ELL SUMMER INSTITUTE SECTION

TOEFL iBT® Reading

REQUIREMENTS FOR SAVING AND SUBMITTING DOCUMENTS

1. **Filename**: Save your document with your first and last name plus the ELL Summer Institute section and the year for which you are applying.
   
   Example: Jane Doe TOEFL iBT Reading 20XX.doc

2. **Identifying Info**: Your name should not appear anywhere inside the document. It should only appear in the filename.

3. **Submission Format**: More detailed instructions on how to format materials for submission are provided throughout the document.

OVERVIEW

The TOEFL iBT Reading test assesses examinees’ reading comprehension skills in English through the use of authentic college-level texts (“passages”) of about 650-700 words excerpted from authentic sources. Comprehension of each passage is tested by means of fourteen non-overlapping multiple-choice questions (“items”). Some items directly measure vocabulary knowledge; others measure a reader’s comprehension of the discrete facts presented in the passage; others require the reader to make small inferences or recognize structural and rhetorical relationships; and others measure the reader’s ability to synthesize the most important information presented across the passage. Each passage must therefore be dense with rich, substantive content, and a careful decision must be made about whether a passage has sufficient content appropriate for item development. Below is a list of some of the criteria we consider when we evaluate passages for TOEFL iBT® Reading. Applicants are strongly encouraged to review the sample TOEFL iBT® Reading passages available through these links:

https://www.ets.org/toefl/ibt/prepare/test_questions
https://www.ets.org/toefl/ibt/prepare/quick_prep/
https://www.ets.org/toefl/ibt/prepare/toefl_interactive_sampler
PASSAGE EVALUATION CRITERIA

- **Language and accessibility.** Language should be introductory college-level and academic in tone. Passage should not assume a North American audience.

- **Main ideas.** A good passage is conceptually complex enough that it cannot be summarized adequately in a single sentence. Instead, it should contain three or more distinct main ideas that a proficient reader can identify.

- **Complexity of content.** Presentation of information should go beyond the encyclopedic listing of facts. Content should consist of multiple layers of information, ranging from general ideas to specific details, examples, and explanations that support these ideas. In addition, a good passage will employ a variety of techniques to develop the ideas presented. These might include:
  - analysis of cause/ effect relating to a phenomenon (dinosaur extinction was caused by meteorite impact)
  - comparison/ contrast (the reproductive strategies of "opportunists" vs. those of "competitors")
  - advantages/ disadvantages (e.g., of an organism’s adaptive mechanisms)
  - evidence/counterevidence (X suggests that Theory A is true, but Y suggests that it is not)
  - assertion/qualification (Fish are water-breathing animals, although a few have also evolved to breathe surface air).

- **Degree of technicality.** To avoid favoring specialists in a given subject, passages should not be overly technical. A reader proficient in English should be able to understand a passage based on its content alone. Test takers should not have to rely on outside knowledge (of biology or chemistry, for instance) beyond what is expected of a typical high school student.

- **Other potential content issues.** *Repetition?* A good passage contains little or no redundancy. We have to create 14 items based on 700 words, so passages must not repeat information. *Excessive examples?* We like passages that provide an occasional example to support an idea; a passage that consists largely of examples of a single phenomenon does not work. *Common knowledge?* A passage should not contain excessive common knowledge or information that a reader might infer through common sense. Test items are based on passage content, and test takers should be able to answer them only on the basis of knowledge gained by reading the passage. *Visualization required?* Physical description should not be so detailed that a reader must rely on visualization skills to understand the content. *Abstraction?* Content should be concrete enough to be testable. A passage that is largely abstract in nature will not work.
Below are two excerpts from passages that were actually submitted to TOEFL iBT® Reading together with some comments on their problematic features. These passages were not accepted. Please look closely at the excerpts and at the comments provided. This should help you to form an idea of how we evaluate passages.

Example 1:

The supercooling point (temperature of crystallization) of a liquid is the temperature at which it turns to ice. Although 0°C is ordinarily considered the freezing point of water, insect fluids and cell contents may not freeze down to -20°C or lower because of cryoprotectants that reduce the supercooling temperature. Glucose, trehalose, low-molecular-weight lipids, and sorbitol in the hemolymph act as cryoprotectants. No natural chemical, however, equals glycerol to prevent freezing. Glycerol has been found in most overwintering, freezing-tolerant insects, especially larvae and pupae. Glycerol extends the temperature range of supercooling without freezing to retard the rate of freezing and to reduce the size of crystals. Both actions reduce freezing injury to tissues. When the insect is indeed frozen, glycerol presumably reduces the deleterious osmotic effects and prevents the intracellular freezing that is fatal.

