Rate Builders Level “I”

Rate builder exercises test the readers on the different levels of Bloom’s Taxonomy. Reading the material the reader acquires the knowledge presented in the rate builder. While reading, the reader practices paraphrasing the material to help the reader acquire comprehension. Answering the questions in the rate builder develops the reader’s application and analysis of the material presented in the rate builder. Some of the questions also call for the reader to synthesize and evaluate the information presented in the rate builder.

Prepared using material from Science Research Associates, Inc.
An unusual competition known as the Northern Games takes place annually at Inuvik in the Northwest Territories of Canada, close to the Arctic Ocean.

The women’s events are contests in such everyday skills as boiling tea, cooking fish, making bannock, lighting fires, skinning muskrats and seals, preparing dry fish, and sewing, as well as throwing balls and hoops.

With a typical northern flavor, the men’s contests include such events as arm pulling, harpoon throwing, the Alaskan high kick, and drum dancing. The record for the high kick is 8 feet 2 inches. The blanket toss is popular; contestants are tossed as high as fifty feet in the air by twenty men heaving a sealskin blanket.

The contest for introducing a new game was won one year by a skydiver, the only one in the North. Several times he jumped over the games site, trying to land in an outstretched sealskin blanket. Once he came within four feet of his target. Another time, when a sudden gust of wind blew his parachute off course, he dented the roof of a car a quarter of a mile away.

Most of the contestants and thousands of spectators are Indians and Eskimos, some coming over a thousand miles by plane and boat, to take part in the events.

1. The Northern Games have taken place every year for the past

   A. fifty years   B. ten years   C. two years   D. The article does not say
2. The games take place

A. at Anchorage, Alaska  
B. at Inuvik, Canada  
C. on the shores of the Artic Ocean  
D. None of the above

3. The women’s events include

A. making bannock and melting blubber and making fires  
B. skinning seals and making fires  
C. boiling tea and throwing harpoons  
D. sewing weaving

4. The women’s contests are mainly trials of

A. sporting skills  
B. dancing and singing  
C. everyday skills  
D. aerial stunts

5. In the blanket toss, contestants were tossed

A. 20 feet by 50 men  
B. 50 feet by 20 men  
C. an unknown height  
D. None of the above

6. In the new-games contest, the skydiver

A. missed his target by 4 feet  
B. dented a car roof  
C. tried to land in a sealskin blanket  
D. All of the above

7. Implied but not stated

A. The people of the North enjoy the opportunity to meet others.  
B. Most of the contestants are Indians and Eskimos.  
C. The contestants practice for months for the games.  
D. There are very few spectators at the games.

8. The author states that people come to the games

A. by dogsled and on foot  
B. by plane and boat  
C. by swamp buggy and jeep  
D. All of the above

Every year a million tons of oil are spilled, leaked, or deliberately flushed into the sea. Oil contamination is a critical problem for science to solve.

Remedies for getting rid of oil are many. Straw absorbs four times its weight in oil. Flamethrowers burn oil off. Sand, talc, and chalk effectively break it up and sink it. Various chemicals disperse the slick into droplets and enable microbes to destroy the oil more quickly.

Some chemicals, however, become more poisonous than the oil itself when they combine with it. In 1967, when the tanker Torrey Canyon grounded off Cornwall in southwest England, powerful chemicals did more lasting harm than the oil itself. Though the oil killed thousands of birds as it floated ashore, the detergents used to clean the rocks and beaches destroyed many more creatures and upset the usual balance of marine life.

Masses of oil reaching shore are fortunately rare, but few beaches have escaped contamination by oil. Some ships do not report spillage, and others discharge oily wastes at night and depart. To find the culprits, oil companies are considering a process involving the electronic analysis of oil. This would make it possible to match any spill with its source and so identify the tanker responsible.

