

For Teachers: Please have the students read the sentences one at a time and correct their pronunciation of each sentence then have them repeat after you. Wait until after they read the sentence (use the number in place of the missing word) to have the students choose the correct answer to fill in the blank. When the students finish the article, move on to the further questions.

3[B] – Patterns of Hope

11.1(3B)A2E

- One ^{重大(じゅうだい)な} major problem for hospitals is ^{たくさんの~} the number of ^{患者(かんじゃ)} patients who catch dangerous ^{病気(びょうき)} diseases while they are being ^{治療(ちりょう)される} treated for other problems.
- These diseases are ^{病気(びょうき)} caused by ^{~が原因(げんいん)である} the bacteria that live in hospitals and get into ^{患者(かんじゃ)の} patients' bodies. The ^{通常(つうじょう)の} usual way to ^{~を扱(あつか)う} deal with these bacteria has been to use ^{薬(くすり)} medicines or ^{化学薬品(かがくやくひん)} chemicals to try to kill them.
- Unfortunately, this ^{残念(ざんねん)なこと} method can have the opposite ^{逆(ぎやく)の} effect and ^{実際(じっさい)に} actually ^{~の原因(げんいん)となる} cause the bacteria to become ^{細菌(さいきん)} stronger.
- Now, Anthony Brennan, a ^{科学者(かがくしゃ)} scientist at the University of Florida, has ^{考(かんが)えつく} come up with a new way to ^{減(へ)らす} reduce bacteria in hospitals—one that could help ^{避(さ)ける} avoid this (**30**).

* Choose the correct answer to fill in the blank from these choices.

- (30) 1 ^{態度(たいど)} attitude 2 ^{危険(きけん)} risk 3 promise 4 ^{意味(いみ)} meaning

Further Questions&A

* Ask student to answer the question on their own at first. If the student can't answer correctly, have him look at the last page and read the "example answer" for the question. Have the student try to memorize the answer, if it's too long or difficult, you should divide the sentence into 2 or 3 parts to make it easier to remember. Once they have memorized the answer, the teacher should ask the question one last time so that the student can practice answering. Also if you find any mistakes, please mark the page and let me know ASAP.

- 1)-30 What is the major problem many hospitals have that is ^{述(の)べられて} mentioned in this ^{記事(きじ)} article?
 この記事で述べられているたくさんの病院が抱える問題とはなんですか。
- There are a lot of bacteria in hospitals which can make people more sick ^{そこにいる間(あいだ)に} while there than they were when they entered.
- Brennan first thought of his idea when he was working with the United States Navy.
- The Navy was ^{~を探(さが)す} looking for a way to ^{予防(よぼう)する} prevent ^{ちっちゃな} tiny animals and plants from ^{附着(ふちやく)している} attaching themselves to ships.
- Overtime, a ^{そのうち} thick ^{厚(あつ)い} layer of them can ^{発達(はったつ)する} develop, and this both damages the ship and ^{減(へ)らす} reduces the speed at which they can ^{動(うご)く} travel.
- Brennan began thinking about how sea ^{生物(せいぶつ)} creatures ^{対処(たいしょ)する} deal with the same problem.
- Most of those that move slowly, such as whales and turtles, do ^{事実上(じじつじょう)} in fact become ^{~で覆(おお)われて} covered by ^{層(そう)} such a layer. Slow-moving sharks though have skin that ^{~のまま} remains (**31**).

* Choose the correct answer to fill in the blank from these choices.

