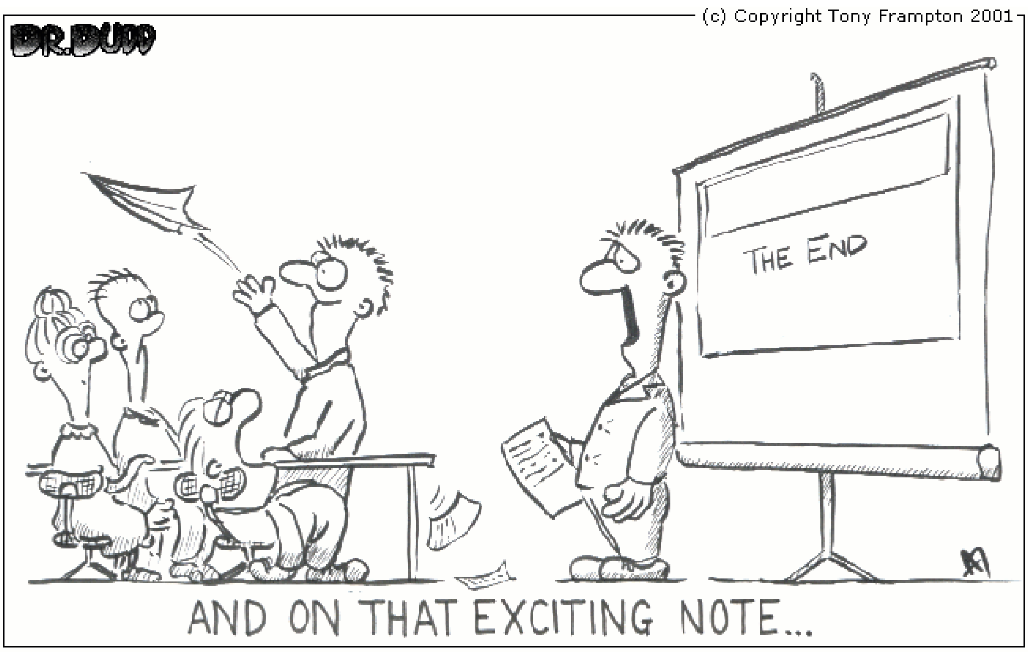
4. PRESENTATIONS: SIGNALLING DEVICES, ENDING

1. Speaking. Discuss these points in small groups.

a) When giving a presentation, what do you need to prepare? How do you choose the right topic? What should you keep in mind when giving a presentation?
b) When you are speaking, do you prefer to read a text, speak from your notes or without a paper? What do you think is the best? Why?
c) Think of a presentation from the point of view of its setting and purpose. What is the difference between academic presentations (at a congress, seminar, conference) and business presentations? How does it influence the speaker´s attitude, appearance and language?
c) Give examples of different kinds of audience. How does the audience influence the presentation? What is useful to know about the audience?
b) As a recipient do you prefer to read a paper or listen to a speaker? Why?
c) What happens you if you get lost when reading a text or when listening to a presentation?
d) What can help the audience follow the presentation?



SIGNALLING DEVICES (PHRASES TYPICAL FOR PRESENTATIONS)

2. Match the headings and the groups of phrases. A heading for group (A) has been given.

1) Giving examples
2) Showing a route, explaining that something will come later
3) Summarizing
4) Going to more detail
5) Sequencing, enumerating
6) Reaching the end of a point
7) Starting a new point

A. Linking to the main body
Let me start by …
I'll start by…
First of all, I'll...
Starting with…
I'd like to begin with

B. ……………………………….
Right, I've told you about…
We've looked at …
That's all I have to say about…
So much for….

C. . …………………………………
Let me turn now to…
Let's move onto…
Turning to…
I'd like now to…
Let's look now at…

D. . …………………………………
Where does that take us ?
Let's look at this in more detail.
Translated into real terms…
What does that mean for us ?

E ………………………………
For example…
A good example of this is….
To illustrate this point …

F. ………………………………
I'll deal with this later, if I may, but for now
I'll come back to this question later in my talk
I won't comment on this now…
We'll be examining this question in more detail later on.

G. ………………………………
Let's recap, shall we ?
I'd like to sum up now…
Let me summarise briefly what I've said.
Let me remind you, finally, of some of the points I've made.
If I can just sum up the main points…

H. ………………………………..
Firstly… secondly…..thirdly…lastly
First…
after that…finally
To start with… later…. to finish up

3. Listen to the recording on 'Photosynthesis'.

a) Note down the main points.

b) Focus on signalling devices and note them down.

c) Compare your notes with the transcript.

