

LECTURE NOTES

BAHASA INGGRIS (FIS-230)

Denny Darmawan, M.Sc.
[\(darmawan@uny.ac.id\)](mailto:darmawan@uny.ac.id)

**PROGRAM STUDI FISIKA
FAKULTAS MATEMATIKA & ILMU PENGETAHUAN ALAM
UNIVERSITAS NEGERI YOGYAKARTA**

A/AN and THE

Study these examples:

- I had **a** sandwich and **an** apple for lunch. **The** sandwich wasn't very good but **the** apple was nice.
- **A** man and **a** woman were sitting opposite me. **The** man was American but I think **the** woman was British.
- When we were on holiday, we stayed at **a** hotel. Sometimes we had our evening meal at **the** hotel and sometimes we went to **a** restaurant.

We use **the** when we are thinking of one particular thing.

Compare **a/an** and **the**:

- Tom sat down on **a** chair. (*perhaps one of many chairs in the room*)
- but* Tom sat down on **the** chair **nearest the door**. (*a particular chair*)
- Ann is looking for **a** job. (*not a particular job*)
- but* Did Ann get **the** job **she applied for**? (*a particular job*)
- Have you got **a** car? (*not a particular car*)
- but* I cleaned **the** car yesterday. (= *my car*)

We use **the** when it is clear in the situation which thing or person we mean. For example, in a room we talk about '**the** light/**the** floor/**the** ceiling/**the** door/**the** carpet' etc:

- Can you turn off **the** light, please? (= *the light in this room*)
- I took a taxi to **the** station. (= *the station in that town*)
- I'd like to speak to **the** manager, please. (= *the manager of this shop*)

In the same way, we say (go to) **the bank**, **the post office**:

- I must go to **the bank** to get some money and then I'm going to **the post office** to get some stamps. (*The speaker is usually thinking of a particular bank or post office.*)

Also: **the doctor**, **the dentist**:

- Carol isn't very well. She's gone to **the doctor**. (= her usual doctor)
- I hate going to **the dentist**.

Compare **a**:

- Is there **a bank** near here?
- My sister is **a dentist**.

Don't forget **the**:

- Susan works in **the city centre**. (*not 'in city centre'*)
- My brother is in **the army**. (*not 'in army'*)

THE

We use **the...** when there is only one of something:

- What is **the** longest river in **the** world? (*there is only one longest river*)
- **The** earth goes round **the** sun and **the** moon goes round **the** earth.
- I'm going away at **the** end of this month.

Don't forget **the**:

- Paris is **the** capital of France. (*not 'Paris is capital of'*)

But we use **a/an** to say what kind of thing something is:

- **The** sun is **a** star. (= *one of many stars*)
- **The** hotel we stayed at was **a** very nice hotel.

We say: **the sky the sea the ground the country the environment**:

- We look up at all the stars in **the sky**. (*not 'in sky'*)
- Would you rather live in a town or in **the country**?
- We must do more to protect **the environment**.

Note that we say **space** (without 'the') when we mean 'space in the universe':

- There are millions of stars in **space**. (*not 'in the space'*)
- but* I try to park my car but **the space** was too small.

We use **the** before **same** (**the same**):

- Your hat is **the same** colour as mine. (*not 'is same colour'*)
- These two photographs are **the same** (*not 'are same'*)

We usually say **the radio**, but **television** (without 'the'):

- I often listen to **the radio**.
- We watched the news on **television**.

but Can you turn off **the television**, please? (= *the television set*)

Breakfast lunch dinner

We do not normally use **the** with the name of meals (**breakfast, lunch, etc.**):

- What did you have for **breakfast**?
- We had **lunch** in a very nice restaurant.
- What time is **dinner**?

But we use **a** if there is an adjective before **breakfast, lunch, etc.**

- We had **a** very **nice lunch**. (*not 'we had very nice lunch'*)

Platform 5 Room 126 etc.

We do not use **the** before noun+number. We say:

- Our train leaves from **Platform 5**. (*not 'the Platform 5'*)
- (*in a shop*) Have you got these shoes in **size 40**? (*not 'the size 40'*)

In the same way, we say: **Room 126** (in a hotel) **page 29** (of a book).

NAME WITH AND WITHOUT 'THE'

We do not use '**the**' with names of people. In the same way, we do not normally use '**the**' with names of places. For example:

continents Africa (not 'the Africa'), Europe, Asia
countries France (not 'the France'), Japan, Switzerland
regions Central Java, North America
islands Bermuda, Belitung
cities/towns Jakarta, Jogja, Kuala Lumpur

But we use '**the**' in names with 'Republic', 'Kingdom', 'States':
the United **States** of America (the USA), **the** United **Kingdom** (the UK), **The** Dominican **Republic**

Compare:

- We visited **Canada** and **the United States**.

