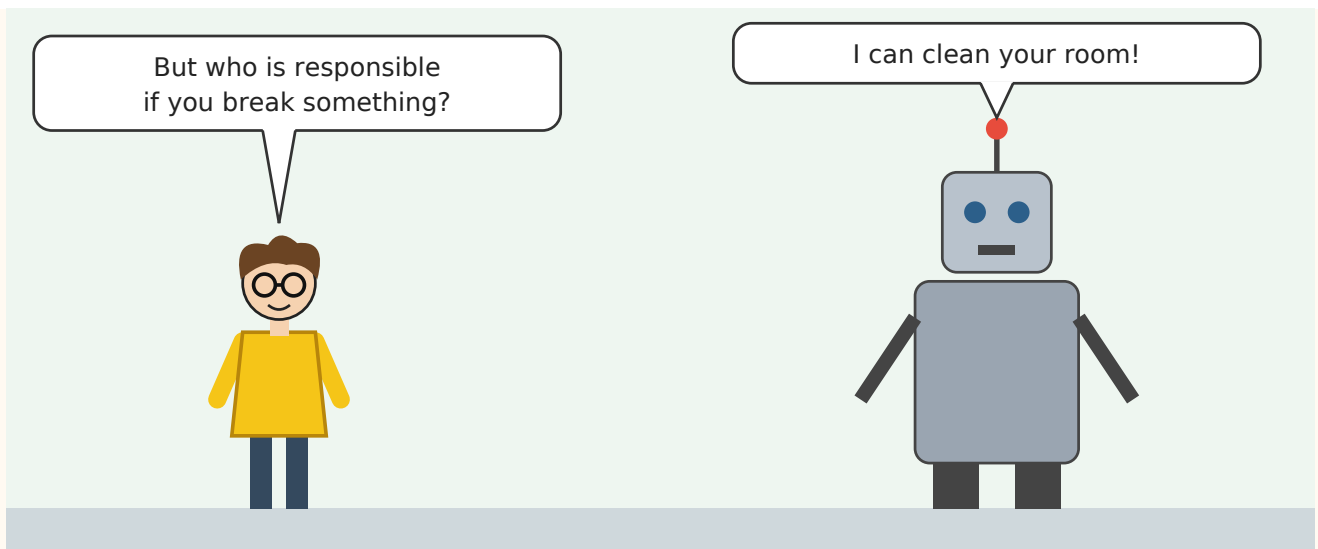
Exercice 17 : passer au passif

Transforme chaque phrase à la voix passive.

1. Engineers built the prototype in a garage.
2. Scientists will test the vaccine.
3. Companies collect our data.
4. They have banned the product.
5. A student invented the app.
6. Someone is repairing the satellite.

Exercice 18 : un robot à la maison

Observe l'image, puis réponds aux questions.



Who is responsible?

1. What is the boy wearing?
2. What can the robot do?
3. What worries the boy?
4. In your opinion, who is responsible if the robot breaks something? Answer in two sentences.

Exercice 19 : faux amis

Choisis la bonne traduction du mot en gras.

1. The inventor **actually** lost money. a) actuellement – b) en fait
2. It was a **sensible** decision. a) sensible – b) raisonnable
3. Over 500 people **attended** the launch. a) ont attendu – b) ont assisté à
4. **Eventually**, the team solved the problem. a) éventuellement – b) finalement
5. She works in a large **library**. a) librairie – b) bibliothèque
6. The **lecture** was very long. a) lecture – b) conférence (cours)

Exercice 20 : production écrite

En 80 à 100 mots, réponds à la question : *Should scientists be held responsible for the way their inventions are used?* Donne deux arguments et une conclusion.