Well, good afternoon, ladies and gentlemen. Let me introduce myself. My name's Colin Robertson. I'm a science consultant and I take care of the chemistry section at the Museum of Nature in London.

The topic of my talk today is photosynthesis. I've divided my presentation into three parts. First, I'll define the term, then I'll mention the equation for photosynthesis and finally we'll look in more detail at two stages of photosynthesis – the light reaction and the dark reaction. I'd be glad to answer any questions at the end of my talk.

Let me start by defining the term. Photosynthesis is a process by which chlorophyl-containing organisms, green plants - algae, and some bacteria - capture energy in the form of light and convert it to chemical energy.

Well, this brings me to the second point, which is the equation for photosynthesis.
A quite generalized, unbalanced chemical equation is

$$CO2 + H2A \xrightarrow{\text{light energy}} (CH2) + H2O$$

Let's look at this in more detail.
The formula H2A represents a compound that can be oxidized, that is, from which electrons can be removed. CO2 is carbon dioxide, and CH2 is a generalization for the hydrocarbon fragments incorporated by the growing organism. In the majority of photosynthetic organisms H2A is water, in some photosynthetic bacteria, however, H2A is hydrogen sulfide (H2S).
So much for the equation for photosynthesis. I'll come back to it later.

Let me turn now to the stages of photosynthesis. Photosynthesis consists of two stages: a series of light-dependent reactions and a series of temperature-dependent reactions.
The first step in the light reaction is the absorption of light by pigments of which chlorophyll is the most important. It captures light energy in the violet and red portions of the spectrum and transforms it into chemical energy stored in teh ATP and NADPH2.
Right.

Let's move onto the second stage. In the dark reaction the energy stored in the ATP and NADPH2 is used to reduce carbon dioxide to organic carbon to provide the basis for glucose. This is accomplished through a series of reactions known as the Calvin cycle.
The complete, balanced equation for photosynthesis in which water serves as the electron donor is

$$6\ CO2 + 12\ H2O \rightarrow C6H12O6 + 6\ O2 + 6\ H2O$$

Well, that's all I have to say about the topic. Let me summarize briefly what I've said.

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ENDING

4. What should you do to make an effective ending to the presentation?

5. Watch version 1 and 2 of the video[1] from 23:28 – 25:23 – Joanna´ ending of a presentation. Does she include any signalling devices? If so, note them down.

	Version 1:	Version 2
A signal to end / summary		
Sequencing, enumerating		
Suggestion / conclusion		
Invitation for questions		

Version 1

Yes, ves ... um ... production has actually dropped a little over the last few years, although profits have actually held up ... um ... and that's something we need to discuss... I mean, can we actually continue as a small independent brewery?

Anyway, that's about it, so ... um ... that is the main question today... um.. so ... I don't know whether that helps at all, but it's all I can think of really, so I, I'll leave... I'll leave... I think that's that... so... I'll leave it there, OK?

Version 2

So, before we move on to discuss these matters, let me just summarize the main issues as I see them. Firstly, on the product side, there's the question of diversity of product range. Secondly, on the marketing front, we need to review our distribution network. And thirdly, on the personnel side, we need to look at the sort of employer we are, and want to become. So, I suggest we look at things in that order: product, distribution, and people. Hopefully this will help us to agree on a clear way forward. Right, before we start, are there any questions you'd like to ask.

6. Make full sentences by matching the correct halves.

a Before we come to the end.	1 there are four major features
b I'd be glad to answer	2 we start the discussion now.
c To summarize,	3 by quoting a well-known saying.
d We can conclude	4 we should reduce our costs.
e In my opinion,	5 any questions now.
f I'd like to suggest	6 I'd like to thank you for your participation.

7. Study your text[2] A/B and present the information to student B/A using signalling devices to help your partner follow the talk. B/A listens carefully, takes notes and in the end, summarizes what A/B has said (include a summary, conclusion, closing formalities).

TEXT A:

Haber-Bosch process (From Wikipedia, the free encyclopedia)

The **Haber process**, also called the **Haber–Bosch process**, is the reaction of nitrogen and hydrogen, over an iron substrate, to produce ammonia. The Haber process is important because ammonia is difficult to produce on an industrial scale. Even though 78.1% of the air we breathe is nitrogen, the gas is relatively unreactive because nitrogen molecules are held together by strong triple bonds. It was not until the early 20th century that this method was developed to to create ammonia, which can then be oxidized to make the nitrates and nitrites essential for the production of nitrate fertilizer and munitions.