We do not use '**the**' with the names of mounts and lakes:

Mount Everest, **Mount** Merapi, **Lake** Toba

- They live near **the lake**. *but* They live near **Lake** Toba

We use '**the**' with the names of oceans, seas, rivers and canals:
the Atlantic (Ocean), **the** Indian Ocean, **the** China Sea, **the** Red Sea, **the** (River) Amazon, **the** Ciliwung, **the** Suez Canal.

We use '**the**' with plural names of people and places:

people **the** Taylors (=the Taylor Family), **the** Johnsons
countries **the** Netherlands, **the** Philippines, **the** United States
groups of islands

the Canaries/**the** Canary Islands, **the** Bahamas
mountain ranges
the Andes, **the** Alps

- The highest mountain in **the Alps** is **Mont Blanc** (*not* 'the Mont Blanc')

North/Northern:

We say: **the east** of Java but **eastern** Java (*without* 'the')

Compare:

Lampung is in **southern** Sumatera but Aceh is in **the north**.

You can also use **north/south** etc.+ a place name (*without* 'the')
West Java, **North** Sumatera

Put in **a/an** or **the** in these sentences where necessary.

1. Would you like apple? an apple
2. How often do you go to dentist?
3. Could you close door, please?
4. I'm sorry. I didn't mean to do that. It was mistake.
5. Excuse me, where is bus station, please?
6. I've got problem. Can you help me?
7. I'm just going to post office. I won't be long.
8. There were no chairs, so we had to sit on floor.
9. Have you finished with book I lent you?
10. My sister has just got job in bank in Manchester.
11. We live in small flat near city centre.
12. There's small supermarket at end of street I live in.

Put in **the** or **a/an** where necessary. If the sentence is already correct, put 'RIGHT'

1. Sun is star. The sun is a star.
2. Tim lives in small village in country.
3. Moon goes round earth every 27 days.
4. What is highest mountain in world.
5. I'm fed up with doing same thing every day.
6. It was very hot day. It was hottest day of year.
7. I don't usually have lunch but I always eat good breakfast.
8. If you live in foreign country, you should try and learn language.
9. We missed our train because we were waiting on wrong platform.

Correct these sentences where necessary. Put 'RIGHT' if it is already correct.

1. Everest was first climbed in 1953. RIGHT
2. Milan is in north of Italy. Milan is in the north of ...
3. Africa is much larger than Europe.
4. Last year I visited Mexico and United States.
5. South of England is warmer than north.
6. Portugal is in western Europe.
7. France and Britain are separated by Channel.
8. Jim has travelled a lot in Middle East.
9. Chicago is on Lake Michigan.
10. The highest mountain in Africa is Kilimanjaro.
11. Next year we are going to skiing in Swiss Alps.
12. United Kingdom consists of Great Britain and Northern Ireland
13. Seychelles are a group of islands in Indian Ocean.
14. River Volga flows into Caspian Sea.

AT/ON/IN (time)

We use:

at for the time of day:

at 5 o'clock at 11.45 at midnight at lunchtime at sunset

on for days and dates:

on Friday on 12 May 1991 on holidays on my birthday

in for longer periods (for example, months/years/seasons):

in October in 1986s in the 18th century in the future

We use at in these expressions:

at night	I don't like going out at night
at the weekend / at weekends	Will you be here at the weekend
at the moment / at present	Mr Ben is busy at the moment
at the same time	Liz and I arrived at the same time

We say :

in the morning in the afternoon in the evening

but :

on Friday morning on Sunday evening on Monday afternoon

We do not use at/on/in before last/next/this/every :

- I'll see you **next Friday**
- They got married **last June**

In a few minutes / in six months :

- The train will be leaving **in a few minutes.**
- Jack has gone away. He'll be back **in a week.**
- She'll be here **in a moment.**

In/at/on (place) (1)

In : Study these examples:

- There's no one *in the room* / *in the building* / *in the garden*.
- What have you got *in your hand* / *in your mouth*?
- When we were in Italy, we spent a few days *in Venice*.
- I have a friend who lives *in a small village in the mountains*.
- Look at those people swimming *in the pool* / *in the sea* / *in the river*.

At : Study these examples:

- Who is that man standing *at the bus stop* / *at the door* / *at the window*?
- Turn left *at the traffic lights* / *at the church* / *at the roundabout*.
- Write your name *at the top* / *at the bottom* of the page.
- Angela's house is the white one *at the end* of the street.
- When you leave the hotel, please leave your key *at reception*.

