

**Semestre : 2**

**UE : Transversale**

**Matière : Langues étrangères 2**

**Objectifs de l'enseignement**

*Amélioration de l'acquisition de la langue et des capacités aux techniques de rédaction scientifique.*

**Connaissances préalables recommandées**

*Il est recommandé d'avoir un bon niveau en Anglais/ Français*

**Contenu de la matière :**

**Pour l'Anglais 2**

1. Grammar
2. Translation English-French and French-English
3. Scientific articles
4. Scientific reviews

**Pour Français 2**

1. Initiation à la rédaction scientifique
2. Auteurs francophones
3. Ouvrages illustrés
4. Article scientifique en français
5. Ouvrage scientifique en français

**Mode d'évaluation :** Examen : 100%

**Références** (*Livres et photocopiés, sites internet, etc*) :

*Août 2014*

## ADJECTIVES OF QUANTITY

**Countable nouns:** a noun that can be used in the plural and with such words as many and few:

e.g. there are two oranges in the basket.

Many children love football. Only a few love rugby.

**Uncountable nouns:** a noun that can not be made plural or preceded by a or an; water - sugar - cheese.

**Some and any** mean a certain quantity and are used before plural or uncountable nouns:

e.g. There are some oranges.

There isn't any butter.

**Some** is used in affirmative sentences:

I'd like some butter, please.

I want some cheese.

She eats some dates in the morning.

**Any** is used in negative sentences:

I don't want any mayonnaise.

She doesn't need any carrots.

**And** after interrogatives:

Do you need any tomatoes?

When the question is really an invitation or a request, **some** is used:

Would you like some tea?

Will you have some coffee?

There are two types of articles:

- indefinite, «a» and «an»: *a* car, *a* house, *an* article. (1)
- definite, «the»: *the* car, *the* kids, *the* teacher's book. (2)

### Rules:

«A» and «an» are used before nouns that introduce something or someone you have not mentioned before:

I saw *an* elephant this morning; I ate *a* banana for lunch. (3)

«A» and «an» are also used when talking about your profession:

I am *an* English teacher; I am *a* salesman. (4)

You use «the» when you are aware that the listener knows or can work out what particular person/thing you are talking about:

*The* apple I've eaten is rotten; Did you lock *the* car? (5)

✓ You should also use «the» when you have already mentioned the thing you are talking about:

She's got two children; a girl and a boy. *The* girl's eight and *the* boy's fourteen. (6)



### Important note!

- \* We usually use no article before abstract nouns: friendship, love, etc.
- \* We usually use no article before:
  - ✓ - abstract nouns: friendship, love, etc.
  - uncountable words when we talk about them in general:
    - People are worried about global warming (7);
    - coffee is bad for you. (8)
  - plural indefinite nouns: love poems are the best medium to **express love**. (9)

**Mots de Liaison**

N°	English/Français	
1	<b>According to</b> , selon, d'après	
	According to the radio it is going to snow.	
2	<b>Actually, in fact</b> , en fait	
	She says she is 16, but actually she is 14.	
3	<b>All the same</b> , tout de même, quand même	
	Thanks all the same.	
4	<b>Anyway</b> , en tout cas, de toute façon	
	I will phone or I will write. Anyway, I will contact you.	
5	<b>As a result, consequently</b> , aussi, par conséquent	
	He did not revise for the exam, as a result/consequently, he failed.	
6	<b>As a rule, generally speaking</b> , en règle générale	
	As a rule/generally speaking, artists dislike criticism.	
7	<b>As for</b> , quant à	
	I will talk to Ahmed, and as for the others, I will see them tomorrow.	
8	<b>As regards</b> , en ce qui concerne	
	As regards the budget, we are having a meeting next week.	
9	<b>At least</b> , au moins, du moins	
	Amal is leaving next week, at least that is what her friend told me.	
10	<b>Besides</b> , d'ailleurs = <i>en plus</i>	
	I do not want to go shopping, besides, I am tired.	
11	<b>By the way</b> , au fait	
	By the way, Ahmed has got a new job.	
12	<b>Firstly, secondly</b> , en premier lieu, puis, ...	
	Firstly, I shall explain the origins of the problem, secondly, ...	
13	<b>For</b> , car	
	He was shocked, for he has never seen such a thing.	
14	<b>However</b> , cependant	
	Our room was over the street, however, we were too tired to be troubled.	
15	<b>I think</b> , je pense, je trouve, d'après moi	
	I think, his latest film was a disaster.	
16	<b>In a way</b> , d'un côté	
	In a way, I agree with you.	
17	<b>In addition</b> , de plus	
	This is a risky project, in addition, it is extremely expensive.	
18	<b>In conclusion</b> , pour conclure	
	And in conclusion, I should like to thank all those who ...	
19	<b>In my opinion</b> , à mon avis	
	In my opinion, there is only one solution.	

