

1<sup>st</sup>

Your group is preparing a poster presentation entitled "The Person Who Changed Science Forever," using information from the magazine article below .

Charles Robert Darwin , an English naturalist and biologist , changed the way we understand the natural world when he published his book *On the Origin of Species* in 1859 . In that revolutionary book , he proposed that all living creatures evolved from a common ancestor , through the process of natural selection . Darwin's Theory of Evolution is now widely accepted by the scientific community all over the world .

Charles Darwin was born in Shrewsbury , England , on February 12 , 1809 . As a child , he showed a deep interest in natural history but was encouraged by his doctor father to follow him into a career in medicine . Charles Darwin entered Edinburgh University in 1825 as a medical student but soon became bored by his studies . Instead , he spent a great deal of his free time learning about plants and animals from experts he met at the university . It was at Edinburgh University that he first encountered the concept of evolution .

According to his father's wishes , Darwin moved to Cambridge University , and after graduating in 1831 , Charles Darwin joined an expedition to South America on board the ship HMS Beagle . During the five-year expedition , Darwin visited many different South American countries . In each country , he found unique wildlife and fossils that provided strong evidence that all living things were descended from a common ancestor . In September 1835 , the Beagle arrived in the Galapagos Islands . Darwin discovered many new types of birds on the islands that were similar to those found in neighboring Chile , but with new changes to their body and behavior . He noted that each island contained unique species perfectly adapted to their environment . These changes slowly occurred over many generations and this discovery supported Darwin's new ideas about how natural selection created new species .

Before returning to England , the HMS Beagle stopped in Australia . There , Darwin observed unusual animals such as the kangaroo and the koala . The

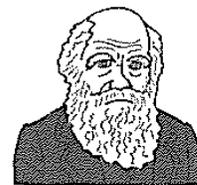
differences he observed again helped him develop his theory about the origin of species .

On his return to England in 1836 , Darwin began the work of organizing the fossils and bones he had collected on his expedition . He noticed that the fossils he collected were different but similar to creatures still living in South America , providing evidence that species can evolve . During the next twenty years , Darwin published research , gave presentations and continued to work on his book about the origin of new species . He included the observations he made on his voyage on the Beagle and used the fossils he collected as evidence . Charles Darwin's book , *On the Origin of Species* went on sale on November 24 , 1859 . At the end of the book , he suggested that human also evolved in the same way as the other living creatures he had observed . This was a radical suggestion at the time . Reviews of his book were mixed , as many people did not want to believe that humans were related to animals and the Anglican Church argued that his ideas broke God's rules . However , scientists and thinkers at that time agreed with Darwin that one of the ways new species evolve is through natural selection . Natural selection is still taught in science lessons around the world today .

**The Person Who Changed Science Forever**

■ **The life of Charles Robert Darwin**

Period	Events
1810s	Darwin spent his childhood in Shrewsbury , England .
1820s	(1)
1830s and beyond	(2)→(3)→(4)→(5)



Charles Robert Darwin

■ **About *On the Origin of Species***

- First published on November 24<sup>th</sup> , 1859 .
- The book received mixed reviews for the following reason : (6)

■ **What Darwin taught us**

- Species can (7) .
- Natural selection is : (8) .

問1. Members of your group listed important events in Darwin's life . Put the events in the boxes (1) ~ (5) in the order that they happened .

- ① Darwin organized and researched the fossils and bones he has collected during the expedition .
- ② Darwin studied at university in Edinburgh and Cambridge .
- ③ Darwin visited South America on HMS Beagle .
- ④ Darwin visited the Galapagos Islands .
- ⑤ Darwin's book *On the Origin of Species* was published .

問2. Choose the best statements to complete the sentence . (Choose the set of correct answers. ) (6)

- A. Scientists argued against the concept of natural selection .
- B. The book argued against the idea that God created the various species we see today .
- C. The book contained little evidence of evolution .
- D. The book suggested that humans had also evolved through natural selection
- E. The concept of natural selection was too difficult for people to understand .
- F. The radical group of the Anglican Church tried to block the publication of the book .

- ① A,F ② B,C ③ B,D ④ B,E ⑤ C,D ⑥ E,F

問3. Which of the following completes the sentence ? (7)

- ① adapt to their environment
- ② change environments without adapting
- ③ eventually evolve into humans
- ④ quickly evolve into new species

問4. Choose the best statements to complete the sentence . (Choose the set of correct answers.) (8)

- A. a process invented by Darwin
- B. a way of explaining why Darwin's ideas were incorrect
- C. an old theory no longer believed by scientists today
- D. one of the main theories that explain how species evolve
- E. one of the reasons why different environments contain unique species
- F. the process by which monkeys become human

- ① A,B ② A,D ③ B,F ④ C,D ⑤ D,E ⑥ D,F

【語句】			
(第1段落)			
naturalist	博物学者	wildlife	野生生物
biologist	生物学者	fossil	化石
origin	起源	evidence	証拠
species	種	similar to ~	~に似ている
revolutionary	革命的な	neighboring	隣の
propose	~を提唱する	note	~に注目する
living	生きている	contain	~を含む
creature	生き物	adapt to ~	~に適応する
evolve from ~	~から進化す	(第4段落)	
る		observe	~を観察する
ancestor	祖先	(第5段落)	
natural selection	自然選択	organize	~を整理する
theory	理論	presentation	発表
evolution	進化	work on ~	~に取り組む
(第2段落)		go on sale	売りに出る
follow	~に従う	radical	過激な
medicine	医学	review	評価
instead	代わりに	as	~なので
(第3段落)		be related to ~	~と関連があ
expedition	遠征	る	
on board	~に乗って	argue	~と主張する
unique	独特の	thinker	思想家
		at that time	当時

2<sup>nd</sup>

Your group is preparing a poster presentation entitled "The Company that Invented Convenience Stores," using information from the magazine article below .