- (31) 1 dark 2 ^{柔軟(じゅうなん)な} flexible 3 ^{乱暴(らんぼう)な} rough 4 clean

Further Questions&A

16. **2)-31** What was Anthony Brennan studying when he ^{作り出した} created his ^{発明(はつめい)} invention that might help hospitals? Anthony Brennan ^{びょういん} が ^{すく} 病院 ^{ごと} を ^し 救う ^{こと} 事ができるかも ^し 知れない ^{はつめい} 発明 ^{とき} を ^{かれ} した ^な 時、彼は ^{なに} 何を ^{べんきょう} 勉強 ^{して} いましたか。
17. *He was trying to ^{作(つく)り出(だ)す} create a way to keep sea life off of the bottoms of ships.*
18. **3)-31** Why are small animals and plants ^{~に集積(しゅうせき)する} building up on ships bad for the ship?
19. ^{ちい} 小さい ^{どうぶつ} 動物 ^{しよくぶつ} と ^{ふね} 植物 ^{しゅうせき} が ^{ふね} 船 ^に ^わ 集積 ^{こと} することは ^{わる} なぜ ^{こと} 船 ^に にとって ^{わる} 悪い ^{こと} 事 ^な の ^{です} ですか。
20. *They ^{遅(おそ)くする} slow the ship down and slowly ^{破壊(はかい)する} destroy the ^{船体(せんたい)} hull of the ship.*
21. **4)-31** Do whales and turtles have problems with the small creatures building up on them?
22. ^{ちい} クジラ ^{せいぶつ} と ^{かれ} カメ ^{しゅうせき} は ^{ちい} 小さい ^{せいぶつ} 生物 ^が ^{もんだい} 彼ら ^に ^{しゅうせき} 集積 ^{こと} することに ^{もんだい} 問題 ^が ^あ り ^ま す ^か 。
23. *Yes, they often ^{発達(はったつ)させる} develop a layer of these creatures ^{付着(ふちやく)した} attached to their skin or shells.*
24. When Brennan ^{調(しら)べた} examined these sharks ^{詳(くわ)しく} closely, he ^{発見(はっけん)した} discovered that this was because of ^{ちっちゃな} pattern of ^{突起(とつき)} tiny ^と bumps ^の on their skin.
25. These patterns make it hard for the small creatures and plants to ^{くっつく} stick to the skin.
26. Brennan ^{決(き)めた} decided to create a (**32**) ^{表面(ひょうめん)} surface that could be used in hospitals.
- * Choose the correct answer to fill in the blank from these choices.
27. **(32)** 1 ^{似(に)ている} similar 2 ^{基本的(きほんてき)な} basic 3 cheap 4 ^{液体(えきたい)} liquid

Further Questions&A

28. **5)-32** How does Anthony Brennan's ^{発明(はつめい)} invention ^{作用(さよう)する} work ?
29. Anthony Brennan ^{はつめい} の ^{はつめい} 発明 ^は ^ど の ^よ う ^に ^{して} ^{さよう} 作用 ^し ます ^か 。
30. *The small ^{突起(とつき)} bumps like on a shark skin are difficult for small creatures like bacteria to live on.*
31. Eventually, he ^{ついに} created ^{作(つく)り出(だ)した} a plastic layer on which patterns like those on shark skin are printed.
32. Experiments ^{実験(じっけん)} have shown that ^{細菌(さいきん)} bacteria find it very hard to live on these patterns.
33. Brennan hopes that hospitals will use his plastic layer to cover surfaces where ^{集(あつ)まる} bacteria usually ^{成功(せいこう)する} gather . If his idea ^{成功(せいこう)する} succeeds , this will be a good example of how much we human beings can (**33**) ^{成功(せいこう)する} from nature.
- * Choose the correct answer to fill in the blank from these choices.
34. **(33)** 1 ^{取(と)り除(のぞ)く} remove 2 ^{守る} guard 3 ^{学(まな)ぶ} learn 4 ^{説明(せつめい)する} explain

Further Questions&A

37. **6)-33** How does Brennan ^{考(かんが)える} imagine hospitals using his invention?
38. Brennan ^{びょういん} は ^{かれ} 病院 ^が ^{はつめい} 彼の ^{はつめい} 発明 ^を ^ど の ^よ う ^に ^{しよく} 使用 ^し ます ^と ^{かんが} 考 ^え ています ^か 。
39. *They can put a layer of his plastic on areas where bacteria ^{~しがちである} tends to ^{集(あつ)まる} collect .*
40. **7)-33** Do you think his invention will be successful at ^{取(と)り除(のぞ)く} eliminating bacteria in hospitals?
41. あなた ^{かれ} は ^{はつめい} 彼の ^{びょういん} 発明 ^が ^と 病院 ^内 の ^と バクテリア ^を ^{のぞ} 取り除 ^く ことに ^{せいこう} 成功 ^{する} と思 ^い ます ^か 。

42. *No, I don't think so. It sounds like his invention isn't ^{柔軟性(じゅうなんせい)のある} flexible enough for it to ^{減(へ)らす} cover all the necessary surfaces. But it might help reduce the bacteria.*
43. **8)-33** Where else could his invention be used that have problems with bacteria?
44. *バクテリアの問題を抱える場所で 病院の他に彼の発明を使えるところはありますか。*
45. *It might be possible for it to be used in schools and maybe it can be put on ^{ドアノブ} doorknobs and bathroom doors where bacteria can also be a problem.*

Vocabularies: Try to memorize these words yourself without looking at the Japanese translations.

For Teachers: Have the student read the word in English, correct their pronunciation then say it together. Then have the student say it in Japanese before saying again in English. After you have done this for each line, go back to the first word and have the student translate it.

- | | | | |
|----------------------------|------------|-----------|-----------|
| 46. (30) 1 attitude | 2 risk | 3 promise | 4 meaning |
| 47. (31) 1 dark | 2 flexible | 3 rough | 4 clean |
| 48. (32) 1 similar | 2 basic | 3 cheap | 4 liquid |
| 49. (33) 1 remove | 2 guard | 3 learn | 4 explain |

Example sentences: *It must take a long time but Try to use these vocabularies one by one in the sentences of your original one. Teacher must show them your for example sentence before ask.