	In my opinion, there is only one solution.	
20	<b>In other words</b> , autrement dit	
	I cannot help you, in other words, you will have to do it yourself.	
21	<b>In short, in a word</b> , bref	
	He composes, he plays six instruments, he sings, he conducts. In short, he is a musical genius.	
22	<b>Let me see, let me think</b> , attendez (que je réfléchisse)	
	When can we do it? "Let me see - what about tomorrow?"	
23	<b>Mind you, remarque</b> : remarquez	
	He does not do much work. Mind you, he gets good results.	
24	<b>Moreover</b> , de plus = in addition	
	She found the weather depressing, moreover, her health was not good.	
25	<b>On the contrary</b> , au contraire	
	This is not an exclusive school, On the contrary, anyone can join.	
26	<b>On the other hand</b> , d'une part	
	On the other hand, we have a lot of preparations to make, ...	
27	<b>On the whole</b> , dans l'ensemble	
	On the whole, I am satisfied with my job.	
28	<b>Otherwise</b> , sinon	
	We would better start now, otherwise we shall be late.	
29	<b>Still</b> , toutefois, encore	
	It was not a very good hotel. Still, it was better than nothing.	
30	<b>That is to say (F)</b> , c'est-à-dire	
	For us, that is to say my colleagues and myself, the problem is simple.	
31	<b>Therefore (F)</b> , par conséquent	
	Ahmed, the English teacher, is too busy, the next lesson will therefore be given by Rabah	
32	<b>Thus</b> , ainsi	
	Thus, we are forced to conclude that ....	
33	<b>to sum up (F)</b> = en résumé = to summarize = à la fin	
	to sum up : I feel that there are convincing arguments on both sides	
34	<b>Yet</b> = mais	
	He was far from strong, and yet people were afraid of him	

## PLURALS

To form the plural of a noun. Add **s**:

A cat → cats

a boy → boys

a book → books

When you find a noun ending in (o, ss, ch, x) add **es**:

Potato → potatoes / glass → glasses / watch → watches / fox → foxes

**Be careful:** piano → pianos

photo → photos

**Compare:**

Day → days

baby → babies

Notice the letter preceding the(y) :

a vowel: add **s** → Day → days

a consonant: drop the **y** and add **ies** → baby → babies

Notice: f → ves

Wife → wives

Knife → knives

Calf → calves

**watch out:** handkerchief → handkerchiefs

Some nouns form their plural by a vowel change:

Man → men

mouse → mice

Woman → women

louse → lice

Foot → feet

tooth → teeth

**Animals!** Some names of animals do not change in the plural:

Sheep; deer; salmon; trout; fish; grouse; ...

e.g. one sheep → two sheep

**Numbers!** ( hundred / thousand / million) no **s** in the plural:

One hundred men → two hundred men.

One thousand photos → two thousand photos.

One million books → two million books.

Put the words below into plural form

- ✓ - School = .....
- ✓ - Baby = .....
- ✓ - Teacher = .....
- Lady = .....
- Tree = .....
- ✓ - Car = .....
- ✓ - Ring = .....
- cheer = .....
- ✓ - Mother = .....
- Picture = .....
- Fox = .....
- ✓ - Boy = .....
- bag = .....
- match = .....
- Spoon = .....
- Child = .....
- Bee = .....
- Man = .....
- Knife = .....
- Tooth = .....
- Dress = .....
- Ox = .....
- Pupil = .....
- capital = .....
- Body = .....

- ✓ - other = .....
- ✓ - watch = .....
- ✓ - House = .....
- ✓ - brush = .....
- ✓ - leaf = .....
- ✓ - Box = .....
- Wife = .....
- cloth = .....
- ✓ - Glass = .....
- ✓ - Door = .....
- country = .....
- Tomato = .....
- ✓ - **sock** = .....
- ✓ - copybook = .....
- potato = .....
- toy = .....
- computer = .....
- Form = .....
- Table = .....
- ✓ - policeman = .....
- letter = .....
- Sheep = .....
- word = .....
- ✓ - heart = .....

