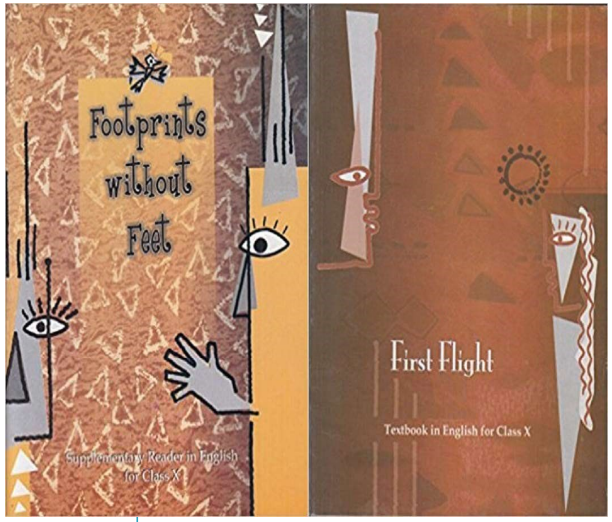
પુ•ના International School

Shree Swaminarayan Gurukul, Zundal

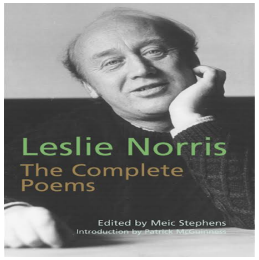
Reflections on Grade X Teaching methodology
For August 2019

1) English
2) Maths
3) Hindi
4) Social Studies
5) Science

Glance at lessons of August 2019



Lucio Rodrigues Forsyth



Leslie Norris

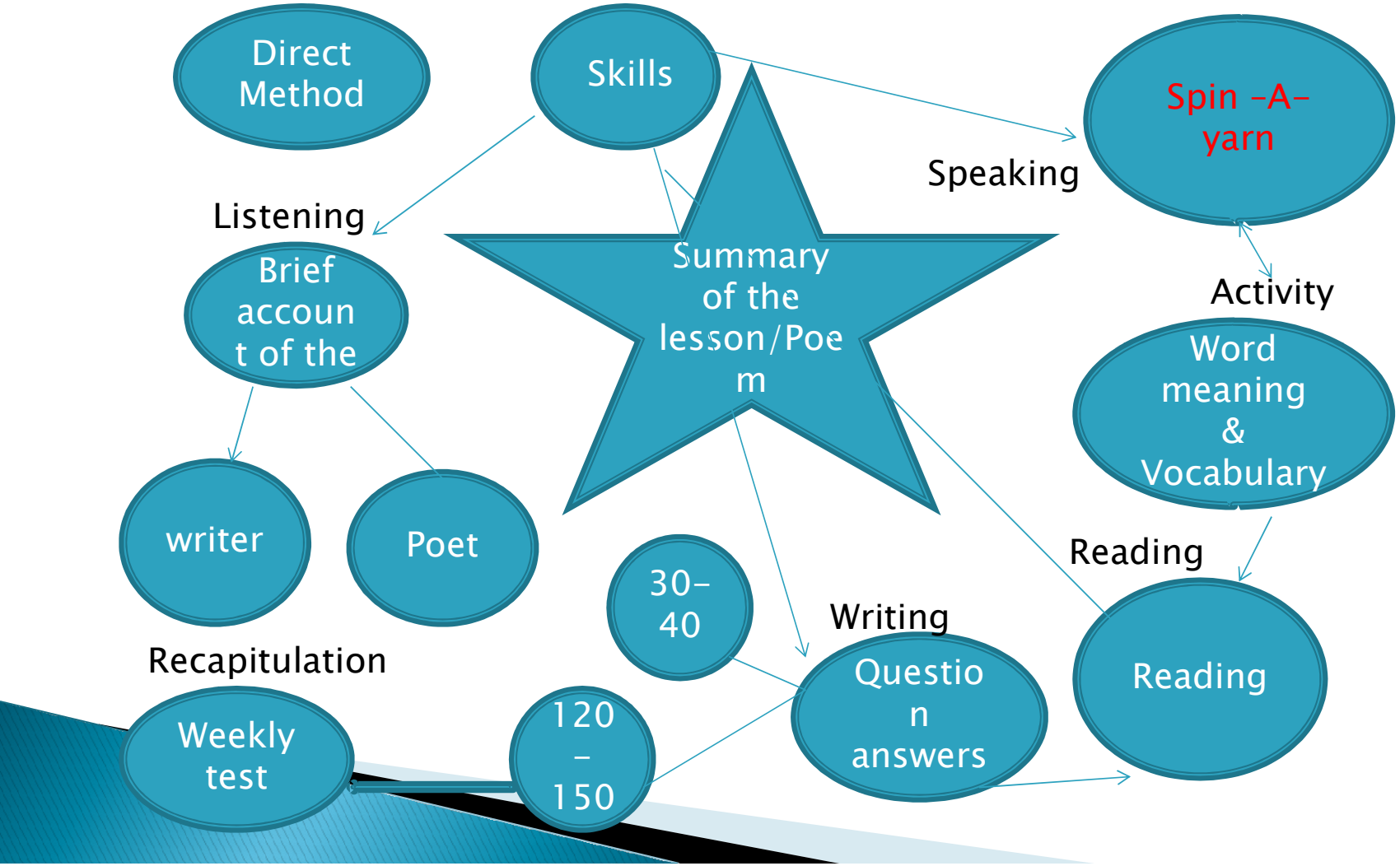
Robin Klein

Prose
1) A Tiger In the Zoo
2) A Baker from Goa
3) Coorg

Poetry
4) Amanda
5) Animals

Supplementary Reader
1) The midnight Visitor
2) A Question of Trust

Teaching Methodology



Teaching Aids

Poem AMENDA

Flow chart

A small Child

Nagging Parents

Unhappy with the interference

Dreams of Freedom

Wishes to lead life of mermaid

Emerald only inhabitant

Feels orphan

Leads a calm life Rapunzel

Flash Cards

Robin Klein

Sight words Pronunciation Sentences

Slouching
Mermaid
Hushed

Tranquil
Sulking
Patterns

Youtube Video

https://www.youtube.com/watch?v=h4RfAfpSaTg

PAPER STYLE

A	Section	Reading skills	20 Marks
B	Section	Writing with grammar	30 Marks
C	Section	Literature TB & Extended Reading	30 Marks

Section A Reading **20 Marks**

Q1 : A factual passage 300-350 words 8 Marks

Q2 :A discursive passage 350-400 words with 4 short answer type to test vocabulary. 12 marks

Section B Writing and Grammar **30 marks**

Q3 : Writing an article/ descriptive paragraph(person place event /diary entry) in about 100-150 words 8 Marks

Q4: Writing a short story based on given outline 10 Marks

Q5 : Gap filling with one or two words to test preposition, articles, conjunctions and tenses 4 Marls

Q6 : Editing / Omission 4 Marks

Q7 : Sentence reordering / sentence transformation in context 4 marks

Paper style

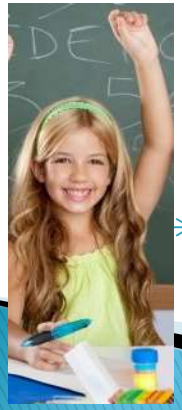
Section C **30 Marks**

Q8 : One out of two extract from prose/ poetry/ play . Four very short answer qs **4 Marks**

Q9: Five short answer type qs. From Beehive and Moments (3 from Beehive 2 from moments) 30-40 words. **10 Marks**

Q 10: One out of 2 long answer type qs from Beehive to assess creativity , imagination beyond the text book (100 – 150 words) **8 Marks**

Q11: One out of two long answer qs . From Moments on theme or plot interpretation beyond the text or character sketch **8 Marks**



MATHS PROBABILITY

The **outcomes** of an experiment are the ways it can happen.