1. The article states the yearly discharge of oil into the sea is

   A. a million tons   B. ten million tons   C. a billion tons   D. None of the above

2. Implied but not stated:

   A. Straw absorbs six times its weight in oil.
   B. Flamethrowers burn oil off.
   C. Oil floats on the surface of the sea.
   D. All ships carry supplies of straw and flamethrowers.
3. Sand, talc, and chalk act in the same way by
   A. absorbing ten times their weight in oil  B. forming a layer on the surface
   C. making the oil sink  D. destroying the oil by chemical reaction

4. According to the article, chemical remedies must be carefully chosen because they
   A. are the most expensive remedies  B. may result in poisonous mixtures
   C. are harder to collect than oil-soaked straw  D. add harmful microbes to the sea

5. The example proving the need of careful choice is the
   A. collision of two tankers in the English Channel  B. blowing of an oil well in the Gulf of Mexico
   C. sinking of a tanker in the North Sea  D. grounding of a tanker off Cornwall

6. The last paragraph suggests that the cause of oil contamination on many beaches is
   A. careless handling of oil wastes by ships  B. spillage of oil by submarines
   C. collisions of tankers with other ships  D. strong winds driving oil slicks ashore

7. Those responsible for this contamination are
   A. easily traced  B. easily proved to be the culprits  C. hard to find
   D. Both A & B

8. The article states that the source of an oil spill may be traced by
   A. registering all tankers  B. keeping a list of all known culprits
   C. gathering samples of oil from every continent  D. matching oils by a process of electronic analysis

Legend attaches a romantic story of true love to two magnificent snowcapped volcanoes in Mexico — Popocatepetl (poh-poh-kah-TAY-pet-l) and Iztaccihuatl (Iss-ta-SEE-hwat-l).

According to the story, Popo was a warrior who loved Iztaccihuatl, the beautiful daughter of an Indian king. The king declared that, to win his daughter, Popo would have to prove his valor. So Popo went off to battle, swearing to return victorious. Iztaccihuatl made a vow that he were killed she would commit suicide.

Alarmed, the king sent two messengers after Popo. When they returned with word that he had died, the princess put on a bridal veil and disappeared.

Some months later Popo returned. He hadn’t been killed after all, just severely wounded. Setting out to find his loved one, he searched for several years, scouring all the valleys and pueblos of Mexico.

Finally Indian scouts told Popocatepetl they had seen a woman reclining on a mountain. Popo climbed the mountain and, at the top, found Iztaccihuatl — asleep forever. In grief he withdrew to a distance, knelt down, and kept perpetual watch over her until he too died.

Today the two lovers appear as mountains. Popocatepetl, the loftier of the two, stands guard over the lower, flatter Iztaccihuatl, who is still reclining as her lover found her many years ago.

1. The story of Popocatepetl and Iztaccihuatl is
   
   A. history   B. science fiction   C. legend   D. adventure

2. Iztaccihuatl’s father, the king, was
   
   A. sure that his daughter would marry a rich man
   B. unwilling to have his daughter marry
   C. anxious to have his daughter marry a brave man
   D. unconcerned about what happened to his daughter
3. The vow Iztaccihuatl made showed that she
   A. hated war    B. respected her father    C. Loved Popo    D. knew how beautiful she was

4. When she heard about Popo’s death, Iztaccihuatl
   A. put on her bridal veil    B. left her father’s home    C. Both A and B    D. Neither A nor B

5. Popo’s unexpected return proved that
   A. he had become a ghost    B. the messenger’s report had been wrong
   C. the king had tricked his daughter    D. Popo had been cowardly in battle

6. During his absence Popo had probably been
   A. preparing an army to fight the king    B. visiting his family
   C. recovering from his wounds    D. hiding in the mountains

7. Which happened last?
   A. Popo searched all over Mexico for his love.
   B. Iztaccihuatl died on the mountain.
   C. Indian scouts saw he princess.
   D. Popo stood guard over his sweetheart’s body.

8. To people of long ago, the legend explained
   A. why the two mountains are snowcapped
   B. why the two mountains have contrasting shapes
   C. how Popo was rewarded for his bravery
   D. why true love ends in grief

Natives and other people used to living in the tropics can stand heat much better than newcomers. Similarly, among troops stationed in hot areas casualties from heatstroke are always highest among recent arrivals. Obese persons are particularly endangered by heat, and the rate of heat ailments among overweight people is three to five times as high as among the slim.