Put the words below into plural form

- |           |              |             |                |
|-----------|--------------|-------------|----------------|
| - School  | = schools..  | - other     | = others       |
| - Baby    | = babies..   | - watch     | = watches      |
| - Teacher | = teachers.. | - House     | = houses..     |
| - Lady    | = ladies...  | - brush     | = brushes      |
| - Tree    | = trees..... | - leaf      | = leaves..     |
| - Car     | = cars.....  | - Box       | = boxes..      |
| - Ring    | = rings....  | - Wife      | = wives...     |
| - cheer   | = cheers.... | - cloth     | = cloths...    |
| - Mother  | = mothers    | - Glass     | = glasses..    |
| - Picture | = pictures.. | - Door      | = doors...     |
| - Fox     | = foxes..    | - country   | = countries    |
| - Boy     | = boys.....  | - Tomato    | = tomatoes     |
| - bag     | = bags....   | - Sock      | = socks..      |
| - match   | = matches    | - copybook  | = copybooks    |
| - Spoon   | = spoons...  | - potato    | = potatoes     |
| - Child   | = children   | - toy       | = toys.....    |
| - Bee     | = bees.....  | - computer  | = computers    |
| - Man     | = men...     | - Form      | = forms...     |
| - Knife   | = knives..   | - Table     | = tables...    |
| - Tooth   | = teeth...   | - policeman | = policemen    |
| - Dress   | = dresses..  | - letter    | = letters..... |
| - Ox      | = oxen...    | - Sheep     | = sheep.....   |
| - Pupil   | = pupils..   | - word      | = words...     |
| - capital | = capitals   | - heart     | = hearts..     |
| - Body    | = bodies     | - copy      | = copies..     |



# VERBES IRRÉGULIERS

\* en américain

INFINITIF	PRÉTÉRIT	PARTICIPE PASSÉ	TRADUCTION
awake	awoke, awaked	awoken, awaked	éveiller
bear	bore	borne	porter/supporter
		be born	naître
beat	beat	beaten	battre
become	became	become	devenir
begin	began	begun	commencer
bend	bent	bent	courber
bite	bit	bitten	mordre
bleed	bled	bled	saigner
blow	blew	blown	souffler
break	broke	broken	casser
bring	brought	brought	apporter
build	built	built	construire
burn	burnt, burned*	burnt, burned*	brûler
burst	burst	burst	éclater
buy	bought	bought	acheter
catch	caught	caught	attraper
choose	chose	chosen	choisir
come	came	come	venir
cost	cost	cost	coûter
creep	crept	crept	ramper
cut	cut	cut	couper
deal	dealt	dealt	distribuer
dig	dug	dug	creuser
do, does	did	done	faire
draw	drew	drawn	tirer, dessiner
dream	dreamt, dreamed*	dreamt, dreamed*	rêver
drink	drank	drunk	boire
drive	drove	driven	conduire
eat	ate	eaten	manger
fall	fell	fallen	tomber
feed	fed	fed	nourrir
feel	felt	felt	sentir
fly	flew	flown	voler
forbid	forbade, forbad	forbidden	interdire
forget	forgot	forgotten	oublier
forgive	forgave	forgiven	pardonner
freeze	froze	frozen	geler
get	got	got, gotten*	obtenir/devenir
give	gave	given	donner
go	went	gone	aller
grow	grew	grown	croître, devenir
hang	hung	hung	pendre (à)
hang	hanged	hanged	pendre (pendaison)
hear	heard	heard	entendre
hide	hid	hidden, hid	caler
hit	hit	hit	frapper
hold	held	held	tenir
hurt	hurt	hurt	blesser/faire mal
keep	kept	kept	garder/conservé
know	knew	known	savoir/connaitre
lay	laid	laid	poser
lead	led	led	mener, conduire
lean	leant, leaned*	leant, leaned*	pencher
learn	learnt, learned*	learnt, learned*	apprendre
leave	left	left	laisser
lend	lent	lent	prêter
let	let	let	laisser (faire), louer
lie	lay	lain	être couché