On : Study these examples:

- I sat *on the floor* / *on the ground* / *on the grass* / *on a chair* / *on the beach*.
- There's a dirty mark *on the wall* / *on the ceiling* / *on your nose* / *on your shirt*.
- Have you seen the notice *on the notice board* / *on the door*?
- You'll find details of TV programmes *on page seven* (of the newspaper).

Compare :

- There were a lot of people *in the shop*. It was very crowded.
but Go along this road, then turn left *at the shop*.
- There is some water *in the bottle*.
but There is a label *on the bottle*.
- There is somebody *at the door*. Shall I go and see who it is?
but There is a notice *on the door*. It says 'Do not disturb'.

In/at/on (place) (2)

In : We say that somebody/something is :

in a line / in a row / in a queue / in a street
in a photograph / in a picture / in a mirror
in the sky / in the world
in a book / in a newspaper / in a letter (*but* 'on a page')

- **When I go to the cinema, I prefer to sit in the front row.**
- **I live in King Street. Sarah lives in Queen Street.**
- **Who is the woman in that photograph? (not 'on that photograph')**
- **Have you seen this article in the newspaper?**
- **It was a lovely day. There wasn't a cloud in the sky.**

On : We say that somebody/something is:

on the left / on the right
on the ground floor / on the first floor / on the second floor
on a map / on the menu / on a list
on a farm

- **In Britain we drive on the left.**
- **Our flat is on the second floor of the building.**
- **Here's a shopping list. Don't buy anything that's not on the list.**
- **Have you ever worked on a farm?**

We say that a place is on a river / on a road / on the coast:

- **London is on the river of Thames.**
- **Portsmouth is on the south coast of England.**

We say that a place is on the way to another place:

- **We stopped at a small village on the way to London.**

Put in *at*, *on* or *in*.

- 1. Mozart was born in Salzburg 1756.**
- 2. I haven't seen Kate for a few days. I last saw her Tuesday.**
- 3. The price of electricity is going up October.**
- 4. I've been invited to a wedding 14 February.**
- 5. Hurry up! We've got to go five minutes.**
- 6. I'm busy just now but I'll be with you a moment.**
- 7. Jenny's brother is an engineer but he's out of work ... the moment.**
- 8. There are usually a lot of parties New Year's Eve.**
- 9. I hope the weather will be nice the weekend.**
- 10..... Saturday night I went to bed 11 o'clock.**
- 11. I don't like travelling night.**
- 12. We travelled overnight to Paris and arrived 5 o'clock morning.**
- 13. The course begins 7 January and ends sometime April.**
- 14. It was quite a short book and easy to read. I read it a day.**
- 15. I might not be at home Tuesday morning but I'll probably be there the afternoon.**
- 16. My car is being repaired at the garage. It will be ready two hours.**
- 17. The telephone and the doorbell rang the same time.**
- 18. Mary and Henry always go out for a meal their wedding anniversary.**
- 19. Henry is 63. He'll be retiring from his job two years' time.**

Complete the sentences with in, at or on.

- 1. Write your name the top of the page.**
- 2. I like that picture hanging the wall the kitchen.**
- 3. There was an accident the crossroads this morning.**
- 4. I wasn't sure whether I had come to the right office.
There was no name the door.**
- 5. the end of the street there is a path leading to the river.**
- 6. You'll find the sports results the back of page of the newspaper.**
- 7. I wouldn't like an office job. I couldn't spend the whole day sitting a desk.**
- 8. My brother lives a small village the south-west of England.**
- 9. The man the police are looking for has a scarhis right cheek.**
- 10.The headquarters of the company are Milan.**
- 11.Nicola was wearing a silver ring her little finger.**

Complete the sentences with *in, at or on*.

- 1. It can be dangerous when children play the street.**
- 2. If you walk to the end of the street, you'll see a small shop the corner.**
- 3. Is Tom this photograph? I can't find him.**
- 4. My office is the first floor. It's the left as you come out of the lift.**
- 5. We normally use the front entrance but there's another entrance the back.**
- 6. I love to look up at the stars the sky at night.**
- 7. 'Where shall we sit?' 'Over there, the corner.'**
- 8. When I'm a passenger in a car, I prefer to sit the front.**
- 9. It's a very small village. You'll probably won't find it your map**
- 10.Paris is the river Seine.**

UJIAN AKHIR SEMESTER I 2007/2008

Mata Kuliah : Bahasa Inggris
Kelas : Pendidikan Fisika (R/NR)
Dosen : Denny Darmawan, M.Sc. /Joko Sudomo, M.A.
Hari/Tanggal : Senin, 21 Januari 2008
Waktu : 100 menit
Sifat : Close Book/Dictionary

I. Reading

Question 1-10 are based on the following reading passage

Adult Intelligence

Over 90 years ago, Binet and Simon delineated two different methods of assessing intelligence. These were the psychological method (which concentrates mostly on intellectual processes, such as memory and abstract reasoning) and the pedagogical method (which concentrates on assessing what an individual knows). The main concern of Binet and Simon was to predict elementary school performance independently from the social and economic background of the individual student. As a result, they settled on the psychological method, and they spawned an intelligence assessment paradigm which has been substantially unchanged from the original tests.