A second strategy that insects use to avoid freezing injury is to avoid having ice nucleation centers (nucleators) that accelerate ice formation. Mineral particles, and especially bacteria, act as catalysts for ice formation. The presence of nucleators in the gut or hemolymph of an insect raises the supercooling point. On the other hand, the addition of dissolved substances in water lowers the points of freezing and supercooling. Even without special antifreeze substances, the body fluids of overwintering insects can often be supercooled to -20°C. Thus many insects survive subzero weather by evacuating their guts in autumn and supercooling without harm, to temperatures above the supercooling point. When the supercooling point of the insect is reached, an ice crystal will form internally around a nucleator.

Comments:
- Many technical terms (supercooling, cryoprotectants, hemolymph, intracellular, etc.).
  Note that even though some terms are defined (supercooling), the definition contains yet another difficult term (crystallization).
- Difficult language level even aside from technical terms (the deleterious osmotic effects)
- Lots of detailed mechanistic description (steps in the freezing process)
- Many discrete facts without the development of arguments

Example 2:

When paint on the surface of a canvas appears thick and somewhat three-dimensional, it is called impasto. Van Gogh often applied paint in an impasto manner in order to express his intense feelings directly on the canvas. In his impatience, he sometimes used paint squeezed directly from the tube. Artists have also used their palette knife to spread thick paint on the support for an impasto effect.

Another oil painting technique involving thickish paint is called scumbling. In scumbling, the artist drags brushstrokes of paint over the dry layer of paint underneath, as Joan Mitchell did.
on her canvas Marlin. Scumbling creates an open-textured brushstroke of opaque paint that still lets the color underneath appear. Usually, a light color is color is scumbled over a dark one underneath.

Comments:
- List of loosely connected facts, i.e. encyclopedic
- Lots of specialized language (palette knife, brushstrokes, canvas)
- Too many definitions (impasto, scumbling)
- Visualization skills required (second paragraph’s description of base layer of paint visible through top layer)
- Too many examples

WORK SAMPLE TASKS AND SOURCE MATERIALS

Reading—Task 1
Mini Passage Review

With the above criteria in mind, please assess the two sample passages included below for suitability as potential TOEFL iBT® Reading Comprehension passages and explain your decisions in terms of these criteria. Your responses will be evaluated on the basis of your ability to apply our criteria to a potential passage. Your comments for EACH passage should be a MAXIMUM of 150 words in length, single-spaced in 11 point Calibri. Please be as concise as possible. Comment on a passage’s perceived strengths and weaknesses, using the checklist below and referring to specific details from the passage to illustrate your comments.

Checklist:
- Language and accessibility
- Main ideas
- Complexity of content
- Degree of technicality
- Other potential content issues

Sample Passage #1

The Lure of the American West

The Homestead Act of 1862, passed during the Civil War by a Congress free of southern opposition, reflected the ideals and goals of a Republican United States. In keeping with the Jeffersonian vision of a nation of small farmers, the federal government sought to extend the system of individual land ownership west. The Homestead Act, expanding the basic system of settlement established by the Ordinance of 1785, provided a means for privatizing expansive western public lands. Before the Civil War homesteading west of the Mississippi River had proved problematic for individual families, as cheap lands intended for individuals quickly evolved into a commercialized system of land speculation.

The Homestead Act provided title to 160-acre parcels for individuals who made “improvements” to the land over a period of five years. Settlers had the option to purchase the
land for $1.25 per acre after the first six months of residency, and some opted to pay up front to secure mortgages to fund improvements. This option encouraged speculation by allowing homesteaded land to be brought into the commercial market a quarter section (one quarter of a square mile) at a time at a higher resale value. Rather than improving the land, homesteaders often sold out to other individuals or commercial farms that grew grain crops over vast acreages.