\* en américain

INFINITIF	PRÉTÉRIT	PARTICIPE PASSÉ	TRADUCTION
light	lit, lighted	lit, lighted	<i>allumer/éclairer</i>
lose	lost	lost	<i>perdre</i>
make	made	made	<i>faire/fabriquer</i>
mean	meant	meant	<i>signifier/vouloir dire</i>
meet	met	met	<i>rencontrer</i>
mistake	mistook	mistaken	<i>prendre (pour) par erreur</i>
overcome	overcame	overcome	<i>surmonter</i>
overtake	overtook	overtaken	<i>dépasser</i>
pay	paid	paid	<i>payer</i>
put	put	put	<i>mettre</i>
read [ri:d]	read [red]	read [red]	<i>lire</i>
ride	rode	ridden	<i>monter (à cheval...)</i>
ring	rang	rung	<i>sonner</i>
rise	rose	risen	<i>se lever</i>
run	ran	run	<i>courir</i>
saw	sawed	sawn, sawed	<i>scier</i>
say [sei]	said [sed]	said [sed]	<i>dire</i>
see	saw	seen	<i>voir</i>
seek	sought	sought	<i>chercher</i>
sell	sold	sold	<i>vendre</i>
send	sent	sent	<i>envoyer</i>
set	set	set	<i>placer</i>
shake	shook	shaken	<i>secouer/trembler</i>
shine	shone	shone	<i>briller</i>
shoot	shot	shot	<i>tirer/abattre</i>
show	showed	shown, showed	<i>montrer</i>
shut	shut	shut	<i>fermer</i>
sing	sang	sung	<i>chanter</i>
sink	sank	sunk	<i>sombrer/couler</i>
sit	sat	sat	<i>être assis</i>
sleep	slept	slept	<i>dormir</i>
slide	slid	slid	<i>glisser</i>
smell	smelt	smelt	<i>sentir (odorat)</i>
speak	spoke	spoken	<i>parler</i>
spell	spelt, spelled*	spelt, spelled*	<i>épeler/orthographier</i>
spend	spent	spent	<i>passer</i>
spit	spat	spat	<i>cracher</i>
split	split	split	<i>fendre</i>
spread	spread	spread	<i>répandre</i>
spring	sprang	sprung	<i>s'élançer</i>
stand	stood	stood	<i>être debout</i>
steal	stole	stolen	<i>voler</i>
stick	stuck	stuck	<i>coller</i>
stink	stank, stunk	stunk	<i>puer</i>
strike	struck	struck	<i>frapper</i>
swear	swore	sworn	<i>jurer</i>
sweep	swept	swept	<i>balayer</i>
swim	swam	swum	<i>nager</i>
swing	swung	swung	<i>se balancer</i>
take	took	taken	<i>prendre</i>
teach	taught	taught	<i>enseigner</i>
tear	tore	torn	<i>déchirer</i>
tell	told	told	<i>dire/raconter</i>
think	thought	thought	<i>penser</i>
throw	threw	thrown	<i>jeter</i>
understand	understood	understood	<i>comprendre</i>
undertake	undertook	undertaken	<i>entreprendre</i>
wake	woke, waked	woken, waked	<i>éveiller</i>
wear	wore	worn	<i>porter (vêtements)</i>
weep	wept	wept	<i>pleurer</i>
win	won	won	<i>gagner</i>
write	wrote	written	<i>écrire</i>

## The passive voice

Passive voice is used when the focus is on the action. It is not important or not known, however, who or what is performing the action.

When rewriting active sentences in passive voice, note the following:

- the object of the active sentence becomes the subject of the passive sentence
- the finite form of the verb is changed (*to be* + past participle)
- the subject of the active sentence becomes the object of the passive sentence (or is dropped)

Tense	Active Voice	Passive Voice
- Present	The boys eat the pie.	The pie is eaten by the boys
- Present <i>(continuous progressive)</i>	The boys are eating the pie	The pie is being eaten by the boys
- Present perfect	The boys have eaten the pie	The pie has been eaten by the boys
- Past	The boys ate the pie	The pie was eaten by the boys
- Past progressive	The boys were eating the pie	The pie was being eaten by the boys
- Past perfect	The boys had eaten the pie	The pie had been eaten by the boys
- Future	The boys will eat the pie	The pie will be eaten by the boys
- Future <i>continuous (progressive)</i>	The boys are going to eat the pie.	The pie is going to be eaten by the boys
- Future perfect	The boys will have eaten the pie	The pie will have been eaten by the boys

\* The passive voice can also be used with modals

### Present modals

Active : The boys can eat the pie

Passive : The pie can be eaten by the boys

### Past modals

Active : The boys could have eaten the pie

Passive : The pie could have been eaten by the boys

#### 4-Distinction style scientifique/ style journalistique / style littéraire:

Pour mieux distinguer le discours scientifique des autres types de discours nous utilisons le tableau suivant:

	Style scientifique	Style journalistique	Style littéraire
<b>But</b>	Informé et présenter au lecteur une solution pratique ou théorique à un problème scientifique	Informé et susciter la réflexion du lecteur	Susciter l'émotion, l'intérêt et la réflexion du lecteur
<b>Moyen</b>	Décrire, expliquer ou prédire un phénomène	Présenter les faits, les analyser, les mettre en perspective; au besoin les critiquer	Décrire une réalité au moyen des impressions et des états d'âme du narrateur, d'un personnage, d'un héros, selon une époque et une culture données
<b>Support</b>	Livre, chapitre de livre, article et rapport scientifiques	Journal, quotidien, site internet	Roman, nouvelle, poésie, pièce de théâtre, cinéma
<b>Statut du rédacteur</b>	Scientifique, professeur d'université ou de cégep	Journaliste	Écrivain, romancier, poète, cinéaste
<b>Point de vue du rédacteur</b>	Tend vers l'objectivité/Évitez le JE/Utilisez le NOUS avec parcimonie/Optez pour la forme impersonnelle	Tend vers l'objectivité et la critique/Le JE est permis dans les éditoriaux et les chronique d'humeur ou les billets	Cherche à développer un point de vue original (= subjectif)/Roman écrit au JE ou à la forme impersonnelle
<b>Statut du lecteur</b>	Un autre scientifique, un érudit, un étudiant en science	Abonnés, Monsieur madame Tout-le-monde	Monsieur madame Tout-le-monde
<b>Syntaxe (structure de phrase du texte)</b>	Obéit aux règles grammaticales, mais se veut simple et directe; privilégiez la précision et la cohérence du propos à la beauté du style	Obéit aux règles grammaticales, mais se veut simple et directe; privilégiez la clarté et la concision à la beauté du style	Obéit aux règles grammaticales, mais elle se veut créative et souvent + dense; privilégiez les tours de phrase audacieux, qui sortent des sentiers battus, aux conventions de style et autres prêt-à-lire
<b>Ponctuation</b>	Obéit aux règles de la ponctuation	Obéit aux règles de la ponctuation	Obéit aux règles de la ponctuation, mais certains auteurs font fi des conventions (roman sans point, sans paragraphe ou sans E)

is a kind of writing where discussion in different ways using a scientific style. (A-B-C)

<b>Temps des verbes</b>	Utiliser le présent/la forme active	Selon la nature des faits qui sont rapportés	+ souvent le présent et le passé simple
<b>Utilisation des métaphores, des synonymes ou des effets de style</b>	Rarement, on utilise le terme le plus précis, vingt fois de suite s'il le faut	Parfois pour fleurir le texte, mais sans perdre de vue que la clarté du propos doit primer sur toute autre considération	Souvent pour enjoliver le texte, le rendre plus agréable à lire, plus original
<b>Vocabulaire</b>	Usage fréquent de termes techniques et théoriques (jargon scientifique). L'invention est permise si elle correspond à une découverte ou à une nuance théorique	Vocabulaire usuel (de tous les jours), parfois technique si le sujet s'y prête	Vocabulaire riche, utilisation de mots rares, création de nouveaux mots, de nouvelles expressions. L'invention est permise
<b>Principales caractéristiques de ce style</b>	Précision et cohérence du propos	Simplicité et clarté du propos	Créativité et singularité du propos
<b>Pièges à éviter</b>	Utiliser des synonymes qui s'éloignent du sens premier, phrase ou paragraphes trop longs, concept non-définis, effet de style, absence de références, plagiat	Utilisation du jargon, trop de chiffres, plagiat	Lieux communs, clichés, plagiat
<b>Exceptions/Variantes</b>	La vulgarisation scientifique emprunte parfois au style journalistique (Ex : Yanick Viliedieu, Jean-Pierre Rogel)	La chronique d'humeur emprunte parfois au style littéraire (Ex : Pierre Foglia, Jean Dion)	La science-fiction et le roman d'anticipation empruntent parfois au style scientifique (Ex: Jules Verne, Michael Crichton)
<b>Contenu s'appuie sur des sources ?</b>	Oui, nécessaire: sources citées dans le texte et en références.	Oui, souvent: mais parfois confidentielles	Oui, parfois : roman historique ou science-fiction

## 5- Élaboration d'un cours LSP

Selon C. Parpette (2003), le processus de l'élaboration d'un cours en LSP (ou en FOS) implique les étapes suivantes :

---

**TRADUCTION**

---

**P53, LE GÈNE QUI DÉTRUIT LE CANCER**

Depuis que les biologistes font des recherches sur le cancer, il y a un espoir qu'ils ont toujours entretenu : celui que pour les nombreux cancers susceptibles de ronger un corps – qu'il s'agisse de cancers du foie, du col de l'utérus, du sein, de la vessie, ou encore de cancers du poumon ou du colon qui enveloppent des organes vitaux tel un linceul – il existe en définitive un seul et même stade au-delà duquel des cellules deviennent cancéreuses. En faisant agir les médicaments à ce stade-là, les médecins pourraient empêcher une cellule de suivre la route qui la transforme en cellule cancéreuse de la même façon qu'un aiguilleur empêche un train d'emprunter la mauvaise voie. Il se trouve qu'un gène appelé p53 pourrait faire fonction d'aiguilleur. Si p53 est sain et fait son travail, la cellule reste sur les bons rails. Mais si le gène est absent, endommagé ou emprisonné par d'autres molécules, la cellule change de rails et devient cancéreuse.