With few exceptions, the development of adult intelligence assessment instruments proceeded along the same lines of the Binet-Simon tests. Nevertheless, the difficulty of items was increased for older examinees. Thus, extant adult intelligence tests were created as little more than upward extensions of the original Binet-Simon scales. The Binet-Simon test are quite effective in predicting school success in both primary and secondary educational environments. However, they have been found to be much less predictive of success in post-secondary academic and occupational domains. Such a discrepancy provokes fundamental questions about intelligence. One highly debated question asks whether college success is actually dependent on currently used forms of measured intelligence, or if present measures of intelligence are inadequately sampling the wider domain of adult intellect. One possible answer to this question lies in questioning the preference of the psychological method over the pedagogical method for assessing adult intellect. Recent research across the fields of education, cognitive science, and adult development suggests that much of adult intellect is indeed not adequately sampled by extant intelligence measures and might be better assessed through the pedagogical method (Ackerman, 1996; Gregory, 1994)

Several lines of research have also converged on redefinition of adult intellect that places a greater emphasis on content (knowledge) over process. Substantial strides have been made in delineating knowledge aspects of intellectual performance which are divergent from traditional measures of intelligence (e.g., Wagner, 1987) and in demonstrating that adult performance is greatly influenced by prior topic and domain knowledge (e.g., Alexander et.al., 1994). Even some older testing literature seems to indicate that the knowledge measured by the Graduate Record Examination (GRE) is a comparable or better indicator of future graduate school success and post-graduate performance than traditional aptitude measures (Willingham, 1974).

When adult is presented with completely novel problem (e.g., memorizing a random set of numbers or letters), the basic intellectual processes are typically implicated in predicting which individuals will be successful in solving problems. The dilemma for adult intellectual assessment is that the adult is rarely presented with a completely novel problem in the real world of academic or occupational endeavors. Rather, the problems that an adult is asked to solve almost inevitably draw greatly on his/her accumulated knowledge and skills—one does not build a house by only memorizing physics formula. For an adult, intellect is better conceptualized by the tasks that the person can accomplish and the skills that he/she has developed rather than the number of digits that can be stored in working memory or the number of syllogistic reasoning items that can be correctly evaluated. Thus, the content of the intellect is at least as important as the processes of intellect in determining an adult's real world problem solving efficacy.

From the artificial intelligence field, researchers have discarded the idea of a useful General Problem Solver in favor of knowledge-based expert systems. This is because no amount of processing power can achieve real-world problem solving proficiency without an extensive set of domain-relevant knowledge structure. Gregory (1994) describes the difference between such concepts as “potential intelligence” (knowledge) and “kinetic intelligence” (process). Similarly, Schank and Bimbaum (1994) say that “what makes someone intelligent is what he/she knows.”

One line of relevant educational research is from the examination of expert-novice differences which indicates that the typical expert is found to mainly differ from the novice in terms of experience and the knowledge structures that are developed through that experience rather than in terms of intellectual processes (e.g., Glasser, 1991). Additional research from developmental and gerontological perspectives has also shown that various aspects of adult intellectual functioning are greatly determined by knowledge structures and less influenced by the kinds of process measures which have been shown to decline with age over adult development (e.g., Schooler, 1987; Willis & Tosti-Vasey, 1990).

By bringing together a variety of sources of research evidence, it is clear that our current methods of assessing adult intellect are insufficient. When we are confronted with situations in which the intellectual performance of adults must be predicted (e.g., continuing education or adult learning programs), we must begin to take account of what they know in addition to the traditional assessment of intellectual processes. Because adults are quite diverse in their knowledge structures (e.g., a physicist may know many different things than a carpenter), the challenge for educational assessment researchers in the future will be to develop batteries of tests that can be used to assess different sources of intellectual knowledge for different individuals. When adult knowledge structures are broadly examined with tests such as the Advanced Placement [AP] and the College Level Exam Program [CLEP], it may be possible to improve such things as the prediction of adult performance in specific educational endeavors, the placement of individuals, and adult educational counseling.

