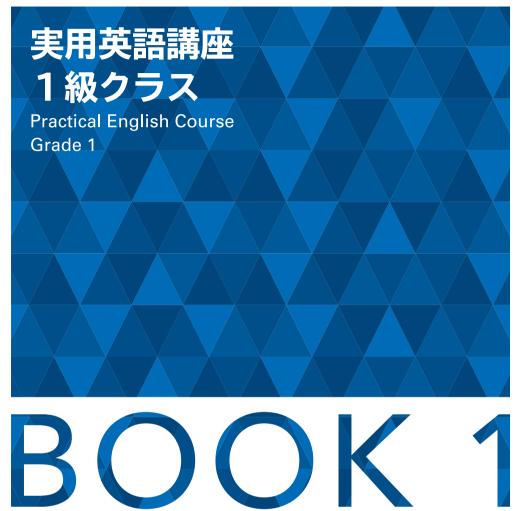
#### 文部科学省認定社会通信教育





文部科学省認定社会通信教育『実用英語講座』1級クラスは,実用英語 検定1級レベルの英語力を身に付けていただけるよう4技能の全てを伸ば す工夫をした講座です。英検1級の対策講座ではありませんが,自学自習 と添削指導を活用してしっかり学ぶことで,1級で求められる実力を備え ていってください。

英検が求める1級レベルの力は、「社会性の高い幅広い分野の文章を理解 し、またそのやりとりができたり文章を書いたりすることができる力」で す。これは、ビジネスであれ、アカデミックな分野であれ、どのような場 面や話題についても対処できる高度な英語力で、難易度の高い文章を読ん だり聞いたりできる力と共に、説得力のある文章を書く力やプレゼンテー ション、スピーチなどができる上質のコミュニケーション能力が要求され ます。

この講座は、そのような実力養成に必要な要素を網羅しています。1週 間の前半は、1つのテーマでリスニングとリーディングを行い、その中の 語彙や文構造を学習します。後半には手順を追ってライティング能力を養 う課題があります。課題を提出すると添削指導を受けることができるので、 全回必ず利用しましょう。週の最後にはauthenticな題材で、海外での実 際の生活や仕事に役立つ学習をすることができます。

この講座が,皆さんに実りある学びをもたらすことを心より願っていま す。

To succeed in your mission, you must have single-minded devotion to your goal.

— A. P. J. Abdul Kalam

立命館大学教育開発推進機構教授 山岡憲史

# WEEK 1

さあ,1 週間が始まります。 まずは,1 日 60 分,集中して 学習に取り組みましょう。

# Targets for WEEK 1

 「周期ゼミ」をテーマに、語彙や表現、知 識を深める

(DAY 1  $\sim$  DAY 3 Listening / Speaking / Reading)

- ② Descriptive Paragraph について学び、 実際に書く練習をする (DAY 4 Writing)
- 3 TV の料理番組を素材に、語彙や表現を 学ぶ
  - (DAY 5 Real Life & Review)

Listening & Speaking

DAY1の解答・解説は別冊「解答・解説」の p.2~3

#### Step 1 — Before Listening \_

Think about the following questions.

WEEK 1

DAY 1

- Q.1 How long do you think cicadas live?
- Q.2 Do you use insect repellent? If yes, for what insects do you usually use it?
- Q.3 It seems a lot of people hate or fear insects. Do you have any idea why they do not like insects? If you hate or fear insects yourself, please explain why.

Step 2 — Listen to the Dialogue	CD1-02
Listen to the dialogue while taking notes,	, then answer each true or false question below.

- Q.1 The woman is very afraid of cicadas. (T / F)
- Q.2 The man says Brood II cicadas will not attack people unless they are extremely threatened. (T/F)
- Q.3 The man is pulling the woman's leg by exaggerating the expected number of cicadas. (T / F)
- Q.4 The woman is looking forward to the once-in-17-years spectacle. (T / F)
- Q.5 This conversation is taking place somewhere in the eastern part of the U.S. (T/F)

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## Step 3 — \_\_\_\_ Listen to the Dialogue \_\_

Listen to the dialogue while taking notes again, then answer each question below.