6

10

52

The **event** is the particular outcome we are looking for.

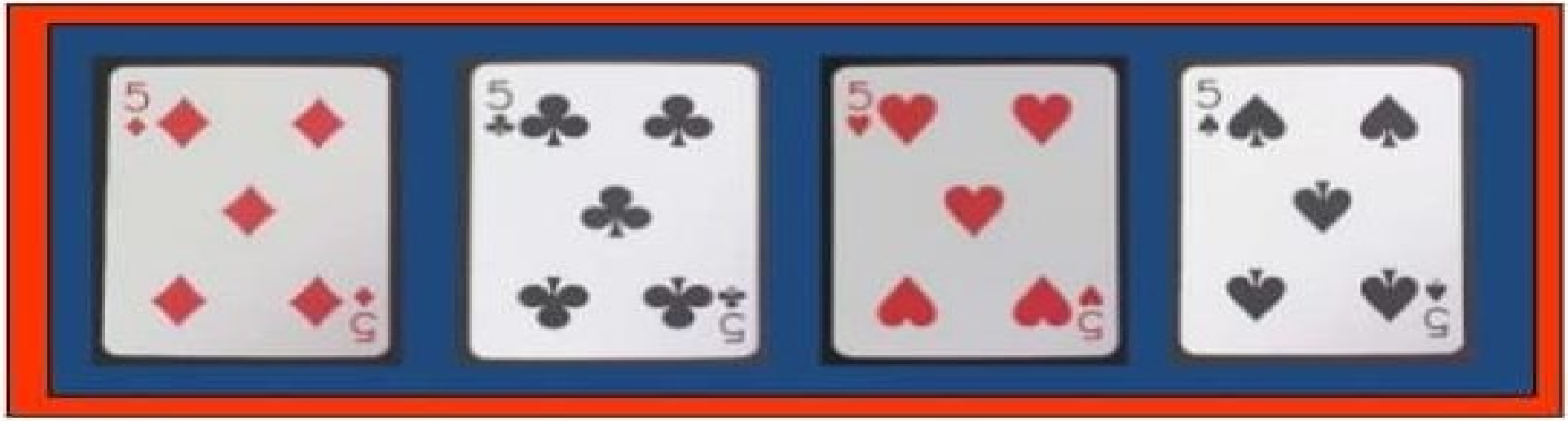
The **Probability of an Event**

P(Event) = the number of ways the event can happen / the number of all possible outcomes

P(H+T) = 2/4 = 1/2

H H | T T | H T | T H

CARD



What is the probability of getting 4 fives?

P(4 fives) = $\frac{4}{52}$

COINS

What is the probability of rolling two coins and getting H first and then T?

$$P(\text{H \& then T}) = \frac{1}{4}$$

DICE

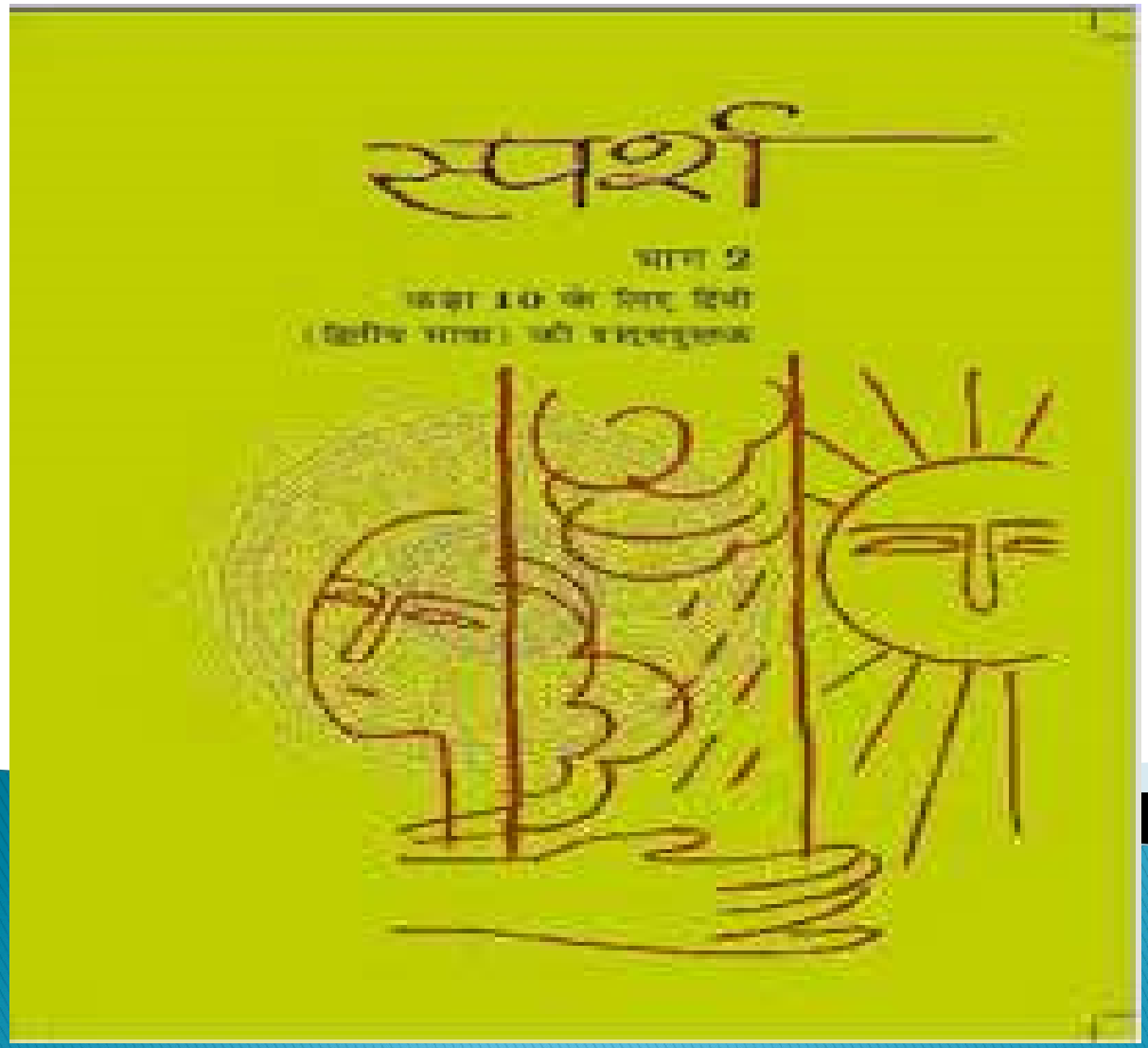
What is the probability of getting an even number?

P(even) $\frac{2}{13}$

Random Experiment...