For those homesteading west of Dodge City, Kansas, on the 100th meridian (the geographic line of aridity where annual rainfalls drop below 8 inches per year), 160 acres required expensive irrigation works for farming or other dry-land farming techniques. These parcels were also far too small for ranching. In addition, five years was too long to develop the land without the benefit of ownership and access to loans. Congress addressed these problems in 1877 with the Desert Lands Act. The act, applicable in eleven western states, allowed for homesteading on 640-acre parcels of arid land at 25 cents per acre and provided title within three years for a dollar an acre for settled, irrigated, land. However, there was no official definition of how much land and water constituted irrigated cultivation. For much of the desert West, agriculture required massive federal support that came with the creation of the Reclamation Service in 1902. The renamed Bureau of Reclamation (BOR) eventually funded extensive irrigation projects in 16 western states. The simple act of providing land and water to farmers and ranchers enormously expanded the growth and reach of the federal government.

It is hard to underestimate the power of perception in the creation of the West as both a geographical region and an ideal with lasting global appeal. In 1895 future president Woodrow Wilson wrote, “The West has been the great word of our history. The Westerner has been the type and master of our American life.” The “great word” was always more myth than truth, not entirely false but a powerful idea with enough fact to motivate millions to move great distances and suffer enormous hardship. The mythic version of the western story is still celebrated in literature, on film, and on TV. But the myth had a dark side. It justified the mistreatment of Indians and their ancestral environment and contributed to class and racial conflict that characterized the post-Civil War West.

At the heart of the mythic story of the West was a question: was the West the land of unlimited opportunity or a paradise lost? Promoters and “boosters” lured settlers, workers, and investors to the region by steadfastly portraying the West as a paradise to be tamed and civilized. Western boosters were masters of public relations and emerging techniques of advertising. Using all of the new mass media at their disposal—dime novels, traveling shows, posters, pamphlets, newspapers, graphic art, and photography—they promoted places that did not yet exist and invented simple solutions to complex cultural and environmental dilemmas. Boosters dismissed the lack of water in much of the region with claims like, “The rain follows the plow.” The faith that ingenuity, technology, and hard work could transform even the wealth was widespread and pushed global migrations to the West.

Word Count: 680
Sample Passage #2

Water and the Birth of the Solar System

Water was important in the formation of our solar system, especially for the ‘gas giant’ and ‘ice giant’ planets beyond Mars. Star systems form in the clouds of gas, mineral dust, and water drifting through space. A portion of the cloud may separate and collapse under its own weight, sometimes as the result of a massive, nearby exploding star (supernova), as happened with our own Sun. The clues to this trigger event lie within ancient meteorites that have fossil chemical traces of short-lived, highly radioactive isotopes that could only have been generated in a supernova that erupted just prior to our own solar system forming.

As the portion of cloud begins to collapse, any initial movement is converted into a slow rotation of the cloud. As the cloud continues to shrink, it begins to rotate more rapidly. The mass of material now occupies a smaller space, and therefore any original movement is speeded up, much as a skater spins more quickly when they pull their arms in tightly to their body. The compression of the gas in the core of the collapsing cloud begins to release heat, from the release of gravitational energy, and this heats up the interior part of the spinning cloud that is now flattening into a thin disc. The cloud becomes a luminous proto-sun, with a fitful output of heat and light reflecting the growing pains of a star in the making.

The densely packed, colliding atoms at the core of the young star generate temperatures – simply through the immense compression – of millions of degrees Celsius. This compressional heating in itself can 'burn' lithium, atomically transmuting it into beryllium. Eventually – usually after tens of millions of years – the inexorable rise in pressure and temperature makes hydrogen atoms begin to fuse into helium, releasing a truly gargantuan source of energy that can last for billions of years. A true star (or more prosaically, a 'main sequence star') is then born.

Starbirth is a thing of beauty and violence, with intense X-ray emissions and powerful stellar winds of outflowing atoms and ions. The outburst of energy powers the outflow of radiation and gas from the inner parts of the star system, driving them to its outer regions. Shock fronts develop as faster-moving packets of gas driven by these outflows impact upon slower-moving gas patches, causing further heating. The proximity of a just-lit star is no place for a volatile molecule such as water, or ammonia, or carbon dioxide. Hence, a snow line, perhaps a billion kilometres in diameter, is formed around the new star.

Inside the snow line it is too hot for volatile molecules to condense, and they remain as gas – a gas that is driven outwards by the fierce solar wind. It is driven outwards until the temperatures fall so low, somewhere around the present orbit of Jupiter, that it can condense into tiny ice crystals. These can collide and aggregate into large masses of ice as they whirl around the infant Sun. It is a factory where comets are made. Water can build greater things than comets, though.