Il a fallu attendre 1989 pour que Levine et Vogelstein découvrent séparément la véritable nature du p53, à savoir qu'il détruit les tumeurs. Aujourd'hui on recense plus de 5200 articles sur le p53 et les biologistes ont la conviction que le p53 est promis à des jours encore meilleurs. « Ce qui me plaît énormément avec le p53, c'est qu'il est annonciateur de traitements anticancéreux, dit Levine de l'université de Princeton. Pour la première fois, nous pouvons vraiment utiliser les recherches faites en laboratoire à des fins médicales pratiques. »

---

## TRADUCTION

### P53, LE GÈNE QUI DÉTRUIT LE CANCER

Depuis que les biologistes font des recherches sur le cancer, il y a un espoir qu'ils ont toujours entretenu : celui que pour les nombreux cancers susceptibles de ronger un corps – qu'il s'agisse de cancers du foie, du col de l'utérus, du sein, de la vessie, ou encore de cancers du poumon ou du colon qui enveloppent des organes vitaux tel un linceul – il existe en définitive un seul et même stade au-delà duquel des cellules deviennent cancéreuses. En faisant agir les médicaments à ce stade-là, les médecins pourraient empêcher une cellule de suivre la route qui la transforme en cellule cancéreuse de la même façon qu'un aiguilleur empêche un train d'emprunter la mauvaise voie. Il se trouve qu'un gène appelé p53 pourrait faire fonction d'aiguilleur. Si p53 est sain et fait son travail, la cellule reste sur les bons rails. Mais si le gène est absent, endommagé ou emprisonné par d'autres molécules, la cellule change de rails et devient cancéreuse.

Il a fallu attendre 1989 pour que Levine et Vogelstein découvrent séparément la véritable nature du p53, à savoir qu'il détruit les tumeurs. Aujourd'hui on recense plus de 5200 articles sur le p53 et les biologistes ont la conviction que le p53 est promis à des jours encore meilleurs. « Ce qui me plaît énormément avec le p53, c'est qu'il est annonciateur de traitements anticancéreux, dit Levine de l'université de Princeton. Pour la première fois, nous pouvons vraiment utiliser les recherches faites en laboratoire à des fins médicales pratiques. »

## VERSION SUIVIE

### P53, THE CANCER KILLER

For as long as biologists have studied cancer, they have nurtured one dream. Their hope has been that, for all of the many different cancers that can eat away at a body – from the liver, cervical, breast or bladder cancers, to the lung and colon cancers that envelop vital organs like a death shroud – there will turn out to be a single step that determines whether cells turn cancerous. By targeting drugs at that step, physicians would be able to stop a cell from heading down the path toward cancer just as a switchman stops a train from going down the wrong track. It turns out that a gene called p53 may be that switch. If p53 is healthy and doing its job, it keeps the cell on the track of normalcy. But if the p53 gene is absent, damaged or tied up by other molecules, the cell goes down the track toward cancer.

It was not until 1989 that Levine and Vogelstein separately discovered p53's true colors: it was a tumor killer. Today there are more than 5,200 published studies on p53, and biologists are convinced that p53 is bound for even greater glory. "What I like so much about p53 is that it predicts ways to treat cancer," says Princeton's Levine. "For the first time, we can honestly translate from the lab to the clinic."

*Newsweek*

**VERSION SUIVIE**

---

**THE DEBATE OVER GLOBAL WARMING**

Hardly a month goes by without some magazine or newspaper arguing that human pollution is altering the environment, creating dangerous global warming, with disastrous effects for agriculture, industry and lifestyles worldwide. Quoting environmentalists and a wide range of other experts, these articles often state that the atmosphere has already heated up half a degree centigrade this century, an ominous sign of the problems to come.

Such articles are often followed by the writings of a passionate nay-sayer insisting the scientific evidence for "so-called" global warming is too uncertain, after all. To reduce human activities that create greenhouse gases, say these pundits, would be economically catastrophic, especially since no one knows for sure whether these gases are at the root of global warming in the first place.

Despite the cacophony there are regions of the earth where the impact of global warming is all too clear. Residents of the Alps, for instance, have long known that climate change is a reality for them. Old-timers have witnessed impressive recession of most Alpine glaciers, but their observations do not prove that glacial shrinking and an increase in greenhouse gases are linked.