Description

In the Haber Process, nitrogen (N_2) and hydrogen (H_2) gases are reacted over an iron catalyst (Fe^{3+}) in which aluminium oxide (Al_2O_3) and potassium oxide (K_2O) are used as promoters. The reaction is carried out under conditions of 150-250 atmospheres (atm), 450-500 °C; resulting in a yield of 10-20%:

$$N_2(g) + 3H_2(g) \rightarrow 2NH_3(g)$$

ΔH^o, the standard heat of reaction or standard enthalpy change, is -92.4 kilojoules per mole.

These conditions are chosen because they increase the reaction rate, but, since the reaction is exothermic, they decrease the yield.

History

The process was first patented by Fritz Haber. In 1910 Carl Bosch, while working for chemical company BASF, successfully commercialized the process and secured further patents. Haber and Bosch were later awarded Nobel prizes. Ammonia was first manufactured using the Haber process on an industrial scale in Germany during World War I to meet the high demand for ammonium nitrate (for use in explosives) at a time when supply of Chile saltpetre from Chile could not be guaranteed because this industry was then almost 100% in British hands. It has been suggested that without this process, Germany would almost certainly have run out of explosives by 1916, thereby ending the war.

The process

The bulk of the chemical technology consists in getting the hydrogen from methane or natural gas using heterogeneous catalysis and then reacting it with the atmospheric nitrogen.

Economic and environmental aspects

The Haber process now produces 100 million tons of nitrogen fertilizer per year, mostly in the form of anhydrous ammonia, ammonium nitrate, and urea. 0.75% of the world's annual energy supply is consumed in the Haber process (3.35% of world natural gas production is used for ammonia production, and natural gas represents 22% of world energy production. That fertilizer is responsible for sustaining one-third of the Earth's population, as well as various deleterious environmental consequences.

TEXT B:

Electrolysis (From Wikipedia, the free encyclopedia)

In chemistry and manufacturing, **electrolysis** is a method of separating chemically bonded elements and compounds by passing an electric current through them.

Description of the process

Electrolysis involves the passage of an electric current through, in general, an ionic substance that is dissolved in an aqueous solution resulting in chemical reactions at the electrodes. The negative electrode is called the cathode, and the positive electrode is the anode.

An ionic compound is dissolved with a solvent, or melted by heat, so that its ions are available in the liquid. An electrical current is applied between a pair of inert electrodes immersed in the liquid. Each electrode attracts ions that are of the opposite charge. Therefore, positively-charged ions (called cations) move towards the cathode, whereas negatively-charged ions (termed anions) move toward the anode. The energy required to separate the ions, and cause them to gather at the electrodes, is provided by an electrical power supply. Electrons are absorbed or released by the ions, forming a collection of the desired element or compound.

Oxidation of anions can take place at the anode, and the reduction of cations at the cathode. For example, it is possible to oxidize cations at the anode:

$$Fe^{2+}_{aq} \longrightarrow Fe^{3+}_{aq} + e^{-}.$$

It is also possible to reduce anions at the cathode:

$$Fe(CN)^{3-}_{6} + e^{-} \longrightarrow Fe(CN)^{4-}_{6}.$$

Electrolysis of water

One important use of electrolysis of water is to produce hydrogen.

$2H_2O_{(l)} \rightarrow 2H_{2(g)} + O_{2(g)}$

Technologies related to electrolysis

The following technologies are related to electrolysis:

- Electrochemical cells, including the hydrogen fuel cell, use the reverse of this process.
- Gel electrophoresis is an electrolysis wherein the solvent is a gel. It is used to separate substances, such as DNA strands, based on their electrical charge.

Industrial uses

Industrial uses of electrolysis include:

- Production of aluminium, lithium, sodium, potassium
- Production of hydrogen for hydrogen cars and fuel cells; high-temperature electrolysis is also used for this
- Production of chlorine and sodium hydroxide
- Production of sodium and potassium chlorate
- Production of perfluorinated organic compounds such as trifluoroacetic acid
  Electrolysis has many other uses.