•...a ***random experiment*** is an action or process that leads to one of several possible outcomes. For example:

Experiment	Outcomes
Tossing a coin	Heads, Tails
Exam Marks	Numbers: 0, 1, 2, ..., 100
Throwing a die	1,2,3,4,5,6


स्पर्श
भाग 2

पर्वत प्रदेश में पावस

सुमित्रानंदन पंत

Class 10 Hindi Sparsh

NCERT

सुमित्रानंदन पंत

मूल नाम: गोसाँई दत्त

जन्म: सन् 1900, कौसानी, जिला अल्मोड़ा (उत्तरांचल)

प्रमुख रचनाएँ: वीणा, ग्रंथि, पल्लव, गुंजन, युगवाणी, ग्राम्या, चिंदबरा, उत्तरा, स्वर्ण किरण, कला और बूढ़ा चाँद, लोकायतन आदि

सम्मान: भारतीय ज्ञानपीठ पुरस्कार, साहित्य अकादमी पुरस्कार, सोवियत लैंड नेहरू पुरस्कार, पद्मभूषण

मृत्यु: सन् 1977

पर्वत प्रदेश में वर्षा ऋतु में प्राकृतिक सौंदर्य कई गुना बढ़ जाता है। वहाँ क्षण-क्षण प्रकृति अपना वेश बदलती-सी नज़र आती है। कभी धूप चमकती नज़र आती है, कभी सूर्य बादलों की ओट में छिप जाता है, कभी प्रकृति का सुहावना रंग दिखाई देता है, तो कभी इतने घने बादल छा जाते हैं कि पर्वत तक अदृश्य हो जाते हैं। मात्र झरनों का शोर सुनाई देता रहता है। अचानक घनघोर वर्षा होने लगती है। निःसंदेह पर्वतों की प्रकृति के ये बदलते दृश्य सुहावने तो लगते हैं। पर्यटकों को आकर्षित भी करते हैं, परंतु पहाड़ों पर रहने वाले लोगों के लिए यह मौसम कठिनाइयों का कारण भी बन जाता है। वर्षा ऋतु में बादलों का फटना, चट्टानों का खिसकना बर्फीले तूफानों का आना एक आम समस्या है, जिसमें गाँव-के-गाँव तबाह हो जाते हैं। फिसलन भरे रास्तों के कारण यातायात व्यवस्था ठप्प पड़ जाती है जिससे रोजमर्रा के लिए आवश्यक सामग्री तक उचित समय पर नहीं पहुँच पाती। चिकित्सा-सुविधाएँ न पहुँचना, संचार व्यवस्था का ठप्प होना, सड़कों का टूटना, ऐसी अनेक समस्याएँ हैं। जिनका सामना इन पर्वतीय अंचल में रहने वाले लोगों को करना पड़ता है।

लेखन विधि -

- काव्यांशों की विस्तृत व्याख्या –
  - शब्दार्थ
  - सन्दर्भ
  - व्याख्या
  - निष्कर्ष
- लघु उत्तरीय प्रश्नोत्तर
- निबंधात्मक प्रश्नोत्तर

पुनरावर्तन

- व्याख्याओं का मौखिक अभ्यास
- प्रश्नोत्तर का मौखिक अभ्यास
- श्रुतिलेख
- साप्ताहिक टेस्ट

HISTORY

CH-5

PRINT CULTURE & THE MODERN WORLD

TOPIC AND SUB TOPIC

OBJECTIVE OF TEACHING :

The student will be able to;

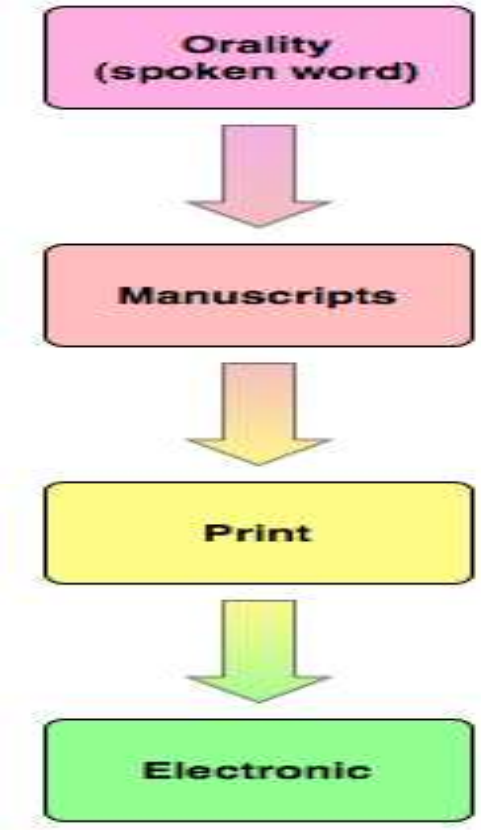
- recognize the first kind of print technology developed in China, Japan and Korea.
- understand how print technology spread to Europe from China
- describe the print revolution and its impact.
- Appraise the leaps in mass literacy in Europe.
- list the religious reforms and public debates which took place as a result of the development in print media.
- identify the new forms of publication.

TEACHING METHOD

- Notes will be provided to students.
- Explanation with examples
- Video session in Digital class room.
- Activity : Poster Designing book seller

Teaching material :

1. PICTURES



2. VIDEO : FOR COMPARISION OF ANCIENT AND MODERN PRINTING TECHNIQUE

Economics

CH-3

MONEY AND CREDIT

TOPIC AND SUB TOPIC

OBJECTIVE OF TEACHING :

The student will be able to:

- identify the importance of money as a medium of exchange.
- recognize the modern forms of money.
- analyze the terms of credit.
- distinguish between formal and informal credit.

TEACHING METHOD

- Notes will be provided to students.
- Explanation with examples
- Visit to Bank

Teaching material :

1. PICTURES:

Different forms of money

CHAPTER - 5

PERIODIC CLASSIFICATION OF ELEMENTS

1) Classification of elements :-

The arranging of elements into different groups on the basis of the similarities in their properties is called classification of elements.

The classification of similar elements into groups makes the study of elements easier.

There are about 114 different elements known so far.

2) Early attempts at classification of elements :-

a) The earliest attempt to classify elements was grouping the then known elements (about 30 elements) into two groups called metals and non metals.

The defect in this classification was that it had no place for metalloids (elements which have properties of both metals and non metals) which were discovered later.

b) Dobereiner's Triads :-

Dobereiner classified elements in the increasing order of their atomic masses into groups of three elements called triads. In each triad the atomic mass of the middle element was approximately equal to the average atomic mass of the other two elements.

The defect in this classification was that all the then known elements could not be correctly arranged into triads.

Triad		Atomic mass	Average atomic mass of Ist and 3rd element
Lithium	Li	6.9	
Sodium	Na	23.0	22.95
Potassium	K	39.0	
Calcium	Ca	40.1	
Strontium	Sr	87.6	88.7
Barium	Ba	137.3	
Chlorine	Cl	35.5	
Bromine	Br	79.9	81.2
Iodine	I	126.9	

c) Newland's octaves :-

Newland classified the elements in the increasing order of their atomic masses into groups of eight elements called octaves like the notes of music. He found that when the elements were arranged in the increasing order of their atomic masses into octaves then there was similarity of properties in every eighth element.

sa	re	ga	ma	pa	da	ni
H	LI	Be	B	C	N	O
F	Na	Mg	Al	Si	P	S
Cl	K	Ca	Cr	Tl	Mn	Fe
Co and Ni	Cu	Zn	Y	In	As	Se
Br	Rb	Sr	Ce and La	Zr	-	-

The defect in this classification was:-

i) All the known elements and elements discovered later could not be correctly arranged into octaves.

ii) Some elements having different properties were placed in the same rows like cobalt and nickel having different properties are placed along with Fluorine, Chlorine and Bromine. Iron having properties similar to Cobalt and Nickel are placed in different rows.

