

LESSON 6



COMPREHENSION STRATEGY: Making Connections

Making Connections: The ability to make connections involves a process of connecting prior knowledge to new knowledge and experiences. This process allows students to relate what they read, see, do, and experience to themselves, to other things they have read, seen, or experienced previously, or to the world around them.

TEXT TO SELF CONNECTION

You are connecting the story to your own life, experiences, and feelings.

- This reminds me of . . .
- I understand how the character feels because . . .
- The setting makes me think about another place . . .
- I experienced this myself . . .

TEXT TO TEXT CONNECTION

You are connecting the characters, setting, or events from one story to another.

- The character in this story is like the character in . . .
- The setting in this story is the same as the setting in . . .
- This event is like when . . .
- These two stories are alike . . .

TEXT TO WORLD CONNECTION

You are connecting the story to world history and events.

- This happened in real life . . .
- This is like something I heard on the news . . .
- This happened when . . .
- This story is similar to . . .



Read the following text and answer the questions that follow.

Before Reading



According to the picture in the text, what are the risks or light pollution?

Light Pollution is a threat to Wildlife, Safety and the Starry Sky

A After hours of driving south in the pitch-black darkness of the Nevada desert, a dome of hazy gold suddenly appears on the horizon. Soon, a road sign confirms the obvious: Las Vegas 30 miles. Looking skyward, you notice that the Big Dipper is harder to find than it was an hour ago.

B Light pollution -the artificial light that illuminates more than its intended target area- has become a problem of increasing concern across the country over the past 15 years. In the suburbs, where over-lit shopping mall parking lots are the norm, only 200 of the Milky Way's 2,500 stars are visible on a clear night. Even fewer can be seen from large cities. In almost every town, big and small, street lights beam just as much light up and out as they do down, illuminating much more than just the street. Almost 50 percent of the light emanating from street lamps misses its intended target, and billboards, shopping centres, private homes and skyscrapers are similarly over-illuminated.



C North America has become so bright that in a satellite image of the United States at night, the outline of the country is visible from its lights alone. The major cities are all there, in bright clusters: New York, Boston, Miami, Houston, Los Angeles, Seattle, Chicago, and, of course, Las Vegas. Mark Adams, superintendent of the McDonald Observatory in west Texas, says that the very fact that city lights are visible from on high is proof of their wastefulness. "When you're up in an airplane, all that light you see on the ground from the city is wasted. It's going up into the night sky. That's why you can see it."

D But don't we need all those lights to ensure our safety? The answer from light engineers, light pollution control advocates and astronomers is an emphatic "no." Elizabeth Alvarez of the International Dark Sky Association (IDA), a non-profit organization in Tucson, Arizona, says that overly bright security lights can actually force neighbours to close the shutters, which means that if any criminal activity does occur on the street, no one will see it. And the old assumption that bright lights deter crime appears to have been a false one: A new Department of Justice report concludes that there is no documented correlation between the level of lighting and the level of crime in an area. And contrary to popular belief, more crimes occur in broad daylight than at night.

E For drivers, light can actually create a safety hazard. Glaring lights can temporarily blind drivers, increasing the likelihood of an accident. To help prevent such accidents, some cities and states prohibit the use of lights that impair night-time vision. For instance, New Hampshire law forbids the use of "any light along a highway so positioned as to blind or dazzle the vision of travellers on the adjacent highway."

F Badly designed lighting can pose a threat to wildlife as well as people. Newly hatched turtles in Florida move toward beach lights instead of the more muted silver shimmer of the ocean. Migrating birds, confused by lights on skyscrapers, broadcast towers and lighthouses, are injured, sometimes fatally, after colliding with high, lighted structures. And light pollution harms air quality as well: Because most of the country's power plants are still powered by fossil fuels, more light means more air pollution.

G So what can be done? Tucson, Arizona is taking back the night. The city has one of the best lighting ordinances in the country, and, not coincidentally, the highest concentration of observatories in the world. Kitt Peak National Optical Astronomy Observatory has 24 telescopes aimed skyward around the city's perimeter, and its cadre of astronomers needs a dark sky to work with.

H For a while, that darkness was threatened. "We were totally losing the night sky," Jim Singleton of Tucson's Lighting Committee told Tulsa, Oklahoma's KOTV last March. Now, after retrofitting inefficient mercury lighting with low-sodium lights that block light from "trespassing" into unwanted areas like bedroom windows, and by doing away with some unnecessary lights altogether, the city is softly glowing rather than brightly beaming. The same thing is happening in a handful of other states, including Texas, which just passed a light pollution bill last summer. "Astronomers can get what they need at the same time that citizens get what they need: safety, security and good visibility at night," says McDonald Observatory's Mark Adams, who provided testimony at the hearings for the bill.

