**Possible openings   
for the introduction of a presentation**

* General statement
* Background information
* History
* Anecdote
* Number and/or fact
* Definition
* Quotation by a famous person
* Question

Today I will talk about rare earth metals. 🡸 interesting???

Topic: Rare earth metals

**General statement** = story, often a personal story

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** As do most people here in Japan, I have a cell phone, which is also known as a smart phone or a mobile phone. In fact, some 81% of the people in Japan have one of these. One component of cell phones and many other devices is the rare earth metals that they contain, and today I would like to explain about those rare earth metals.

**Background**

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** In our modern world we are surrounded by devices. How many do you have? You likely have a cell phone (81% of Japanese do), a television, a computer, perhaps a car, and so forth. In all of these devices we find rare earth metals, which are vital in the batteries, the screens, and other components. Today I would like to explain about rare earth metals.

**History**

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** Today I would like to take us back in time for a moment to 1876. In that year, 144 years ago, Alexander Graham Bell applied for a patent for the first telephone. In the time since then the telephone has become very widespread, and the original landline has been supplemented by today’s wireless cell or mobile phones. In these common devices we find rare earth metals, which are vital in the batteries, the screens, and other components. Today I would like to explain about rare earth metals.

**Anecdote** = story, often a personal story

* Anecdote about my early cell phone

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** When did you first obtain a cell phone, or perhaps a PHS? My first one was in 1998 when I purchased a very simple AU PHS (a personal handyphone system) which had extremely limited power and usability but nonetheless was a telephone. In those early phones and in today’s smart phones, we find rare earth metals, which are vital in the batteries, the screens, and other components. Today I would like to explain about rare earth metals.

* Number or fact: In Japan, what percentage of people have cell phones?

127 million x 81% = 102.87 million

102.87 million users

“81%. 81 percent of the population of Japan.”

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** 102.87 million. Think about that for a moment, please. Over 100 million. 100 million **users**. Of cell phones. Over 100 million cell phone users. In Japan. There are over 100 million cell phone users in Japan. In these common devices we find rare earth metals, which are vital in the batteries, the screens, and other components. Today I would like to explain about rare earth metals.

* Definition: define ‘rare earth metal’

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** Today I would like to consider rare earth metals.A rare earth metal is one of 17 elements of the 116 in the periodic table. These include such elements at yttrium, scandium, and …, yet these elements are not truly rare. ‘Rare’ in this case refers to the difficulty of extracting them. They are crucial because we find rare earth metals in cell or mobile phones, in which they are vital components in the batteries, the screens, and other parts. Today I would like to explain about rare earth metals.

* Quotation by a famous person

“Man is a slow, sloppy, and brilliant thinker; computers   
are fast, accurate, and stupid.” ― John Pfeiffer

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** According to John Pfeiffer, “Man is a slow, sloppy, and brilliant thinker; computers are fast, accurate, and stupid.” To this we might add that computers are very, very common—in our homes, in our schools, in our workplaces, in our cars, in our devices. In short, computers are everywhere! Computers, of course, must be constructed, and in every computer and in every technological device, we use something called *rare earth metals*. These are vital components in the batteries, the screens, and other parts. Today I would like to explain about rare earth metals.

* Question

**Good morning. My name is James Elwood, and I’m a professor at Aoyama Gakuin University.** Do you have a cell phone? How about a computer? A hybrid car? If you do, then you benefit from the use of rare earth metals, which are found in all of these devices. Today I would like to explain about rare earth metals.

Avoid vague expressions.

“We should think about global warming.”

* People should first actively learn about global warming and   
  then take steps in their private lives to combat it.

“It can be said that …” (By whom?)

Say it!!!

“It can be said that young people can’t use kanji correctly.”

* Young people can’t use kanji …

When concluding your presentation, a common device is to   
*bookend* something.



Topic: rare earth metals

**Introduction**: According to John Pfeiffer, “Man is a slow, sloppy, and brilliant thinker; computers are fast, accurate, and stupid.” To this we might add that computers are very, very common—in our homes, in our schools, in our workplaces, in our cars, in our devices. In short, computers are everywhere!

Computers, of course, must be constructed, and in every computer and in every technological device, we use something called *rare earth metals*. These are …

Body: three main points …

**Conclusion**: While it is likely true that man is, as John Pfeiffer  
noted, a slow, sloppy, yet brilliant thinker and computers are   
quite the opposite, the stupid computer has revolutionized   
our world. We owe this fact, of course, to those rare earth  
metals that …

Topic: rare earth metals

**Introduction**: 102.87 million. Over 100 million. 100 million users. Of cell   
phones. Over 100 million cell phone users in Japan.

Body: three main points …

**Conclusion**: Again we come to that singular number. 102.87   
million. Cell phones. In Japan. [*repeat main points*]

How long ago was I born? Say, 20 years and counting, but   
let’s look at that another way. 20 years would be 7300   
days old.

20,000. 20,000 days ago I was born.