Vocabulary:

delineate = menggambarkan

assess = menilai, menaksir

spawn = menimbulkan, menelurkan

proceed = meneruskan

discrepancy = perbedaan

provoke = memicu, membangkitkan

converge = bertemu

stride = langkah

accomplish = menyelesaikan

efficacy = kemanjuran

endeavor = usaha

discard = membuang

proficiency = keahlian

novice = pemula

Question 1-7

Choose your answers from the box below, and write them in your Answer Sheet. There are more choices than sentences so you will not use them all.

1. The psychological method of intelligence assessment measures _____
2. Binet and Simon wanted to develop an assessment method that was not influenced by the child's _____
3. The Binet-Simon test have been successfully used to predict _____
4. The Binet-Simon tests are not good predictors of _____
5. According to _____, the pedagogical method is the best way to assess adult intelligence.
6. The pedagogical method is a better measure of adult intelligence because most problems that adults encounter in real life are not completely _____
7. In the area of artificial intelligence, _____ systems are preferred.

A tests	H thought processes
B psychological issues	I Ackerman and Gregory
C new	J social class
D potential for achievement in school	K recent research
E knowledge-based	L future job performance
F knowledge	M problem solving
G Binet and Simon	

Question 8-13

Do the following statements agree with the information in the passage? write

TRUE if the statement is true according to the passage.
FALSE if the statement contradicts the passage.
NOT GIVEN if there is no information about this in the passage.

8. The Binet-Simon tests have not changed significantly over the years
9. Success in elementary school is a predictor of success in college.
10. Research suggests that experts generally have more developed intellectual processes than novices.
11. Knowledge structures in adults decrease with age.
12. Better methods of measuring adult intelligence need to be developed.
13. The Advanced Placement and College Level Exam Program tests measure knowledge.

Question 14-20 are based on the following reading passage

Electricity and Magnetism

Besides mechanics, an equally important branch of physics is electricity and magnetism. Although some discoveries in the field of electricity go back to 600 B.C. and William Gilbert (1540-1603), it was not until the middle of eighteenth century that a real beginning of understanding was made by the work of Benyamin Franklin (1706-1790) and Charles Augustin de Coulomb (1738-1806). Much deeper understanding in the field of electricity was achieved through the work of Michael Faraday (1791-1867), James Clerk Maxwell (1831-1879), H.A. Lorentz (1853-1928), Heinrich Hertz (1857-1894), and Andre Marie Ampere (1775-1836), just to name a few scientists of the nineteenth century involved in such investigations.

The study of electrical interactions may be divided into *electrostatics*, which deals with charges at rest, and *electrodynamics*, which includes current electricity and electromagnetism. Current electricity is the study of charges in motion, while electromagnetism is the study of electric and magnetic fields produced by the moving charges. The two branches, that is electricity and magnetism, developed quite independently of each other until 1820, when Hans Christian Oersted (1777-1851) demonstrated a close connection between the two by showing that a current-carrying wire produces a magnetic field and hence deflects a magnetic compass needle when it is placed near the wire.

Most of the interactions between charges at rest can be expressed mathematically by means of Coulomb's law, but complete sets of relations giving the connection between charges at rest, charges in motion, electric fields, and magnetic fields were derived theoretically by Maxwell in 1865. His results are summarized in four equations called Maxwell's equations.

Fill in the blanks with the correct answers!

14. The real beginning of understanding in the field of electricity and magnetism started in _____
15. A phenomenon showing that a current-carrying wire produces a magnetic field and hence deflects a magnetic compass needle when it placed near the wire was demonstrated firstly by _____
16. The study of electrical interactions dealing with charges at rest is called _____
17. The study of electric and magnetic fields produced by the moving charges is called _____
18. The interactions between charges at rest can be expressed mathematically by means of _____
19. Theoretically, the complete sets of relations giving the connection between charges at rest, charges in motion, electric fields and magnetic fields were derived by _____
20. How many equation did Maxwell derive in order to explain the relations among charges at rest, charges in motion, electric fields and magnetic fields? _____

II. Structure

Question 21-30

Rewrite these sentences into the correct form.

21. Tom said that he is learning English now.
22. Freddy said that he will be here next week.
23. We were able to translate the letter into English without use a dictionary.
24. I was very tired after travel on a plane for 12 hours.
25. It took us a long time but we finally succeeded solving the problem.
26. The weather was extremely bad and this prevented us from go out.
27. I feel very full after that meal. I'm not used to eat so much.
28. I don't usually have lunch but I always eat good breakfast.
29. Have you finished with book I lent you?
30. Moon goes round earth every 27 days.