### **History of Convenience Stores**

Convenience stores are found everywhere today but their invention is relatively recent . Convenience stores have only been open fewer than one hundred years . The earliest stores did not have all the features we expect from convenience stores today . For example , they weren't open 24 hours a day , though from the start late hours were an important part of being a convenience store .

The first convenience store in the world was started in Dallas , Texas in the United States in 1927 . It was started by a man named Jefferson Green and was named the Southland Ice Company . The store originally did not serve as a convenience store , but was a store for buying blocks of ice used for cooling food . The store was open after grocery stores had closed and Green noticed that people often couldn't buy things they needed late at night . He decided to start selling simple foods at low prices so that customers had an option to buy things like eggs and milk late at night .

Over the next few decades , the company opened more stores across the state of Texas and then across the United States . They kept their locations open from seven o'clock AM to eleven o'clock PM , and in 1946 changed the company name to 7-Eleven . The company kept this name even when many stores went to being open 24 hours a day . The first store to stay open all night did so by accident . In the Texas city of Austin , the college football team won a game and many fans and students went to a nearby 7-Eleven after the game . There were so many people that the store couldn't close . People stayed through the night and into the next morning . The night was such a success that the company decided to open a store that was intended to stay open all night . They found an appropriate location in Las Vegas for their first 24-hour store in 1963 . With so many people gambling and partying all night , it was a perfect fit . It wasn't long before most stores adopted this 24-hour-a-day schedule .

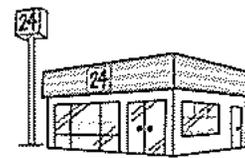
By 1966 the convenience store industry achieved one billion dollars in sales . One of the major reasons for the popularity of these stores was the new national highway system in the United States . With more people driving across the country , there was a greater need for small shops that could provide essentials for travelers . Many of these stores had attached gas stations as well . There were also more people working late in factories and in other jobs that kept them at work late . These people , including the now greater number of women who worked , appreciated the chance to buy things on the way home .

Following this access , American convenience stores expanded into other countries . In 1974 the first 7-Eleven opened in Japan . This store in Toyosu , Tokyo initially had trouble staying in business , but eventually became a big success . Japanese convenience stores brought about many innovations in business operations including new systems to keep products in stock . They also improved tracking systems that monitored what products were being bought and by what kind of people . These systems helped the convenience store companies to develop popular new products . Convenience stores became so successful in Japan that the Japanese division of 7-Eleven bought the parent company in the United States .

The Company that Invented Convenience Stores

■ History of 7-Eleven

Period	Events
1920s	The Southland Ice Company opened .
1940s	(1)
1960s and beyond	(2)→(3)→(4)→(5)



■ About 7-Eleven

- Originally started as a store that sold ice for refrigerating food .
- Was successful for the following reasons: (6)

■ A new model for shopping

- Modern purchase tracking systems developed in Japan helped stores: (7) .
- The convenience store model adapted to new patterns of modern life such as: (8) .

問1. Members of your group listed key events in the history of 7-Eleven . Put the events in the boxes (1)~(5) in the order that they happened .

- ① Convenience stores had yearly sales of \$1 billion .
- ② The company changed its name to 7-Eleven .
- ③ The first 7-Eleven in Japan opened .
- ④ The first 24-hour convenience store opened .
- ⑤ The Japanese portion of the company bought parent company .

問2. Choose the best statements to complete the sentence . Choose the set of correct answers.) (6)

- A. They allowed gambling .
  - B. They had low prices .
  - C. They had many female employees .
  - D. They had many locations .
  - E. They were close to highways .
  - F. They were open late .
- ① A, B, D   ② A, D, F   ③ B, C, F  
④ B, D, E   ⑤ B, D, F   ⑥ C, D, E

問3. Which of the following was a benefit from the purchase tracking systems 7-Eleven of Japan introduced ?

- ① They allowed stores to stock items during only late at night .
- ② They could predict what kinds of products people would want to buy .
- ③ They limited the amount of trips that delivery trucks had to make .
- ④ They made it easier to keep track of items in a much larger store .

問4. Choose the best statements to complete the sentence . (Choose the set of correct answers.) (7)

- A. more travel being done by car
  - B. more women working
  - C. people watching television
  - D. people working from home
  - E. people working longer hours
  - F. sports becoming more popular
- ① A, B, E   ② A, C, E   ③ A, E, F  
④ B, C, D   ⑤ B, E, F   ⑥ D, E, F

【語句】

(第1段落)

invention	発明	adopt	～を採用する
relatively	比較的	(第4段落)	
feature	特徴	popularity	人気

(第2段落)

serve as ～	～として務める	a need for ～	～に対する需要
cool	～を冷やす	essentials	必需品
late at night	夜遅く	attach	～を付属として持つ
so that ～	～できるよう	at work	仕事中で
have an option to do	～するという	appreciate	～をありがた

選択肢がある。

(第3段落)

few decades	数十年	(第5段落)	
location	店舗・場所	expand	拡大する
by accident	偶然に	initially	はじめは
such ~ that ...	とても～なの	have trouble (in) doing	～するのは困
で・・・		難だ	
be intended to do	～するために	bring about ～	～をもたらす
作られる		innovation	革新
appropriate	適切な	in stock	在庫がある状
gamble	ギャンブルす	態で	
る		tracking	追跡
fit	ぴったり合う	monitor	～をチェック
こと		する	
		division	部門