8. MODAL VERBS (ZPŮSOBOVÁ SLOVESA)[3]

	Present (Přítomný čas)	Past (Minulý čas)	Future (Budoucí čas)
CAN	***I can read*** *mohu číst* *umím číst*	***could = was able to read***	***will be able to read***
	zápor		
	cannot = can't *nemohu, neumím*	***could not = couldn't = was not = wasn't able to read*** ***can't have been=*** *určitě ne*	***will not = /won't/ be able to read***
MUST	***He must be there*** *=musí tam být (tj. je donucen)* *musí tam být (tj. jistě tam je)*	***had to be*** ***must have been*** *=určitě tam byl*	***will have to be***
	zápor		
	need not= needn't ***do not have to*** ***do not need to*** *nemuset, nepotřebovat*	***did not have to be*** ***did not need to be***	***will not = /won't / have to be***
MAY	***may do it*** *smím to udělat* *možná, že to udělám*	***I was allowed to do it*** ***may have done*** *možná to udělal*	***I will be allowed to do it***
	zápor		
	must not = mustn't ***may not*** *nesmím, možná ne*	***was not allowed to do it*** ***may not have done*** *možná to neudělal*	***will not (won't) be allowed to do i*** ***may not do it***

NEED ve funkci slovesa způsobového vyjadřuje nutnost: ***Need you go there?*** *Musíš tam chodit? Je nutné, abys tam šel?* Pomocí **need** se tvoří zápor ke slovesu **must**. ***You needn't go there.*** Nemusíš tam jít. Zápor v minulém čase se tvoří dvěma způsoby:

1. ***I didn't need to go there. Nemusel jsem tam chodit (a nešel jsem tam).***
2. ***I needn't have gone there. Nemusel jsem tam chodit (ale šel jsem tam - zbytečně)***

POZOR

Sloveso ***need*** se vyskytuje také jako sloveso pravidelné ve významu potřebovat. Tehdy tvoří otázku a zápor pomocí ***do, does*** a ***did***.

I need not go there.	***I don't need to go there.***
Nemusím tam chodit.	*Nepotřebuji tam jít.*

EXERCISES

a) Choose the right answer.

1. Soldiers...........disobey a superior officer.

   A. must/have to   B. must not   C. don't have to

2. To stay alive, people.........breathe oxygen.

   A. must/have to   B. must not   C. don't have to

3. You.......finish your work on this project before you go on holiday. You'll probably lose your job if you don't.

   A. must/have to   B. must not   C. don't have to

4. Their room is a mess, but they :,.......clean it before they go out tonight. They can do it in the morning.

   A. must/have to   B. must not   C. don't have to

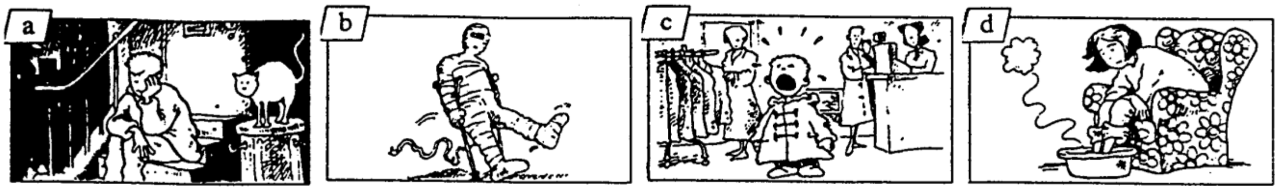
5. To be a successful manager, you............show a great deal of courage.

   A. must/have to   B. must not   C. don't have to

b) Fill in the gaps with needn't / mustn't.

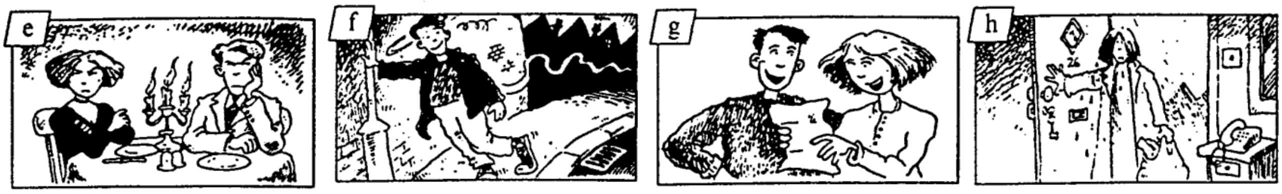
1. The students .... do the homework today. There's no school tomorrow.
2. The doctor says I.....take that medicine if I don't feel well after it.
3. She.....eat so much, she is getting fat.
4. In Britain cars.....go on the right.
5. Tell him he.....buy the tickets. I'll buy them on the way to town.
6. must have …, might have …, may have …

c) Look at the scenes in the pictures and write what *could / must / might / may have happened*. Write one or more sentences for each scene.



He must have locked himself out.

He might have lost his key.



Sources: [1] Comfort, Jeremy and Utley, Derek: *Effective Presentations.* OUP 2000

[2] **From Wikipedia, the free encyclopedia.**

[3] **Aapted from** Julišová, Marta. *What are you good at?* Praha: Global, 2003.

Lesson adapted from Hana Němcová and Milada Pavlovová.