

Taking the Sting Out of Jellyfish

No: _____ Name: _____

[A] Comprehension Part 3 [P 76~77]

(1) Listen to Part 3 and choose T or F for each of the following statements.

1. All kinds of Jellyfish are able to emit light.
2. Dr. Shimomura discovered luminous proteins that had not been known before.
3. GFP is called the magic marker, because it enables us to see cancer cells in the body.
4. *Benikurage* dissolve in water when they are no longer able to sustain their life.
5. There is a possibility that humans someday can be immortal by studying jellyfish.

1. (**F**) 2. (**T**) 3. (**T**) 4. (**F**) 5. (**T**)

(2) Listen to Part 3 again and answer the next questions in English.

Q1: What was Dr. Shimomura awarded the Nobel Prize for?

He was awarded for the discovery and development of GFP.Q2: What do *benikurage* do when they become no longer able to sustain their life?**They go down to the ocean floor and turn into lumps.**

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[B] Paragraph Chart Part 3 [P 76~77]

Read the passage carefully and fill in the missing words in Japanese.

* 15問中10問以上の正解でメソッドポイント7

[1st Paragraph]

- ・オワンクラゲの独特な現象 = (**発光**)
 → 刺激を受けたのは = (**下村脩博士**) と彼の同僚たち
 → オワンクラゲの中に2つの光るタンパク質を見つけた。
 → one of which is GFP = (**緑色蛍光タンパク質**)
- ・GFPについて
 - ① (**医学**) の分野では「マジックマーカー」と呼ばれている
 Because → そのおかげで私たちが (**ガン細胞**) を (**見る**) ことができるから
 - ② その (**発見**) と (**発展**) に対して
 2008年の (**ノーベル化学賞**) 賞が授与された

[2nd Paragraph]

- ・ベニクラゲの特徴 = (**不死(身)**) のクラゲ
 How → 次の(1)～(4)のサイクルを何度も繰り返す
 (1) 生命を維持することができなくなると、
 (**海底**) まで降りていき (**塊**) になる
 (2) 水に溶けることはない
 (3) (**何か固いもの**) にくっついて、根を張ってポリプを作る
 (4) (**若いクラゲ**) に変化する

[3rd Paragraph]

- ・クラゲの研究によっていつか現実になる可能性があること = (**不死(身)**) の人間?

[C] Word Search Part 3 [P 76~77]

Find the words in this part that best match the following descriptions.
and change each of them into Japanese.

1. to send out something such as light, heat, gas, etc.
 = (**emit**) = (In Japanese, **放つ**)
2. something that can be seen to happen or exist and is interesting or not usual
 = (**phenomenon**) = (In Japanese, **現象**)
3. the state of living forever
 = (**immortality**) = (In Japanese, **不死(身)**)
4. to keep something alive or to cause something to continue
 = (**sustain**) = (In Japanese, **維持する**)
5. to mix with something such as water and to become included in it
 = (**dissolve**) = (In Japanese, **溶解する**)