- Q.1 How many Brood II cicadas are expected to appear the coming summer?
- Q.2 According to the man, what is a little problematic about the Brood II cicadas?
- Q.3 What does the man say is very impressive about the Brood II cicadas?
- Q.4 What does the name "17-year cicada" tell us about the insects?
- Q.5 According to the answer for Q.4, when was the last time the Brood II cicadas appeared?

this conversation takes place.

Step 4 — Read the Dialogue \_

Read silently while you listen.

- M : Since you're relatively new in the States, I wonder if you've heard anything about the Brood II cicadas.
- W : I've heard the term several times recently, and was wondering what they are.
- M: If you have a phobia of cicadas, this summer might turn out to be a bit of an ordeal for you.
- W : I don't scream when I see one flying toward me, but I don't particularly like them. Should I get special repellents, or perhaps protective gear?
- M : No, I assure you that they're harmless creatures, though their chorus is a little noisy. It's their number that's so impressive. Billions of them will soon





be coming out of the ground in the eastern part of the United States.

- W : You're exaggerating.
- M : Not really. The Brood II is a group of 17-year cicadas. As the name suggests, they live 17 years.
- W : Amazing.
- M : Yeah. But even more amazing is that so many cicadas are born, develop, become adults and die in sync. Their final stage of life is spent aboveground, and that's what we're going to witness this year.
- W : You sound like you're looking forward to it.
- M : Of course. It's a once-in-17-years spectacle.



Play the man's part.

#### Step 6 Vocabulary & Phrases \_\_\_\_

Listen to the dialogue again and find the English words and phrases which match the Japanese in the column on the right.

1	種族,群れ;ブルード(13年または17年 ごとに同時に発生する周期ゼミの年次集団)
2	セミ
3	恐怖症,病的恐怖〔嫌悪〕
4	試練,苦しい体験
5	防虫剤,虫よけ
6	防護服,防具
$\bigcirc$	〈人〉に…を請け合う,〈人〉に保証する
8	印象的な,素晴らしい,すごい
9	大げさに言う〔考える〕,…を誇張する
10	名が示すように
	同時に、同調して
12	壮観,光景



CD1-04

CD1-03

CD1-02

WEEK 1

## Step 7 — Summary of the Dialogue

Write a summary of the dialogue in Step 4 using the information and key phrases you wrote down in Steps 2 and 3. Your summary should begin with the following sentence, and should be more than 60 words, not including the given phrase.

# Step 8 — Parallel Reading \_

Read the dialogue in Step 4 aloud while you listen.

Further Practice Shadowing

Listen to the dialogue again, and repeat what you are listening to without looking at the textbook.



CD1-02



Reading

DAY 2 の解答・解説は別冊「解答・解説」の p.4 ~ 6

CD1-02

CD1-03

#### Step 1 — Review of the Previous Day \_

WEEK 1

DAY 2

- 1. Listen to the dialogue from the previous day.
- 2. Go back to page 7, Step 4 and play the man's part again.

# **Reading for Comprehension**

 Step 2
 Read the Passage \_\_\_\_

 Read the passage and choose the best answer from among the four choices for questions 1 to 4.

### The Mysteries of Periodical Cicadas

In spring to early summer, every 13 or 17 years, some parts of eastern North America witness a mysterious phenomenon that cannot be seen anywhere else. Periodical cicadas crawl out en masse after having spent their juvenile years in subterranean hideouts. Millions, or sometimes billions, of mature nymphs climb up trees, molt for the last time and become adults; then they mate, lay eggs, and die, all in a few weeks.

What distinguishes periodical cicadas from other cicada species are their life cycles. There are about 3,000 cicada species worldwide. They spend years underground, and only a relatively short period as flying adults. Most cicada species have

10 life cycles of between two and eight years and some members appear aboveground every year, so they are sometimes referred to as annual cicadas. Periodical cicadas, however, have lifespans of 13 or 17 years, making them the longest-lived insects known. Also, a whole brood develops synchronously and emerges from the soil all at once, sometimes with a density of more than 1.5 million per acre, then disappears

15 until the next mass emergence.