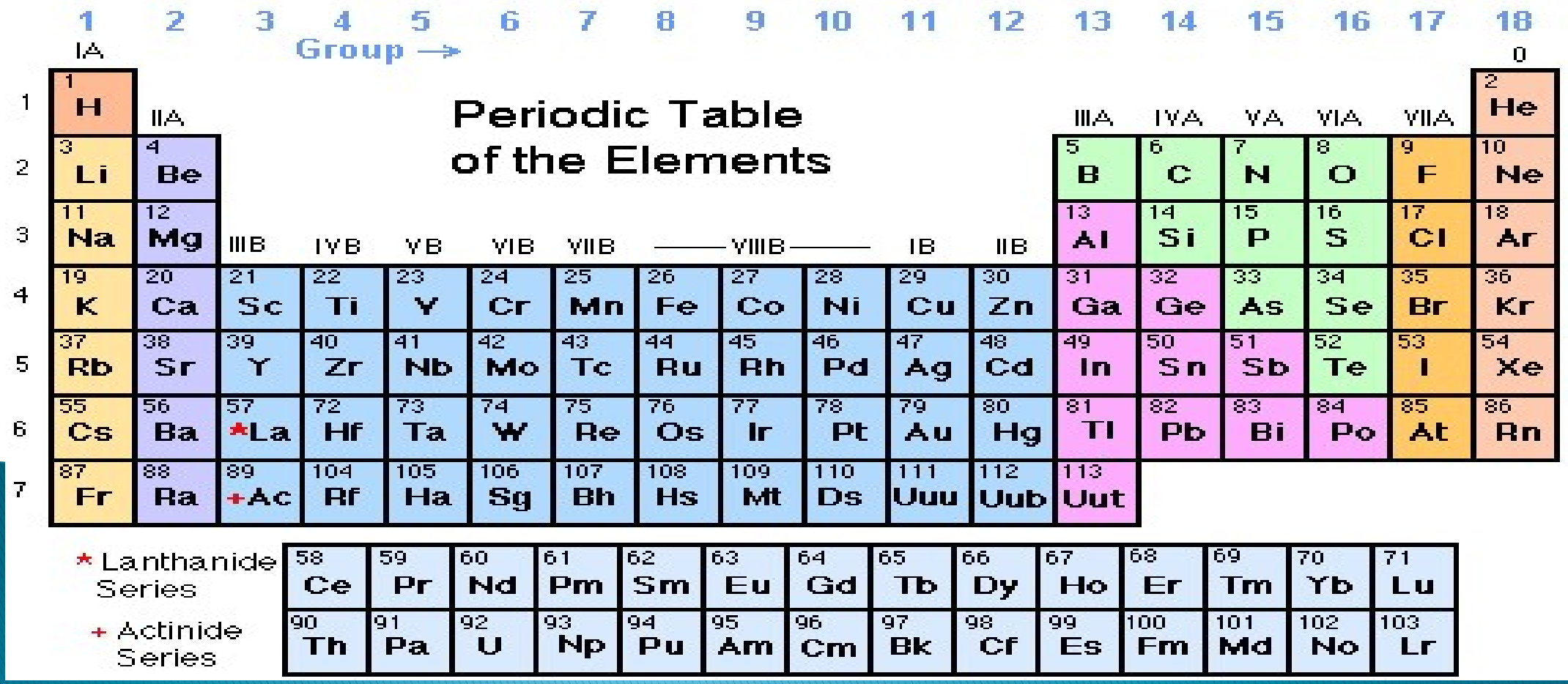
3a) Mendeleev's periodic law :-

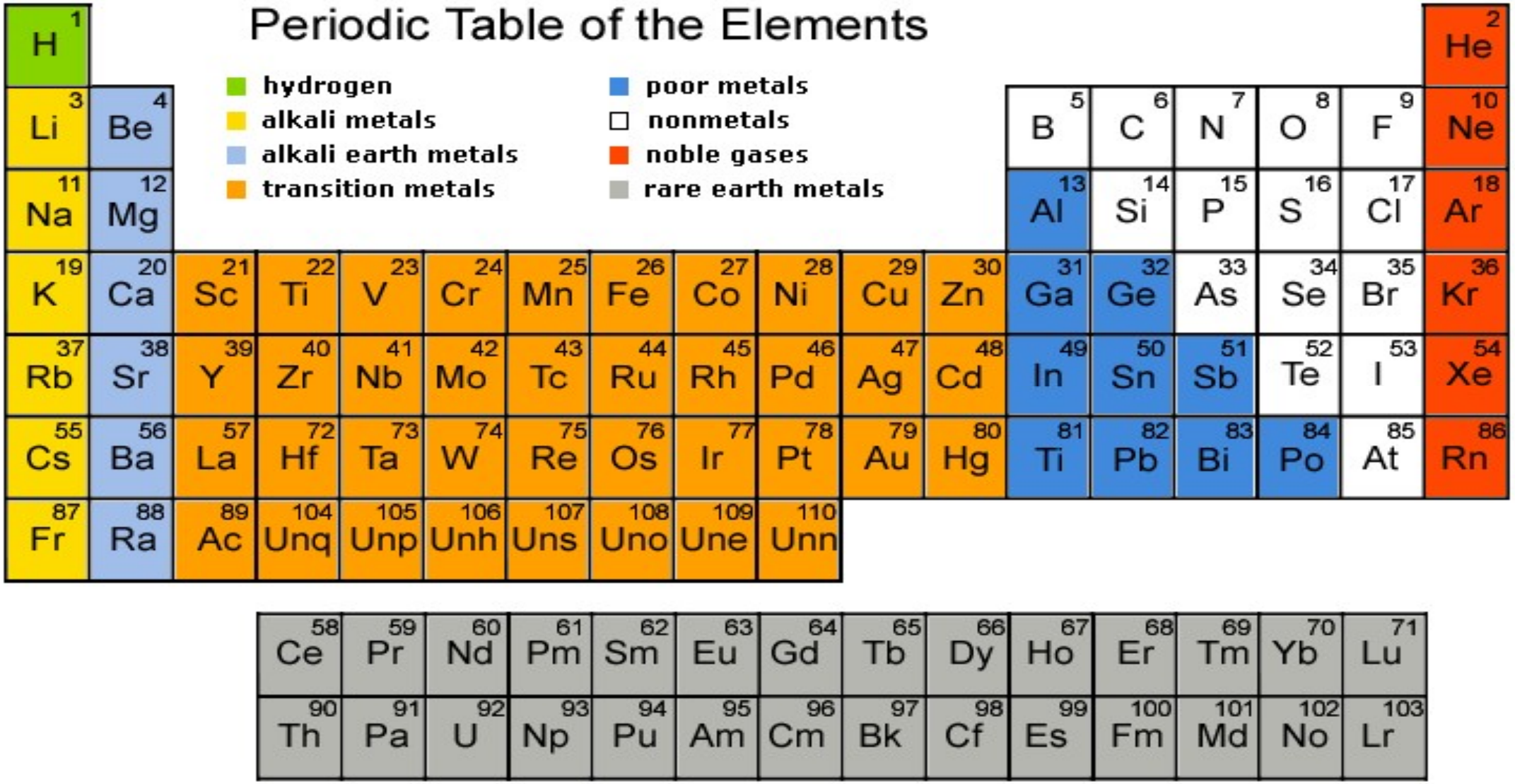
Mendeleev's periodic law states that, ' The properties of elements are periodic functions of their atomic masses'.

A B	A B	A B	A B	A B	A B	A B			
I							Transition series		
H 1.01	II	III	IV	V	VI	VII			
Li 6.94	Be 9.01	B 10.8	C 12.0	N 14.0	O 16.0	F 19.0			
Na 23.0	Mg 24.3	Al 27.0	Si 28.1	P 31.0	S 32.1	Cl 35.5	VIII		
K 39.1	Ca 40.1		Ti 47.9	V 50.9	Cr 52.0	Mn 54.9	Fe 55.9	Co 58.9	Ni 58.7
Cu 63.5	Zn 65.4			As 74.9	Se 79.0	Br 79.9			
Rb 85.5	Sr 87.6	Y 88.9	Zr 91.2	Nb 92.9	Mo 95.9		Ru 101	Rh 103	Pd 106
Ag 108	Cd 112	In 115	Sn 119	Sb 122	Te 128	I 127			
Ce 133	Ba 137	La 139		Ta 181	W 184		Os 194	Ir 192	Pt 195
Au 197	Hg 201	Ti 204	Pb 207	Bi 209					
			Th 232		U 238				

4a) Modern periodic law :-

Modern periodic law states that, ‘ The properties of elements are periodic functions of their atomic numbers’.




