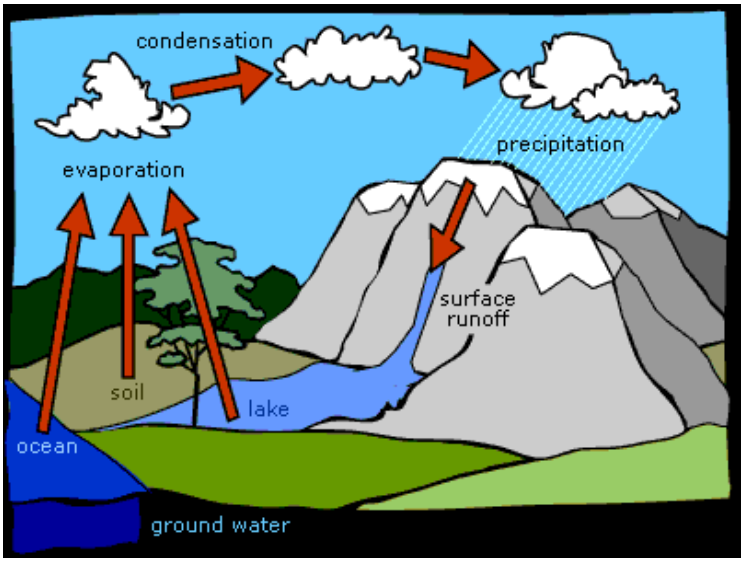
CYCLE/PROCESS DESCRIPTION
Revision and practise

FORMAL AND INFORMAL LANGUAGE, IRREGULAR AND FOREIGN PLURALS

Which word has got these four meanings?

a) a number of related events that happen again and again in the same order
b) a bicycle or motorcycle (especially British English)
c) the period of time needed for a machine to finish a process; a series of movements that a machine performs
d) a group of songs, poems etc. that are all about a particular important event

I. Describe the water cycle according to the figure below.



Useful vocabulary:

evaporate
water vapour
atmosphere
condense
tiny droplets
absorb

Note: Surface runoff is precipitation that reaches a surface stream instead of being absorbed into groundwater or evaporating.

Doppler Effect

When a vibrating source of waves is approaching an observer, the frequency observed is higher than the frequency emitted by the source. When the source is receding, the observed frequency is lower than that emitted. This is known as the Doppler effect, or Doppler´s principle, and is named after an Austrian physicist who lived in the first half of the 19th century. Figs 1 and 2 will help to explain this phenomenon.