I Moreover in the long run, everyone benefits from reduced energy costs. Wasted energy from inefficient lighting costs us between \$1 and \$2 billion a year, according to IDA. The city of San Diego, which installed new, high-efficiency street lights after passing a light pollution law in 1985, now saves about \$3 million a year in energy costs.

J Legislation is not the only answer to light pollution problems. Brian Greer, Central Ohio representative for the Ohio Light Pollution Advisory Council, says that education is just as important, if not more so. "There are some special situations where regulation is the only fix," he says. "But the vast majority of bad lighting is simply the result of not knowing any better." Simple actions like replacing old bulbs and fixtures with more efficient and better-designed ones can make a big difference in preserving the night sky.



Choose the most suitable headings for paragraphs A-F from the list of headings below. There are more headings than paragraphs, so you will not use them all.

Why lights are needed

Lighting discourages law breakers

Paragraph A

The environmental dangers

Paragraph B

People at risk from bright lights

Illuminating space

Paragraph C

A problem lights do not solve

Paragraph D

Seen from above

More light than is necessary

Paragraph E

Approaching the city

Paragraph F

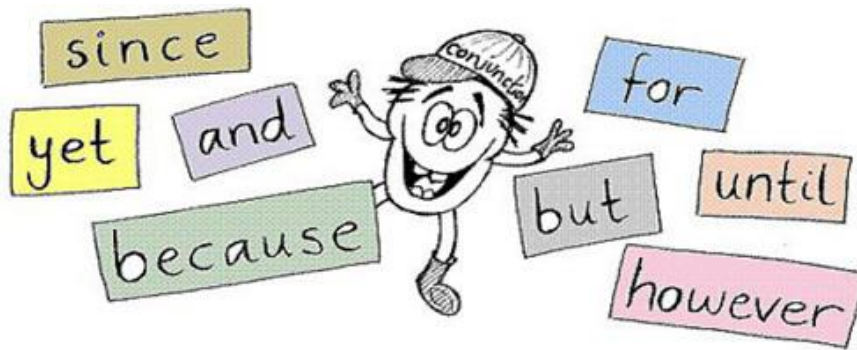


True or False

1. One group of scientists find their observations are made more difficult by bright lights.
2. It is expensive to reduce light pollution.
3. Many countries are now making light pollution illegal.
4. Old types of light often cause more pollution than more modern ones.



GRAMMAR TOPIC: Connectors



Connectors: (linking words): Words and expressions that tie whole sentences, parts of sentences, phrases, or individual elements together to establish a smooth transition in a text. The term 'linking' means 'connecting' and stands for cohesion. There are different connectors in English, which can be used for expressing your thoughts (functions) in a better way.

CONNECTORS ORGANIZED BY FUNCTION

SEQUENCING IDEAS	CAUSE	CONSEQUENCE	ADDING INFORMATION	CHANGING THE SUBJECT
In the first place, First of all, To start with, / To begin with, In the second place, Secondly, Next, Finally, Last but (certainly) not least,	Because of + N / -ing, Due to + N / -ing, owing to + N / -ing, Because + sj + verb As + sj + verb Given that / Given the way that... since...	So, Therefore, That is why, As a result, As a consequence,	Apart from that, In addition, Besides, Moreover, Furthermore, On top of that, What is more, Other than that (addition + contrast)	On a different note, That's beside the point (-that is unrelated to the topic in hand) REFERRING TO OTHER SOURCES According to... In x's view, / In X's opinion,

CONDITIONS	CONTRAST	PERSONAL OPINION	EXPLAINING / GIVING EXAMPLES / EMPHASISING	SUMMING UP
If Unless Provided that As long as Insofar as... Insofar that/ In so far as / In so far that (-to the extent that)	However, / Nevertheless, Although + sj + vb Even though + sj + vb On the one hand.....on the other hand In spite of + N / -ing, Despite + N / -ing	In my opinion, As I see it, It seems to me (that) Personally, From my point of view, In my view, In my opinion, As far as I'm concerned, To my mind,	In fact, / As a matter of fact, for example For instance, such as... / such x as ... In other words, Actually (-in reality) Needless to say,	In conclusion, In short, To put it briefly, To sum up, Taking everything into account/consideration, All things considered, On balance,



Read the following text and then do the activities that follow.

RISK-TAKING AND THE MONKEY ECONOMY

Humans are uniquely smart among all the other species on the planet. We are capable of outstanding feats of technology and engineering. **So** why are we so prone to making mistakes? And why do we tend to make the same ones time and time again? When **primate psychologist** Laurie Santos from the Comparative **Cognition Lab** at Yale University posed this question to her team, they were thinking of the errors of judgment which led to the recent collapse of the financial markets. Santos came to two possible answers to this question. Either humans have designed environments too complex for us to fully understand, or we are biologically prone to making bad decisions.