50. **(30)** 1 He is always angry and brooding, he has a bad **attitude**.
51. 2 He wanted to eat breakfast, but then he would **risk** being late.
52. 3 She made a **promise** to meet me, but she never came.
53. 4 What is the **meaning** of this word?
54. **(31)** 1 Away from the city where it is **dark**, you can see the stars better.
55. 2 She can touch the ground while standing, she is very **flexible**.
56. 3 The car was **bumping** because the road was very **rough**.
57. 4 I must **clean** my room more often.
58. **(32)** 1 I look **similar** to my brother.
59. 2 I will show you some **basic** computer skills before we try anything hard.
60. 3 Food in America is **cheap** compared to Japan.
61. 4 Water is the most **common** **liquid** on earth.
62. **(33)** 1 It is hard to **remove** the sticker from the book without **ripping** it.
63. 2 I bought a new alarm system to **guard** my car.
64. 3 You come here to **learn** English.
65. 4 Can you **explain** what this sentence means?

Answers for "Vocabularies"

- | | | | |
|----------------------------|------------|-----------|-----------|
| 66. (30) 1 attitude | 2 risk | 3 promise | 4 meaning |
| 67. (31) 1 dark | 2 flexible | 3 rough | 4 clean |
| 68. (32) 1 similar | 2 basic | 3 cheap | 4 liquid |

69. (33) 1 取(と)り除(のぞ)く
remove

2 守(まも)る
guard

3 学(まな)ぶ
learn

4 説明(せつめい)する
explain

Review Questions

70. 1)-30 What is the major problem many hospitals have that is mentioned in this article?
記事(きじ) 述(の)べられて
71. *There are a lot of bacteria in hospitals which can make people more sick than they were when they entered.* while there
そこにいる間(あいだ)に
72. 2)-31 What was Anthony Brennan studying when he created his invention that might help hospitals?
作り出した 発明(はつめい)
73. *He was trying to create a way to keep sea life off of the bottoms of ships.*
作(つく)り出(だ)す
74. 3)-31 Why are small animals and plants building up on ships bad for the ship?
~に集積(しゅうせき)する
75. *They slow the ship down and slowly destroy the hull of the ship.*
遅(おそ)くする 破壊(はかい)する 船体(せんたい)
76. 4)-31 Do whales and turtles have problems with the small creatures building up on them?
77. *Yes, they often develop a layer of these creatures attached to their skin or shells.*
発達(はったつ)させる 付着(ふちゃく)した
78. 5)-32 How does Anthony Brennan's invention work?
発明(はつめい)
79. *The small bumps like on a shark skin are difficult for small creatures like bacteria to live on.*
突起(とつき)
80. 6)-33 How does Brennan imagine hospitals using his invention?
81. *They can put a layer of his plastic on areas where bacteria tends to collect.*
~しがちである 集(あつ)まる
82. 7)-33 Do you think his invention will be successful at eliminating bacteria in hospitals?
取(と)り除(のぞ)く
83. *No, I don't think so. It sounds like his invention isn't flexible enough for it to cover all the necessary surfaces. But it might help reduce the bacteria.*
柔軟性(じゅうなんせい)のある 減(へ)らす
84. 8)-33 Where else could his invention be used that have problems with bacteria?
ドアノブ
85. *It might be possible for it to be used in schools and maybe it can be put on doorknobs and bathroom doors where bacteria can also be a problem.*

解答: (30) 2 (31) 4 (32) 1 (33) 3

166	形)ひどい	awful					オウフル
167	前)～を含めて ふくめて	including					インクル ー デ ィ ン グ
168	動)機能する、 うまくいく きのう	work					ワーク
169	名)学位、 (温度などの)度 がくくらい おんど	degree					ディグ リ ー
170	名)病気 びょうき	disease					ディジ ー ズ
171	動)～をうまく 処理する しより	manage					マニ ジ
172	名)成功 せいこう	success					サク セ ス
173	名)無駄(動)～を 無駄にする むだ	waste					ウェ ィ ス ト ウ
174	動)～を示す しめす	indicate					イン デ ィ ケ ィ ト
175	動)～を認める みとめる	admit					アド ミ ッ ト
176	動)～を感動さ せる かんだう	impress					イン プ レ ス
177	名)人口 じんこう	population					パ ピ ュ レ ィ シ ェ ン
178	名)料金 りょうきん	fee					フ ィ ー
179	副)我慢強く がまんつよく	patiently					ペ ィ シ ェ ン ト
180	動)～に気づく きづく	notice					ノ ウ テ ィ ス