Periodic Table of the Elements
hydrogen
alkali metals
alkali earth metals
transition metals
poor metals
nonmetals
noble gases
rare earth metals
H 1
He 2
Li 3
Be 4
B 5
C 6
N 7
O 8
F 9
Ne 10
Na 11
Mg 12
Al 13
Si 14
P 15
S 16
Cl 17
Ar 18
K 19
Ca 20
Sc 21
Ti 22
V 23
Cr 24
Mn 25
Fe 26
Co 27
Ni 28
Cu 29
Zn 30
Ga 31
Ge 32
As 33
Se 34
Br 35
Kr 36
Rb 37
Sr 38
Y 39
Zr 40
Nb 41
Mo 42
Tc 43
Ru 44
Rh 45
Pd 46
Ag 47
Cd 48
In 49
Sn 50
Sb 51
Te 52
I 53
Xe 54
Cs 55
Ba 56
La 57
Hf 72
Ta 73
W 74
Re 75
Os 76
Ir 77
Pt 78
Au 79
Hg 80
Ti 81
Pb 82
Bi 83
Po 84
At 85
Rn 86
Fr 87
Ra 88
Ac 89
Unq 104
Unp 105
Unh 106
Uns 107
Uno 108
Une 109
Unn 110
Ce 58
Pr 59
Nd 60
Pm 61
Sm 62
Eu 63
Gd 64
Tb 65
Dy 66
Ho 67
Er 68
Tm 69
Yb 70
Lu 71
Th 90
Pa 91
U 92
Np 93
Pu 94
Am 95
Cm 96
Bk 97
Cf 98
Es 99
Fm 100
Md 101
No 102
Lr 103

5. Properties of elements in periods and groups :-

i) Valence electrons :-

In a period the number of valence electrons increases from 1 to 8 from the left to the right and the number of shells is the same.

Eg :- 2nd Period

Elements	– Li,	Be,	B,	C,	N,	O,	F,	Ne
AN	– 3	4	5	6	7	8	9	10
EC	– 2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
Valence electrons	– 1	2	3	4	5	6	7	8
Shells	– 2	2	2	2	2	2	2	2

In a group the number of valence electrons is the same for all the elements but the number of shells increases from top to bottom.

Eg :- Group – I A

Elements	AN	EC	VE	Shells
H	1	1	1	1
Li	3	2,1	1	2
Na	11	2,8,1	1	3
K	19	2,8,8,1	1	4

ii) Valency :-

In a period the valency of the elements increases from 1 to 4 and then decreases from 4 to 0 from the left to the right.

Eg :- 2nd Period

Elements	–	Li,	Be,	B,	C,	N,	O,	F,	Ne
AN	–	3	4	5	6	7	8	9	10
EC	–	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
Valence electrons	–	1	2	3	4	5	6	7	8
Valency	–	1	2	3	4	3	2	1	0

In a group the valency is the same for all elements of the group.

Eg :- Group – I A

Elements	AN	EC	VE	Valency
H	1	1	1	1
Li	3	2,1	1	1
Na	11	2,8,1	1	1
K	19	2,8,8,1	1	1

iii) Atomic size (Radius of the atom) :-

In a period the atomic size of the elements decreases from the left to the right because the nuclear charge (number of protons) increases and so the electrons are pulled closer to the nucleus.

Eg :- 2nd Period

Elements	–	Li,	Be,	B,	C,	N,	O,	F,	Ne
AN	–	3	4	5	6	7	8	9	10
EC	–	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
No. of protons	–	3	4	5	6	7	8	9	10

Atomic size decreases →

In a group the atomic size of the elements increases from top to bottom because the number of shells increases and the distance between the nucleus and shells also increases.

Eg :- Group – I A

Elements	AN	EC	VE	Shells
H	1	1	1	1
Li	3	2,1	1	2
Na	11	2,8,1	1	3
K	19	2,8,8,1	1	4

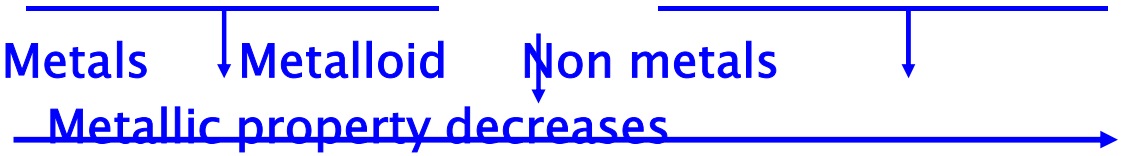
Atomic size increases ↓

iv) Metallic property (Electropositive nature) :-

In a period the metallic property of the elements decreases from the left to the right.

Eg :- 3rd Period

Elements – Na, Mg, Al, Si, P, S, Cl, Ar



In a group the metallic property of the elements increases from the top to the bottom.

Eg :- Group VI A

Elements				
Carbon	C	–	Non metal	Metallic
Silicon	Si	–	Metalloid	property
Germanium	Ge	–	Metalloid	increases
Tin	Sn	–	Metal	
Lead	Pb	–	Metal	

v) Non metallic property (Electronegative nature) :-

In a period the non metallic property of the elements increases from the left to the right.

Eg :- 3rd Period

Elements – Na, Mg, Al, Si, P, S, Cl, Ar

Metals Metalloid Non metals

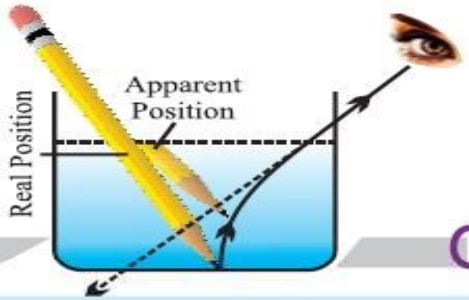
Non metallic property increases

In a group the non metallic property of the elements decreases from the top to the bottom.

Eg :- Group VI A

Elements				
Carbon	C	–	Non metal	Non metallic property decreases
Silicon	Si	–	Metalloid	
Germanium	Ge	–	Metalloid	
Tin	Sn	–	Metal	
Lead	Pb	–	Metal	

PHYSICS



Chapter - 10

Light

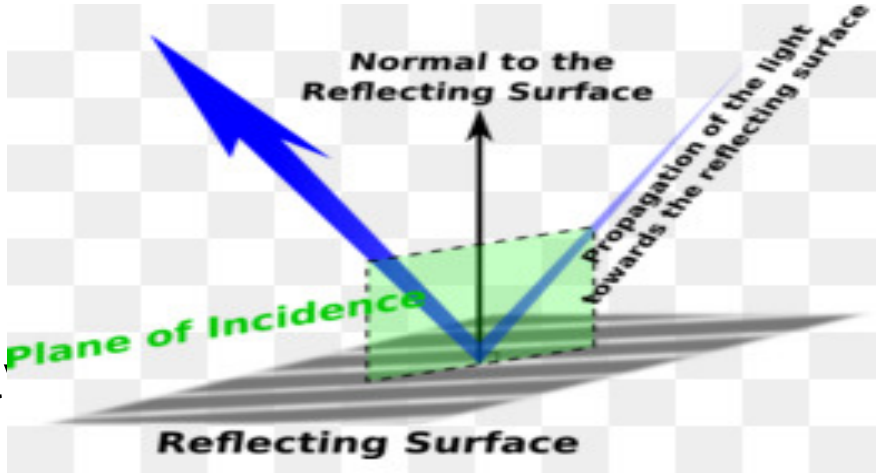
- Light is the form of energy that enables us to see.