In order to test these theories, the team selected a group of Brown Capuchin monkeys. Monkeys were selected for the test because, as distant relatives of humans, they are intelligent and have the capacity to learn. **However**, they are not influenced by any of the technological or cultural environments affecting human decision-making. The team wanted to test whether the capuchin monkeys, when put into similar situations as humans, would make the same mistakes.

What is more, of particular interest to the scientists was whether monkeys would make the same mistakes when making financial decisions. In order to find out, they had to introduce the monkeys to money. The team distributed **metal discs** to the monkeys, and taught them that the discs could be exchanged with **team members** for food. The monkeys soon cottoned on, and as well as learning simple **exchange techniques**, were soon able to distinguish 'bargains' - **if** one team member offered two grapes in exchange for a metal disc and another team member offered one grape, the monkeys chose the two-grape option. Interestingly, when the data about the monkey's **purchasing strategies** was compared with economist's data on **human behavior**, there was a perfect match.

Therefore, after establishing that the monkey market was operating effectively, the team decided to introduce some problems which humans generally get wrong. One of these issues is **risk-taking**. Imagine someone gave you \$1000. In addition to this \$1000, you can receive either A) an additional \$500 or B) someone tosses a coin and if it lands 'heads' you receive an additional \$1000, but if it lands 'tails' you receive no more money. Of these options, most people tend to choose option A. They prefer guaranteed earnings, rather than running the risk of receiving nothing. Now imagine a second situation in which you are given \$2000. Now, you can choose to either A) lose

\$500, leaving you with a total of \$1500, or B) toss a coin; if it lands 'heads' you lose nothing, but if it lands 'tails' you lose \$1000, leaving you with only \$1000. Interestingly, when we stand to lose money, we tend to choose the riskier choice, option B. **Moreover**, as we know from the experience of financial investors and gamblers, it is unwise to take risks when we are on a losing streak.

So would the monkeys make the same basic error of judgment? The team put them to the test by giving them similar options. In the first test, monkeys had the option of exchanging their disc for one grape and receiving one **bonus grape** or exchanging the grape for one grape and sometimes receiving two bonus grapes and sometimes receiving no bonus. It turned out that monkeys, like humans, chose the less risky option in times of plenty. Then the experiment was reversed. Monkeys were offered three grapes, but in option A were only actually given two grapes. In option B, they had a fifty-fifty chance of receiving all three grapes or one grape only. The results were that monkeys, like humans, take more risks in times of loss.

In short, the implications of this experiment are that **because of** the fact that monkeys make the same irrational judgments that humans do, maybe human error is not a result of the complexity of our financial institutions, but it is imbedded in our evolutionary history. If this is the case, our errors of judgment will be very difficult to overcome. On a more optimistic note however, humans are fully capable of overcoming limitations once we have identified them. By recognizing them, we can design technologies which will help us to make better choices in future.



Which is the function of the connectors (linking words) highlighted in the text? The first one has been done for you. Use the chart above to help you.




CONNECTORS	FUNCTION
So why are we so prone to making mistakes?	
However , they are not influenced by any of the technological or cultural environments	
What is more , of particular interest to the scientists was whether monkeys would make the same mistakes (...)	
If one team-member offered two grapes in exchange for a metal disc and another team	
Therefore , after establishing that the monkey market was operating effectively, the team decided to introduce some problems which humans generally get wrong.	
Moreover , as we know from the experience of financial investors and gamblers, it is unwise to take risks when we are on a losing streak.	
The implications of this experiment are that because of the fact that monkeys make (...)	

CONNECTORS	FUNCTION
In short , the implications of this experiment are	



REVISION TOPIC 1: Noun - Noun Phrases

A compound noun is a single noun made up of two or more words




sea + food = seafood

with spaces	without spaces	with hyphens
ice cream	classmate	mother-in-law
swimming pool	greenhouse	dry-cleaning
bus stop	grasshopper	self-confidence
living room	lifespan	merry-go-round



Identify noun-noun phrases (compound nouns) and translate them. The first one has been done for you. **You may use the Grammar Quick Guide to help you.**

COMPOUND NOUN	TRANSLATION
primate psychologist	
Cognition Lab	
metal discs	
team members	
exchange techniques	
purchasing strategies	
human behavior	
risk-taking	



REVISION TOPIC 2: Irregular Plural Forms

Irregular plural nouns are nouns that do not become plural by adding -s or -es, as most nouns in the English language do. For example, the plural form of “man” is “men”, not “mans”.



Complete this chart with the correct plural form. The first one has been done for you. You may use the [Grammar Quick Guide](#) to help you.

<u>SINGULAR FORM</u>	<u>PLURAL FORM</u>
foot	
fish	
crisis	
leaf	
curriculum	
tuna	
swine	
ox	
alumnus	
thesis	
mouse	
species	
series	

WELL DONE!

Answers will be available next week!