Water, here, is not simply an icy backdrop to the larger drama of planet formation. It is the motor that drives the manufacture of the largest planets of all: the gas giants of Jupiter and Saturn, and the ice giants of Uranus and Neptune. Given that water is a combination of the commonest element in the universe, hydrogen, and the third commonest, oxygen, it is little wonder that it is the commonest molecule, after molecular hydrogen, in these regions. It likely exceeds the amount of metals and silicate minerals in the circumstellar disc.

The scavenging of ice by a growing Jupiter, just in the zone where ice was condensing out of vapour, increased its mass, helping it become massive enough to attract and trap the hydrogen and helium still present in the swirling cloud. In this way, Jupiter grew enormous, as
did – although not to quite the same extent – its neighbour Saturn. Farther out from the new Sun's snow line, Uranus and Neptune did not grow large enough to pull in such large amounts of hydrogen. Nevertheless, they accumulated enough water to become 'ice giants' – planets largely made of rock and ice.

**isotopes** – variant forms of chemical elements  
**volatile** – easy to evaporate

**Word Count: 713**

**Reading—Task 2**  
**Making a TOEFL iBT Reading Passage**

For this task, you are provided with a few pages from a book (please see the pdf provided). Your task is to select the best possible cut (smaller excerpt) from these pages for a *TOEFL iBT®* Reading passage. Please keep the following in mind:

1) You must choose your excerpt based on the Passage Evaluation Criteria found near the beginning of this document.

2) The passage (excerpt) needs to be self-contained, meaning virtually everything can be understood based only on the text found in the passage itself. In order to achieve this, you may need to make the following edits:

   - Revise the introductory paragraph to include all the background information that is necessary for the complete understanding of the passage. This information can be summarized from those parts of the text that do not make your final cut, or from any additional sources you may find (such as an encyclopedia, dictionary, etc.). You may modify the first paragraph of the excerpt you choose, or write your own introductory paragraph. In any case, the information in your first paragraph must be factually accurate and go naturally with the rest of the text in your excerpt.

   - Gloss or explain any terms in the passage that are either technical (favoring specialists in the field) or that require background knowledge to understand. Your gloss should be succinct, and at the same time accurately provide all the needed information. Whenever possible, include your explanation/gloss in the text itself in a way that minimally disrupts the flow of the passage (for example, in parentheses). If that is not possible, you may include your gloss together with the glossed term underneath your chosen passage excerpt and underline the glossed word in the passage.

   - Omit author citations or references to pictures, figures, or information presented in parts of the book outside of the excerpt (“As discussed in chapter 2 …”).

3) You should not make any changes to the text other than those described in (2).

4) The final length of your excerpt, including the introductory paragraph and glosses, but excluding the title, must be between 650 and 700 words in total.
5) Type up the final version of your excerpt in your Word submission document using Calibri font size 11, single-spaced. Indicate the word count at the bottom of the passage. On a separate page indicate the following:

- Italicize all places in your excerpt where you changed the source material in any way to add background information or glosses (e.g., *added the parenthetical gloss “groups of related species” after the word “genera”*).
- Identify at the end of the excerpt the source or sources of any information added that comes from outside the excerpt (selected information from the second full paragraph on page 3 of the source material to include in the introduction).
For this task, please read the first chapter, What Limits the Geographic Distribution of Organisms? (pp. 1-12), of Why Ecology Matters by Charles J. Krebs. This material can be found through the following link:


Once at this site, select the hyperlink that says INFO Why Ecology Matters. A pdf of the Preface and Chapter 1 will open. The pdf can be downloaded.

Once you have the source material, imagine that you are preparing a passage submission on cane toads; the material you will use verbatim from the book begins at the bottom of page 4. However, the passage requires an introductory paragraph to frame the discussion. You should select and condense information from elsewhere in the chapter or from other academic sources to write an introductory paragraph. As explained for Task 2, the introduction must provide all necessary background information so that the passage can be understood on its own.

Your introduction will be judged on your ability to

- recognize when subject knowledge is being assumed rather than presented
- clearly, accurately, and concisely supply information needed to make a passage self-contained
- write a paragraph that flows well and transitions smoothly into the rest of the passage
- produce high-quality academic writing that matches in style the writing in the rest of the passage

As in Task 2, you must identify the source or sources of any information taken from outside the excerpt (e.g. information from the second full paragraph on page 3 of the source has been included in the introduction, information has been included from “Ecology, behavior, and life history” in https://en.wikipedia.org/wiki/Cane_toad).

The introduction should be a maximum of 100 words.