*Newsweek*

---



TRADUCTION

VERSION SUIVIE

LE DÉBAT SUR LE RÉCHAUFFEMENT DE LA PLANÈTE

Il ne se passe pratiquement pas un mois sans qu'un magazine ou un journal affirme que la pollution humaine transforme l'environnement, crée un réchauffement de la planète qui est dangereux et a des conséquences désastreuses sur l'agriculture, l'industrie et les modes de vie partout dans le monde. Se faisant l'écho des écologistes et d'un éventail varié d'autres experts, ces articles affirment souvent que l'atmosphère s'est déjà réchauffée d'un demi degré centigrade au cours du XX<sup>e</sup> siècle, ce qui augure mal des problèmes à venir.

De tels articles sont souvent suivis par les écrits d'un opposant passionné qui affirme que, tout bien considéré, les preuves scientifiques d'un "prétendu" réchauffement de la planète sont insuffisantes. Réduire les activités humaines qui créent les gaz à effet de serre, disent ces spécialistes, serait une catastrophe économique, d'autant plus que personne ne sait avec certitude si, au départ, ces gaz sont la cause du réchauffement de la planète.

En dépit de cette cacophonie, il y a des régions de la terre où l'impact du réchauffement de la planète est particulièrement visible. Par exemple, ceux qui vivent dans les Alpes savent depuis longtemps que le changement du climat est pour eux une réalité. Les anciens ont assisté à un recul spectaculaire de la plupart des glaciers alpins, mais leurs observations ne prouvent pas que la réduction glaciaire et l'augmentation des gaz à effet de serre soient liées.

THE DEBATE OVER GLOBAL WARMING

Hardly a month goes by without some magazine or newspaper arguing that human pollution is altering the environment, creating dangerous global warming, with disastrous effects for agriculture, industry and lifestyles worldwide. Quoting environmentalists and a wide range of other experts, these articles often state that the atmosphere has already heated up half a degree centigrade this century, an ominous sign of the problems to come.

Such articles are often followed by the writings of a passionate nay-sayer insisting the scientific evidence for "so-called" global warming is too uncertain, after all. To reduce human activities that create greenhouse gases, say these pundits, would be economically catastrophic, especially since no one knows for sure whether these gases are at the root of global warming in the first place.

Despite the cacophony there are regions of the earth where the impact of global warming is all too clear. Residents of the Alps, for instance, have long known that climate change is a reality for them. Old-timers have witnessed impressive recession of most Alpine glaciers, but their observations do not prove that glacial shrinking and an increase in greenhouse gases are linked.

*Newsweek*

# Guide to technical report writing

## INTRODUCTION

The purpose of a technical report is to completely and clearly describe technical work, why it was done, results obtained and implications of those results. The technical report serves as a means of communicating the work to others and possibly providing useful information about that work at some later date. A well-written report allows the reader to quickly understand what has been accomplished. The report also provides sufficient detail to allow the reader to recreate the results although the level of detail provided depends heavily on the report's audience and any proprietary nature of the work.

## THE FORMAL TECHNICAL REPORT

The formal technical report contains a complete, concise, and well-organized description of the work performed and the results obtained. Any given report may contain all of the sections described herein... or a subset, depending upon the report requirements. These requirements are decided by the author and are based on the audience and expected use of the report.

### 1. Introduction

A technical report is a formal report designed to convey technical information in a clear and easily accessible format. It is divided into sections which allow different readers to access different levels of information. This guide explains the commonly accepted format for a technical report; explains the purposes of the individual sections; and gives hints on how to go about drafting and refining a report in order to produce an accurate, professional document.

### 2. Structure

A technical report should contain the following sections;

Section	Details
Title Page	Must include the title of the report. Reports for assessment, where the word length has been specified, will often also require the summary word count and the main text word count
Summary	A short summary of the whole report including important features, results and conclusions
Contents	Numbers and lists all section and subsection headings with page numbers
Introduction	States the objectives of the report and comments on the way the topic of the report is to be treated. Leads straight into the report itself.
The sections which make up the body of the report	Divided into numbered and headed sections. These sections separate the different main ideas in a logical order
Conclusions	A short, logical summing up of the theme(s) developed in the main text
References	Details of published sources of material referred to or quoted in the text (including any lecture notes and URL addresses of any websites used)
Bibliography	Other published sources of material, including websites, not referred to in the text but useful for background or further reading.
Acknowledgements	List of people who helped you research or prepare the report, including your proofreaders
Appendices (if appropriate)	Any further material which is essential for full understanding of your report (e.g. large scale diagrams, computer code, raw data, specifications) but not required by a casual reader

# The battle to save AFRICA'S RHINOS

In the first eight months of 2015, 750 rhinos were killed by poachers\* across Africa. If the killing continues, they could disappear in the near future...