What is Light?

- Light is a wave, or rather acts like a wave.
- How do we know?
  - Reflection
  - Refraction
  - Dispersion
  - Diffraction
  - Interference
  - Polarization

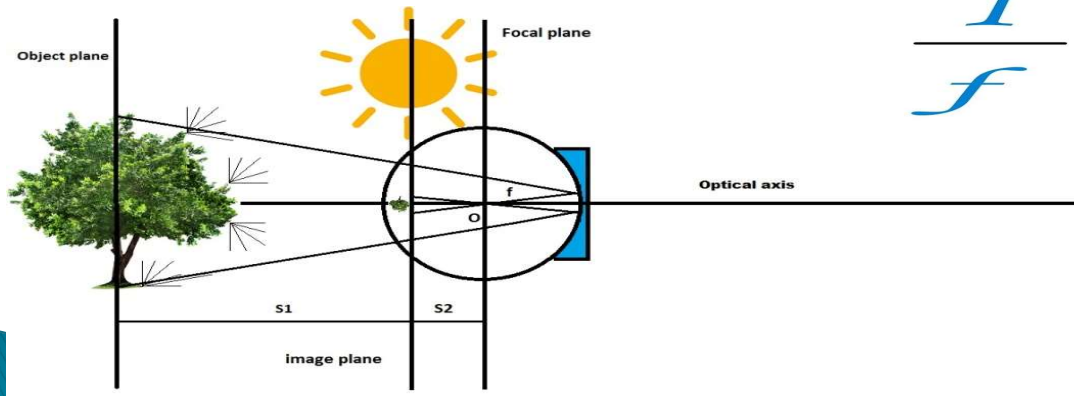
Topic of Light

- Properties of Light
- Reflection
- Ray diagrams of conca
  Convex Mirror



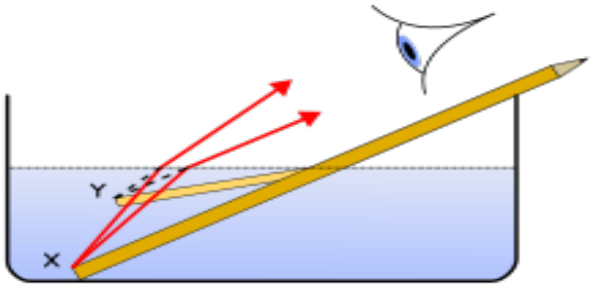
Mirror Formula

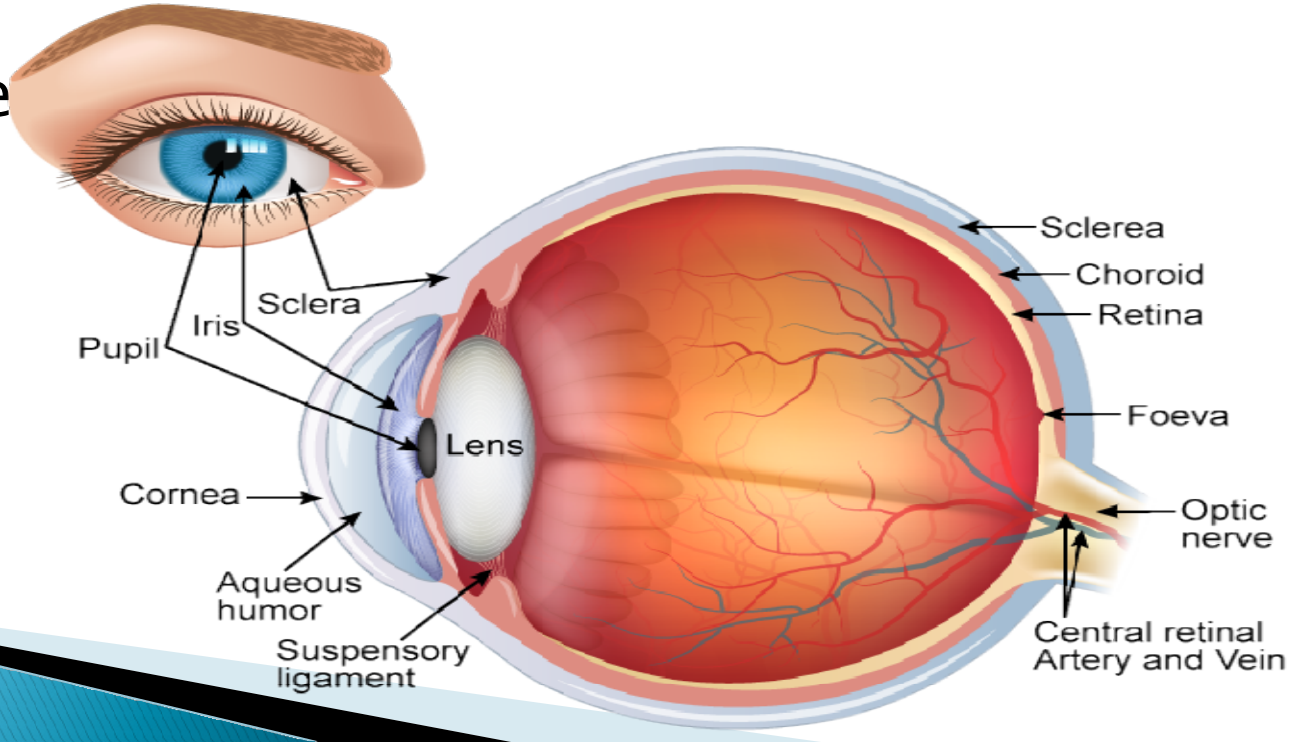
$$\frac{1}{f} = \frac{1}{v} + \frac{1}{u}$$



Topic of Light

- Refraction of Light
- Refraction through Glass Slab
- Human Eye





Practicals

- Determination of the focal length of:
- i) Concave mirror
- ii) Convex lens by obtaining the image of a distant object

