

**【Shinya Yamanaka】**

**[1] Warm-up**

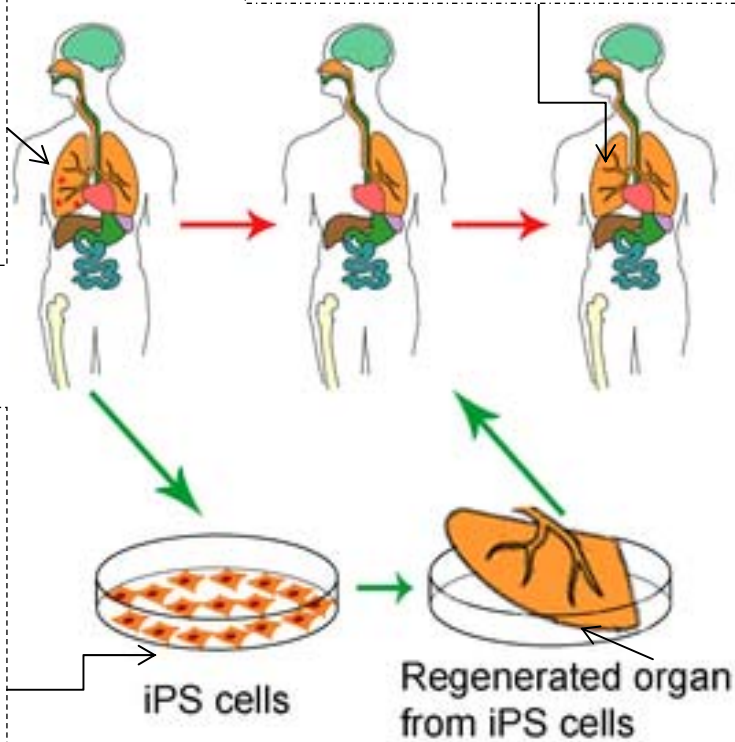
– Professor Shinya Yamanaka, the director of the Center for iPS Cell Research and Application, Kyoto University, is known for creating iPS cells. What are iPS cells? What might be possible for us to do with iPS cells in the future?

– Listen to the explanation and take notes in boxes ① to ④ below.

*For now this is still an imaginary story, but Professor Yamanaka is trying hard to make his dream come true.*

① [Key words]  
*lung disease, remove*

④ [Key Words]  
*reject*



② [Key words]  
*skin cells*

③ [Key words]  
*be put back into ~*

## [2] Getting Information

– Watch the interview and catch what Professor Yamataka says about the points below.

Topics	Questions		Points in listening
His high school days	1	What kind of student was he?	(His favorite subjects) (The sports he played)
	2	What happened about twenty years ago?	
His life as a researcher	3	Why did he leave Japan?	(About the “knockout” technology) + (About the US)
	4	How are scientists in the US different from those in Japan?	(Scientists in the US) ↓ ↑ (Scientists in Japan)
Communicating in English	5	How long has he been learning English?	
	6	What trouble did he have at a hotel in the U.S?	(What he asked at the front desk) ↓ ↑ (What the front desk clerk taught him)
	7	Why does he need to use English in Japan?	(What English is for scientists) ↓ (What he’s still doing in Japan) ↓ (What he has to do)
	8	How can we study English in Japan?	(What we can do without paying a lot of money)
His research & iPS cells	9	What research does he want to do in the near future?	(What they can do now) ↓ (What they hope to do using the technology)
	10	Why did he name the new stem cells “iPS cells”?	(What he wanted to do) ↓ (What he decided to do)

**[3] Professor Yamanaka's Message**

– Catch what he says to high school students in Japan.

“ <i>Don't</i> _____ ”
“ <i>Don't</i> _____ ”
“ <i>You should</i> _____ ”

**[4] Role Play (Pair Work)**

**Student A** Interviewer—Choose three questions from [2] “Getting Information” on the previous page.

**Student B** Professor Yamanaka—Answer the questions looking at what you wrote down on the sheet.

**[5] What Do You Think? (Group Work)**

– Professor Yamanaka says, “... *when you are high school students, you have the freedom to make many mistakes.*” What do you think he means? Exchange your ideas with your friends.

You	Your friends
(Key words only!)	Name: _____
	Name: _____
	Name: _____
	Name: _____

**[6] WRITING: “What I Learned From My Failure”**

(What you experienced)

---

---

---

---

---

---

---

(What you learned)

---

---

---

---

---

---

---

(教師用資料)

**[1] Warm-up の教師による Oral Introduction 発話例**

For now this is still an imaginary story, but Professor Yamanaka is trying hard to make his dream come true. (ワークシート 1 枚目の吹き出しと同じ)

- ① Imagine that this person is suffering from a bad lung disease. His doctors suggest removing one of his lungs. But with only one lung it would be harder for him to breathe.
- ② Thanks to Professor Yamanaka and his team, iPS cells are created from his skin cells. iPS cells are so special that they can be grown into any cell part of his body.
- ③ If the iPS cells were grown into a lung, the lung could be put back into his body.
- ④ With the two lungs, you would get better. Since the new lung is made from his own skin cells, his body would not reject it.