Three rhinoceroses will be killed by poachers\* today. In each case, the poachers will probably be a gang of three men: one to carry the hunting\* rifle, another to carry an axe\*, and a third to carry their food and water. Most probably, they will enter South Africa's Kruger National Park under cover of darkness, using their tracking\* skills to hunt\* down and kill rhinoceroses for their horns\*.

Increasingly, they might be accompanied by two more men carrying guns in case there is a shoot-out\* with park rangers\*. It is not just rhinos who die in this business – nearly 500 poachers have been shot\* dead in the past five years.

"Wildlife\* is seen as a rich white man's thing," says Vincent Barkas, head of an anti-poaching security company. "A poacher is viewed as a Robin Hood in his community, stealing from the rich. The way they survive in the bush\*, you can't help\* but have a little bit of respect for them. To go into the park at night with a rifle takes some balls\*."

Behind the poachers, who number in their thousands, are a small number of gang leaders, a mixture of whites and blacks. They take none of the risk, but have become rich supplying\*

the growing demand for rhino horn in Vietnam and China, where it is believed to be a cure-all\* for everything from cancer to hangovers\*.

The South African authorities have tried everything to stop the poachers. They cut the horns off many rhinos to make them less valuable, but the poachers will still kill them for the 250g of horn that remains in their skull\*. They have implanted rhino horns with tracking\* devices that can monitor\* their vital signs, but in a 20,000 sq km park such as Kruger the response time by rangers is naturally limited – they might catch the poachers, but it will be too late for the rhino. They have even deployed drones to fly above the rhinos and look out for poachers. None of this is working – every year the number of rhinos killed is going up dramatically.

"If you kill 10,000 poachers, there will be another 10,000 waiting to take their place," says Adam Welz of WildAid South Africa. Rhinos will continue to die, Welz believes, until we end "the source of demand".

In other words, the only solution to the crisis is not in South Africa, but thousands of miles away in Vietnam and China.



AUDIO 5

Save the rhino

A écouter sur votre CD ou sur votre smartphone.

## VOCAB P.18 &amp; P.19

**axe:** hache  
**balls (it takes ...):** (vulg.) il faut avoir des couilles  
**bush:** brousse  
**cure-all:** remède miracle  
**hangover:** gueule de bois  
**help (you can't ...):**

on ne peut pas s'empêcher de  
**horn:** corne  
**hunting rifle:** fusil de chasse

**hunt down:** chasser  
**income:** revenue  
**monitor:** contrôler  
**poacher:** braconnier  
**ranger (park ...):**

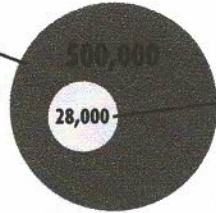
garde forestier  
**shoot (p. shot) dead:** tuer par balle  
**shoot-out:** fusillade  
**skull:** crâne  
**species:** espèce

**supply:** fournir  
**tracking device:** GPS  
**tracking skills:** talents de pisteur  
**wildlife:** faune sauvage  
**worth:** valeur

## WORLD RHINO POPULATION

[The Observer]

Estimated number of rhinos 100 years ago



Estimated number of rhinos today

## WORTH\* MORE THAN ITS WEIGHT IN GOLD

[The Observer]



**\$36,282**  
Price of gold per kilo



**\$65,000**  
Price of rhino horn\* per kilo in Asia

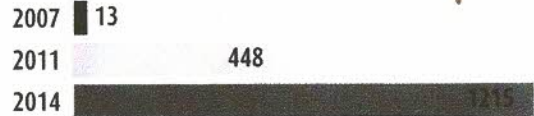
**4**  
out of  
**5**

of the world's rhinoceroses are in South Africa.  
[The Observer]



## NUMBER OF RHINOS KILLED

[www.savetherhino.org]



**5**

## NUMBER OF SPECIES OF RHINO

Two species live in Africa: the white and the black. The others are the Greater one-horned (or Indian) rhino, the Sumatran rhino and the extremely rare Javan rhino.



## POACHER\* POVERTY

[The Observer]



**\$250**  
Average annual income\* in Mozambique, where most poachers come from



**\$7680**  
Income\* that poachers receive per kilo of rhino horn\*

## RHINO LIVES [The Observer]

**Every 8 hours**

Average frequency of rhinos killed by poachers\* in 2014

**16 months**

Rhinoceros gestation period

**40 years**

Normal life expectancy of a rhino

**45 km/hour**

Speed at which black and white rhinos can run

## THE POACHERS\* [The Observer]

**6000**

Approximate number of poachers in South Africa's Kruger National Park

**100**

Approximate number of poachers shot and killed by rangers\* each year in Kruger National Park