Fig. 1

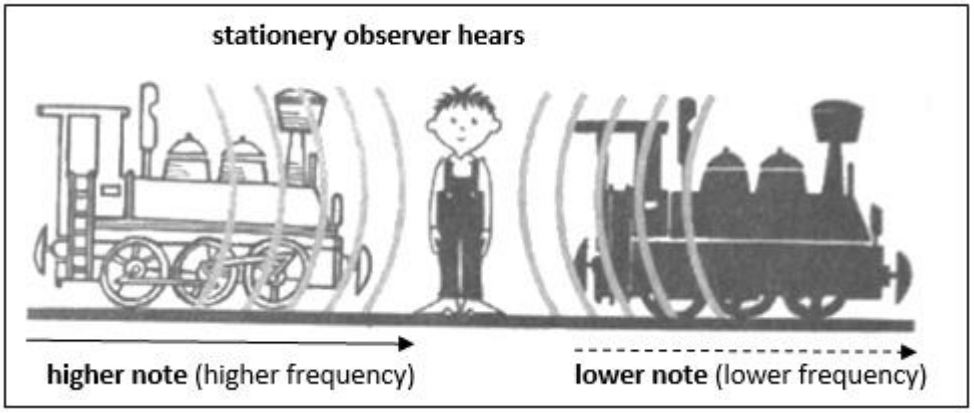
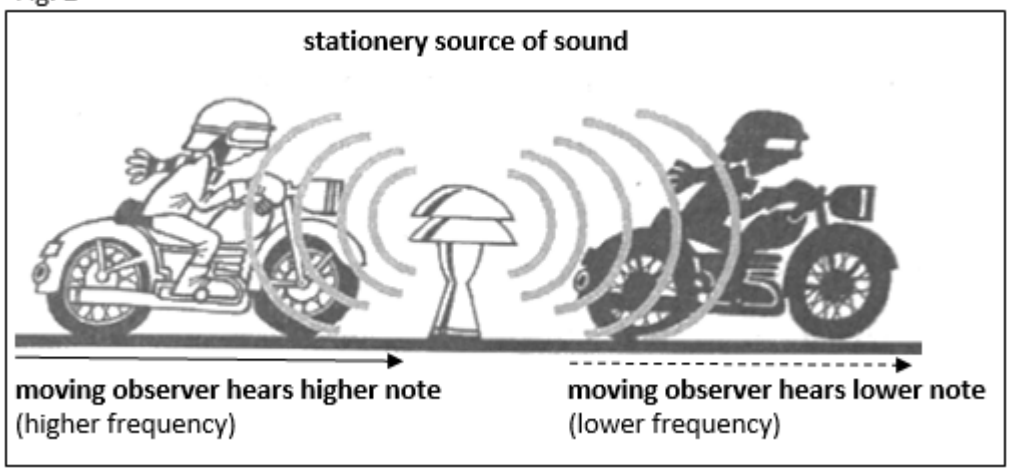
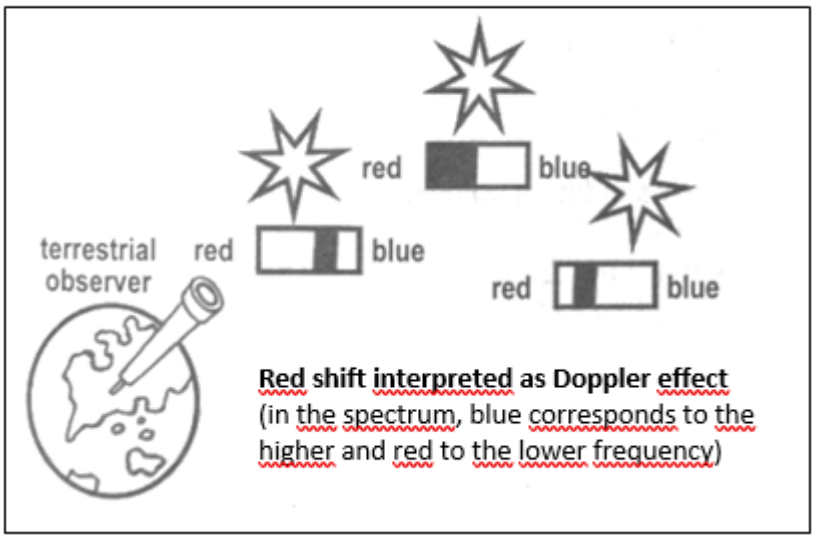


Fig. 2



The Doppler effect is widely used in astronomy for measuring the velocity at which distant stars are approaching or receding. These motions produce a shift in the position of lines in their spectra. A particular spectrum line corresponds to a certain definite light wavelength. If the star emitting the light is moving away from us, its light rays have a longer wavelength (lower frequency) by virtue of the Doppler´s principle, and this is manifested in a general shift of the spectrum lines rowards the end of the spectrum. This is known as the ´red shift´. Similarly, in the spectrum of a star moving towards us, the characteristic lines would show a ´blue shirft´, i.e. they would be displaced towards the blue end of the spectrum, corresponding to shorter wavelengths and higher frequencies. These phenomena are indicated in Fig. 3.

Fig. 3



A remarkable thing about the spectra of the spiral nebulae (the galaxies of stars far out in space beyond our own Milky Way system) is that they al display the red shift and must therefore – on the basis of Doppler´s principle – all be moving away from us. The theory of the ´expanding universe´ is based on this phenomenon. However, this interpretation of the red shift is disputed by some authorities.