How did their life cycles evolve to become synchronous? Why are they so long? Why the prime numbers? For centuries, these questions have intrigued entomologists, and they have produced various theories and hypotheses.

For example, one theory explaining their synchronized mass emergence is the 20 survival strategy called "predator satiation." Periodical cicadas are vulnerable. They

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lack the means to protect themselves, and easily fall prey to predators, from birds to snakes to large and small mammals. However, by emerging at the same time in huge numbers, often they can overwhelm their predators. Even though many of them are consumed by voracious predators, others survive to create a new generation. Some researchers also point out that their density makes finding mates easier.

Another explanation has to do with atmospheric cooling during the Pleistocene epoch, which began about 2.6 million years ago. During that period, glaciers repeatedly advanced into and retreated from North America. For cicadas to survive their life stages aboveground, a certain period of warm temperature is needed. Cicadas that emerged in cold summers were easily destroyed, but ones that developed more 30 slowly and emerged less often were less likely to experience the killing summers, and thus more likely to survive. So were their offspring, who inherited the slowdevelopment genes of their parents. Or as some suggest, the cooler conditions may have slowed down their development, extending their lifespans to 13 or 17 years.

Then, what explains cicadas' lifespans being prime numbers, which can be 35 divided only by themselves and one? It has been hypothesized that their life cycles of 13 or 17 years minimize the risk that their adult life will synchronize with the shorter life cycles of predators. For instance, if a predator species comes and goes over a five-year life cycle, the emergence of a 17-year cicada species would synchronize with the predator's cycle only every 85 years. Also, prime numbers help avoid 40 interbreeding between the 13-year and 17-year species, or between other, shorter-lived cicadas, which may produce hybrids with non-prime-cycle lifespans in low density.

As with many questions involving evolution, nothing can be said for certain. Nevertheless, further findings, along with logical thinking, will help us formulate the 45 best possible hypotheses.



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- Q.1 According to the passage, the phenomenon it describes
  - 1. is observed only in northern parts of the U.S.
  - 2. is observed at any given place in North America.
  - 3. occurs exclusively in eastern North America.
  - 4. rarely occurs other than in North America.
- Q.2 According to the passage, species collectively called annual cicadas
  - 1. have short lifespans compared to other insects.
  - 2. have evolved in such a way that they can avoid interbreeding with other cicada species.
  - 3. can be seen in their adult form throughout the year.
  - **4.** are so called because their life cycles are different from those of periodical types.
- Q.3 According to the passage, some researchers say
  - 1. atmospheric temperatures a long time ago may have helped lengthen the nymphal period of periodical cicadas.
  - 2. we are very close to solving the mysteries of the unique life cycles of periodical cicadas.
  - **3.** the fact that the lifespans of periodical cicadas are prime numbers 13 and 17 has no practical advantage for the cicadas.
  - "predator satiation" has been observed only in periodical cicadas in North America.
- Q.4 According to the passage,
  - 1. periodical cicadas appear above the ground in their adult form.
  - it is not uncommon for insects other than cicada species to live as long as periodical cicadas.
  - **3.** periodical cicadas' synchronous development leads to the high density of their population.
  - **4.** the mass emergence of periodical cicadas also has some negative effects on their survival.

Q.1	Q.2	Q.3	Q.4

# Step 3 – Vocabulary & Phrases –

Fill in the blanks in Japanese.

1)	periodical cicada	
2	en masse	
3	juvenile	
4	subterranean	
5	hideout	
6	nymph	若虫(不完全変態をする〔さなぎにならない〕昆虫 の卵と成虫の間のもの),幼虫
$\bigcirc$	molt	
8	synchronously	
9	emerge	
10	density	
1	prime number	
12	intrigue	
13	entomologist	昆虫学者
14	predator satiation	捕食者飽食
15	vulnerable	
16	fall prey to	
$\bigcirc$	overwhelm	
(18)	voracious	
19	atmospheric	
20	the Pleistocene epoch	更新世(地質時代の区分の1つ。約258万年前から 1万1700年前まで。氷期と間氷期を繰り返した)
21	glacier	
2	interbreed	
23	hybrid	
		·

CD1-06

参考