Even in outer space, with its very low temperatures, heat problems can occur. Space capsules and space suits have to be conditioned to keep a careful balance between the heat gained from the sun, and the heat and moisture produced by the metabolism of crew members, and the heat lost into space. When this balance fails, the results can be quite unpleasant. This was the case during astronaut Richard Gordon’s space walk on the Gemini II mission in 1966. Temperatures in his space suit rose to 43° C, or nearly 110° F. The relative humidity in his suit rose to 100 percent, or saturation, from moisture produced by perspiration and breathing. This environment caused physical deterioration. Gordon’s pulse rate rose to 180 beats per minute and he was unable to perform simple tasks. For a time his situation was dangerous. Only a superbly conditioned man could have survived.

1. The theme of this selection is the

   A. physical effects of heat
   B. problems of space travel
   C. balance between heat and moisture
   D. history or heat problems
2. The writer discusses heat problems in
   A. topical areas   B. outer space   C. mine shafts   D. Both A and B

3. In a hot country, the person least likely to be affected by the heat would be a
   A. stout soldier   B. fat astronaut   C. slender native   D. thin vacationer

4. The effects of heat can include
   A. heatstroke   B. change in pulse rate   C. inability to perform simple tasks   D. All of the above

5. Heat sources in outer space include
   A. the sun   B. the moon   C. lightening   D. all of the above

6. The moisture inside Gordon’s space suit came from
   A. his own body   B. other crew members   C. the fog and rain   D. water used to cool his suit

7. If Gordon’s situation hadn’t been corrected, he probably would have
   A. adjusted to it   B. died   C. lost the effects of gravity   D. drowned

8. The most important conclusion to be drawn is that
   A. heat problems in outer space are greater than those on earth
   B. the relative humidity in outer space is usually about 100 percent
   C. good physical condition is an important factor in withstanding heat
   D. scientists use the centigrade scale to measure temperatures

The word *encyclopedia* began as a Greek word and means “instruction in the whole circle.” It was first used in English by Sir Thomas Elyot in 1538. Encyclopedias today are usually arranged in alphabetical order, but in early times they were arranged in any way the author liked. One writer in the Middle Ages began with a discussion of God and angels and ended with descriptions of scents and colors and a list of thirty-six different kinds of eggs. The first alphabetically arranged encyclopedia was published in 1704 by an English clergyman named John Harris.

The oldest encyclopedia in existence was written during the first century A.D. by Pliny, a Roman. Its thirty-seven volumes list over twenty thousand items. It was valued highly for hundreds of years. Up to 1536 forty-three editions had been published. The largest encyclopedia, the third Chinese encyclopedia, contains over 5020 volumes and was compiled during the eighteenth century. Between 1751 and 1765 the French *Encyclopédie* appeared. This collection is unusual because contemporary famous men, including Voltaire, Rousseau, and Diderot, wrote articles for it.


1. The word *encyclopedia* was first used in English by

   A. Pliny in 1438   B. Elyot in 1538   C. Harris in 1638   D. Diderot in 1738
2. The compiler whose encyclopedia ended with eggs probably considered
   A. eggs his least important subject  B. scent and colors worth of
      inclusion  C. God his most important subject  D. All of the above

3. Most modern encyclopedias are arranged according to
   A. the publisher’s policy  B. the compiler’s preferences
      C. alphabetical order  D. the importance of the subject
       matter

4. The encyclopedia in use for centuries was written by
   A. Pliny  B. Harris  C. Diderot  D. Elyot

5. A reasonable conclusion regarding the third Chinese encyclopedia is that it was
   A. written by a genius  B. published within a short time
      C. compiled by a team of writers  D. Both A and B

6. The time span stated for the French *Encyclopédie* publication indicates that
   A. little care is exercised in preparing references  B. reference works need constant revision
      C. reference works take years to prepare  D. Both A and B

7. The eighteenth century witnessed the publication of the
   A. largest encyclopedia  B. French *Encyclopédie*
      C. *Encyclopaedia Britannica*  D. All of the above

8. For English-speaking peoples, the most widely used encyclopedia is the
   A. *Encyclopedia Americana*  B. *Encyclopaedia Britannica*
      C. *Oxford Junior Encyclopedia*  D. *World Book Encyclopedia*