TASKS

I. In the text above find Latin and Greek words with irregular plurals.

II. Find examples of

a) a time clause
b) a defining relative clause
c) a participle

III. Is more active or passive used in the text?

IV. Write a summary of the text. You should write between 50 and 60 words. Use your own words wherever possible.

FORMAL AND INFORMAL LANGUAGE

I. In the text above text find formal / everyday equivalents for the words in the table below.

everyday English	**formal English**
to move towards	
to move away from	
to send out (light, heat, sound etc.)	
to disagree	
to match (or to be the same or equal)	
far away	

II. Match the following technical terms with their colloquial equivalents:

1. Remove the cover.
2. The text deals with computers.
3. Insert a card.
4. The problem persists.
5. The card contains no data.
6. Ensure that the cover is closed.
7. Replace the card.
8. View the figure.
9. Replace the cover

A) There is no data on the card.
B) Take off the cover.
C) Make sure that the cover is shut.
D) Put back the cover.
E) Put in another card.
F) Put in a card.
G) We`ve still got the same problem.
H) Look at the picture.
I) The text is about comps.

III. Match formal and informal expressions:

1. do
2. so
3. often
4. find
5. very
6. get rid of
7. but
8. important
9. show

A) frequently
B) considerably
C) eliminate
D) conduct
E) discover
F) consequently
G) significant
H) illustrate
I) however

IRREGULAR AND FOREIGN PLURALS

I. How are regular plurals formed?

II. Remember irregular plurals you know. Can you find any patterns?

LATIN/GREEK PLURALS				
1	basis analysis axis hypothesis thesis	[beisis] [ə´næləsis] [æksis] [hai´poθisis] [θi:sis]	bases analyses axes hypotheses theses	[beisi:z] [ə´næləsi:z] [æksi:z] [hai´poθisi:z] [θi:si:z]
2	stimulus nucleus radius focus fungus octopus	[stimjuləs] [nju:kliəs] [reidiəs] [fəukəs] [faŋgəs] [oktəpəs]	stimuli nuclei radii foci fungi octopi / octopuses	[stimjulai / stimjuli:] [nju:kliai] [reidiai] [fəusai / fəusi: / fəukai / fəuki:] [faŋgai / fandžai / faŋgi:] [oktəpai]
3	formula alga	[fo:mjulə] [ælgə]	formulae / formulas algae	[fo:mjuli:] [ældži: / ælgi: / ældžai / ælgai]
4	criterion phenomenon bacterium curriuculum medium spectrum	[krai´tiəriən] [fə´nominən] [bæk´tiəriəm] [kə´rikjuləm] [mi:diəm] [spektrəm]	criteria phenomena bacteria curriucula media spectra	[krai´tiəriə] [fə´nominə] [bæk´tiəriə] [kə´rikjulə] [mi:diə] [spektrə]
5	vertex cortex	[və:teks] [ko:teks]	vertices / vertexes cortices	[və:tisi:z] [ko:tisi:z]

EXCERCISES

I. Choose the correct word for each of the following and give the plural form:
analysis, criterion, memorandum, phenomenon, formula, datum, crisis, medium

a) …….. are facts given.
b) …….. are observed events.
c) …….. are decisive moments.
d) …….. are channels of communication.
e) …….. are notes to assist the memory.
f) …….. are standards or means of judging.
g) …….. are general expressions for solving problems.
h) …….. are separations of things into their parts or components.

II. Fill in a suitable expression in the correct form (they may be used more than once).
***radius, formula, datum, criterion, focus, spectrum, crisis, vertex, nucleus, curriculum vitae*.**

a) The …….. of a circle is the length of a straight line drawn between the centre and the outside edge.

b) We had to learn many chemical …….. at school but I can only remember H_2O for water.

c) The …….. was/were collected by various researchers.

d) The Health Service should not be judged by financial …….. alone.

e) All the line segments extending from the centre of a circle are called ……..

f) In physics the point where waves of light or sound which are moving towards each other meet is called a ……..

g) A …….. is a short group of letters, numbers or other symbols which represent a scientific or mathematical rule.

h) The set of colours into which a beam of light can be separated is called a ……..

i) Now the …….. is being transferred from magnetic tape to hard disc.

j) The …….. I apply to (= by which I decide about) any problem is “What will make me happiest?”

k) I´ve passed several …….. during my illness, but the fever´s started to go down yesterday.

l) How many …….. are there in a triangle?

m) Nuclear fission means the dividing of a …….. and nuclear fusion means the joining of the two ……

n) My uncle´s …….. written before and after the Velvet revolution differ a lot.