Typology of Questions

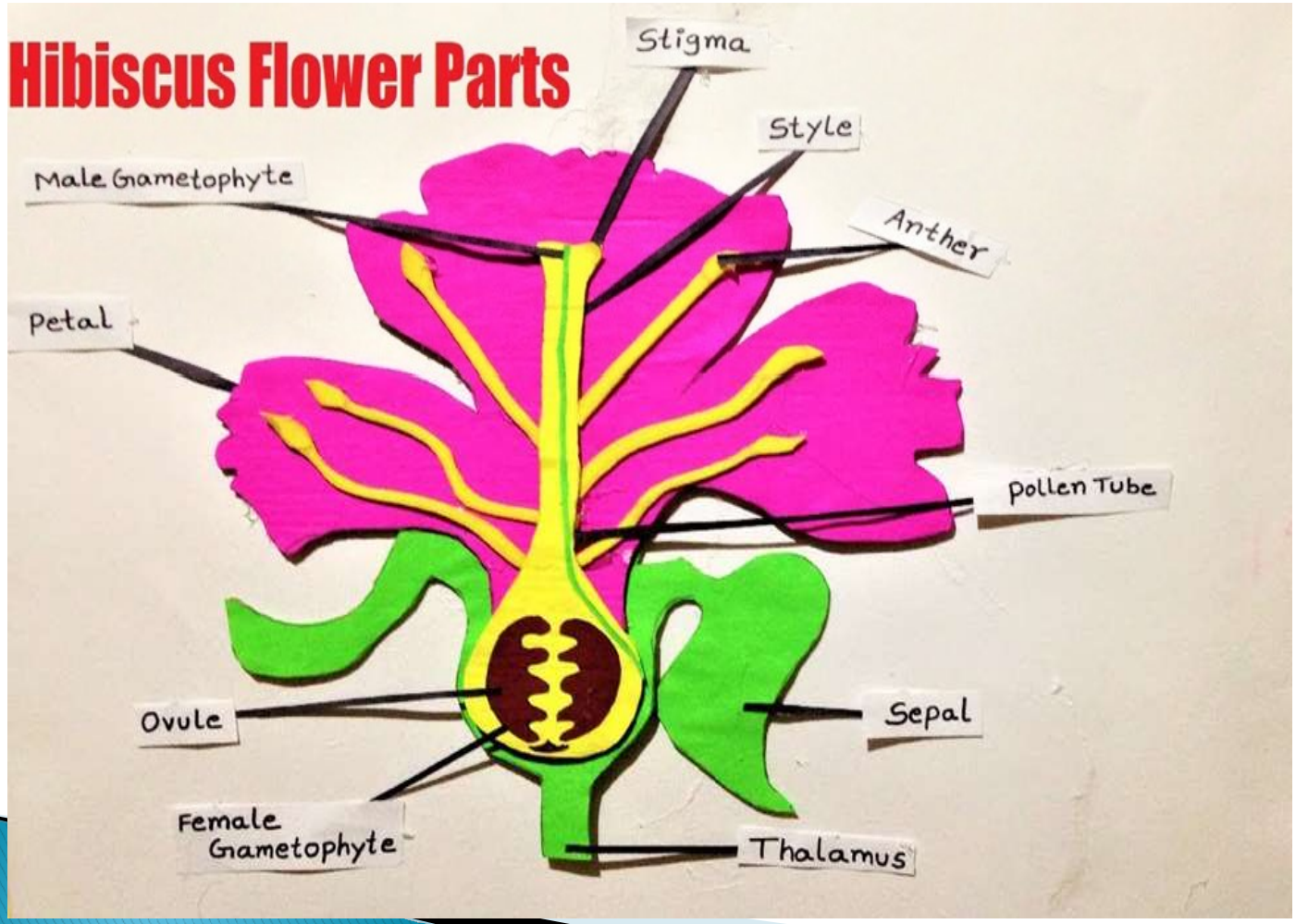
Board Examination –Theory

- M.C.Q
- Short Answer (03 marks)
- Long Answer (05 marks)

Bibliography

- NCERT Book
- YouTube Video

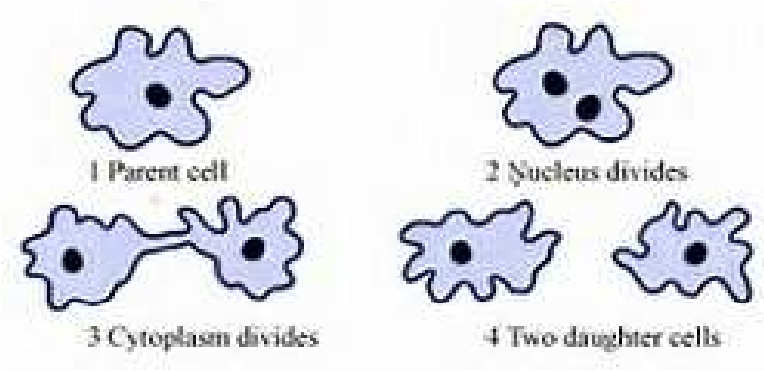
BIOLOGY

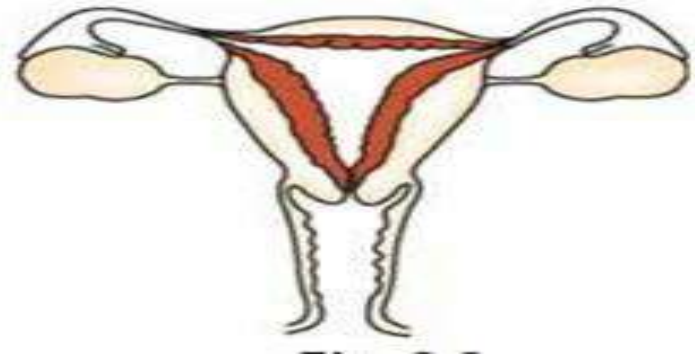

Hibiscus Flower Parts
Stigma
Style
Male Gametophyte
Anther
Petal
Pollen Tube
Ovule
Sepal
Female Gametophyte
Thalamus

REVIEW SCIENCE: AUGUST COURSE

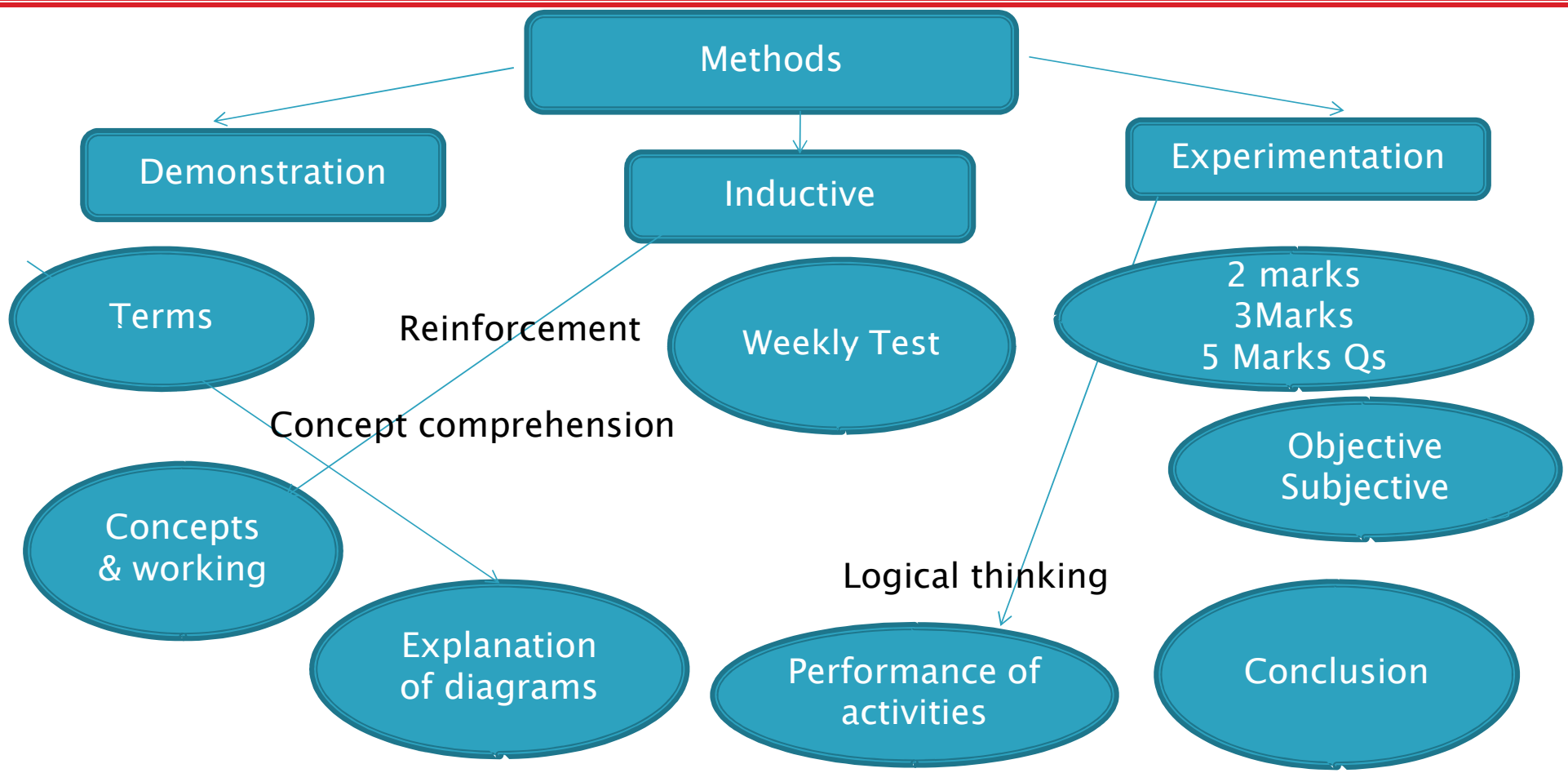
Chapter 8 How Do Organisms Reproduce

Basics of reproduction
Asexual reproductions
Vegetative reproduction
Sexual reproduction in plants
Reproduction in human bei



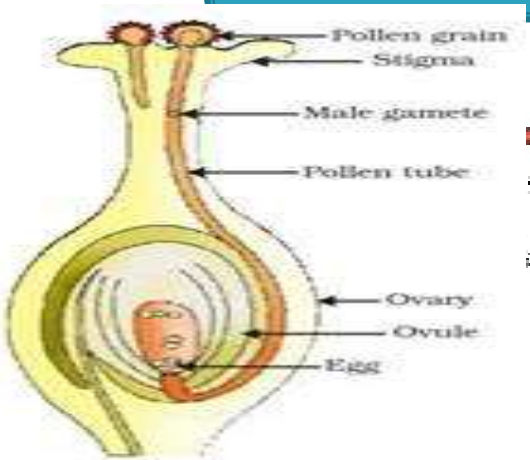


TEACHING METHODOLOGY

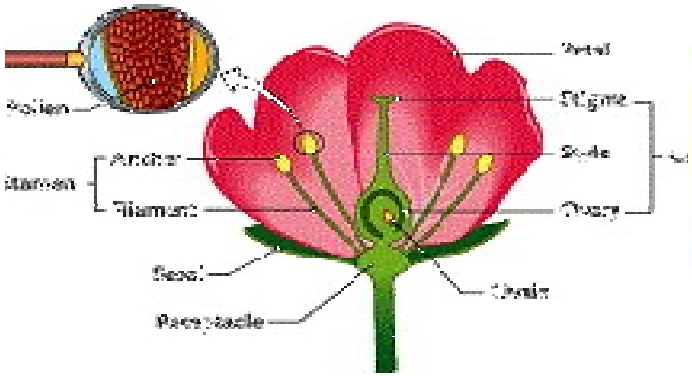


Teaching Aids

Diagrams



Pollen tube growth and its entry into the ovule



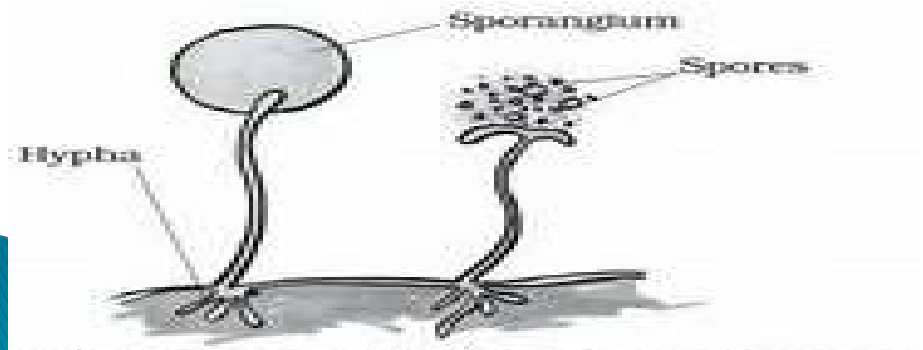
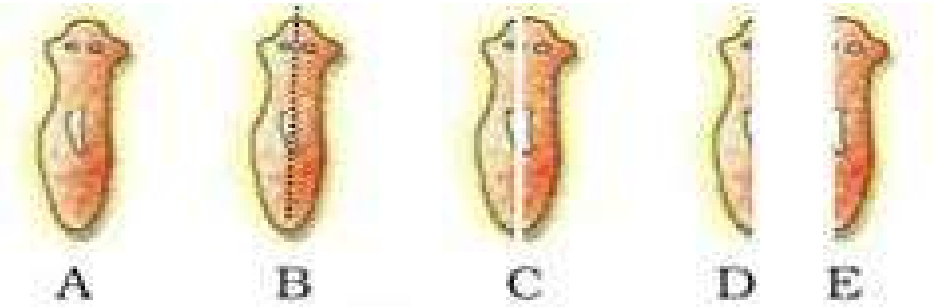
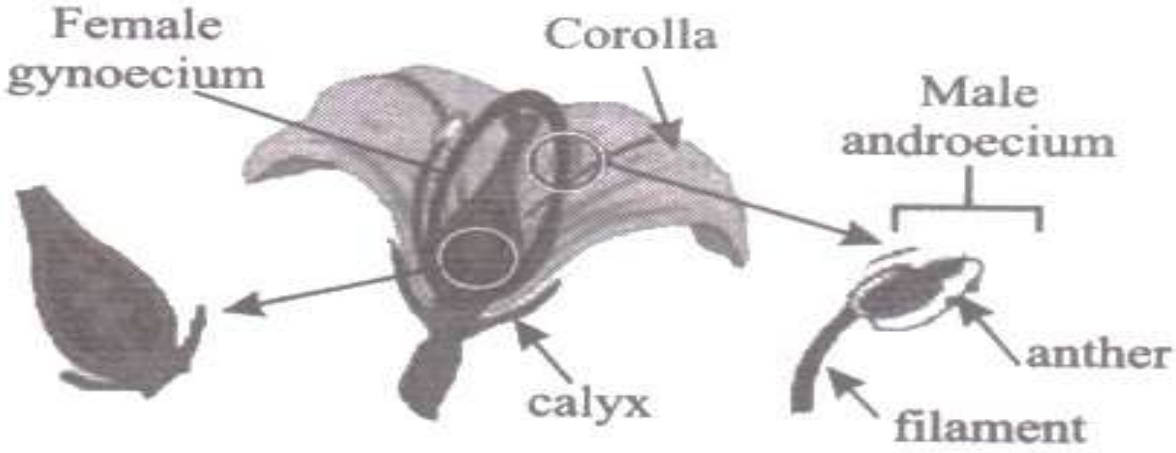


Fig. 12.7 Reproduction through spore formation in fungus

Flash cards





Teaching Aids

- Demonstration of Experiments.
- Studying (binary fission in Amoeba)

Continued Teaching aids

- Youtube videos
- https://www.youtube.com/watch?v=kapHnEw7EgM&feature=youtu.be
- https://www.youtube.com/watch?v=-yriYncPrd4
- https://www.youtube.com/watch?v=-3qEjzzGF0I

Science Paper style

- The question paper comprises of five sections A,B,C,D and E
- All question are compulsory
- Internal choice is given in Sections B, C,D and E
- Sec.A Q no 1 and 2 in this section are 1 mark each.
- Q. No 3-5 in Section B are 2 marks each to be answered in 30 words
- Q. No 6-15 in section C are 3 marks each. They are to be answered in 50 words.
- Q. No 16- 21 in Section D are 5 marks each .they are to be answered in 70 words
- Q. No 22-27 in Section E are based on practical skills . Each questions is of 2 marks each

I HOPE YOU HAVE GAINED KNOWLEDGE BY VIEWING THIS PRESENTATION.

THANK YOU.