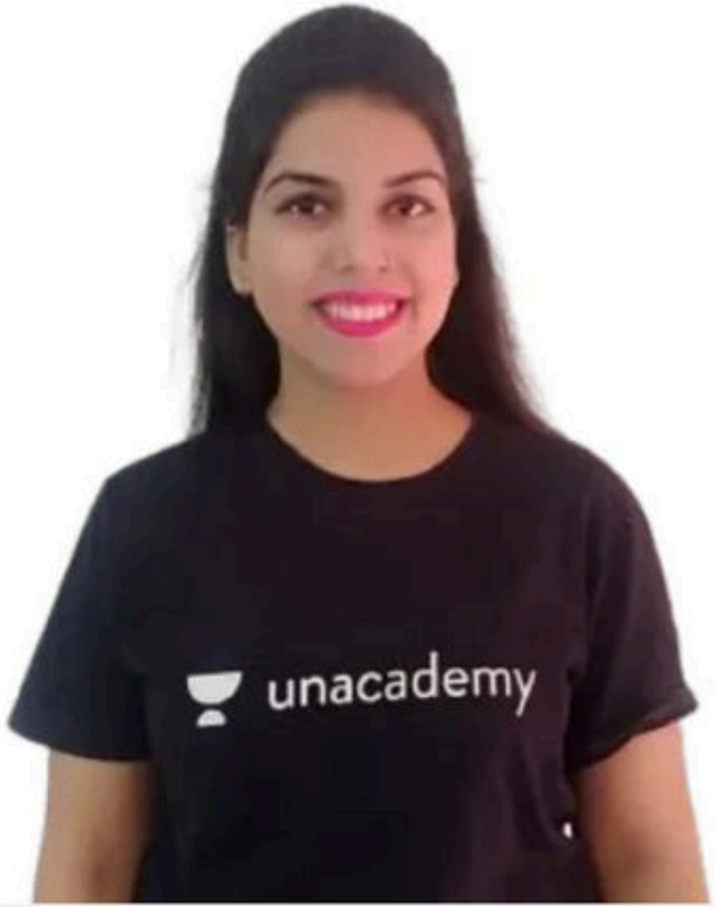
Exam Special Series - Mathematical Reasoning Part I

Special class

Navdeep Kaur • Aug 30, 2021

NTA UGC NET - Way to JRF 2021

Target: 100 Percentile AIR- 1



MAHA Episode

Complete in 1 Class

Mathematical Reasoning

JRF is Mine

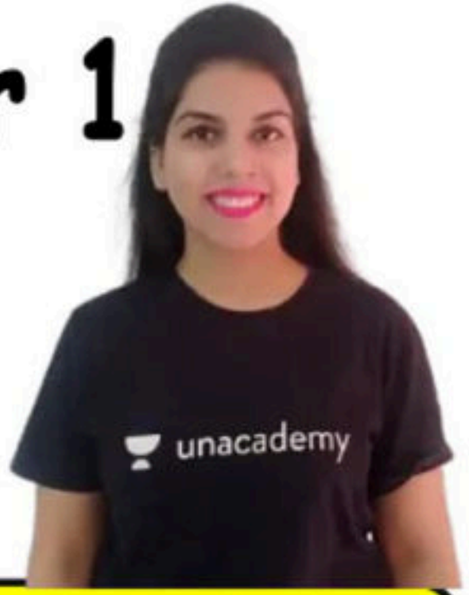
इस बार JRF लेकर रहेंगे

Way to JRF

Exam Series

Mathematical Reasoning

Paper 1



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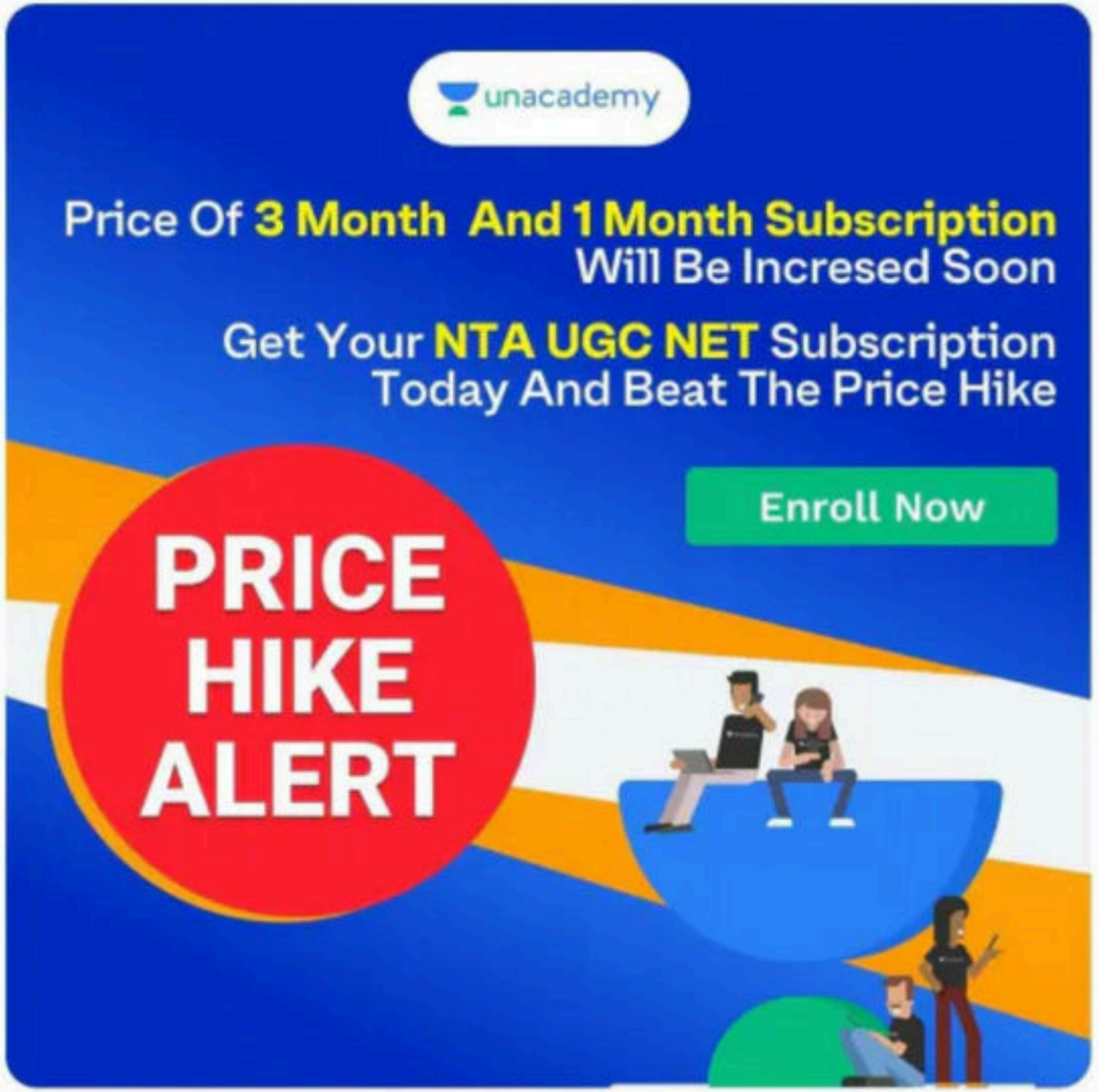

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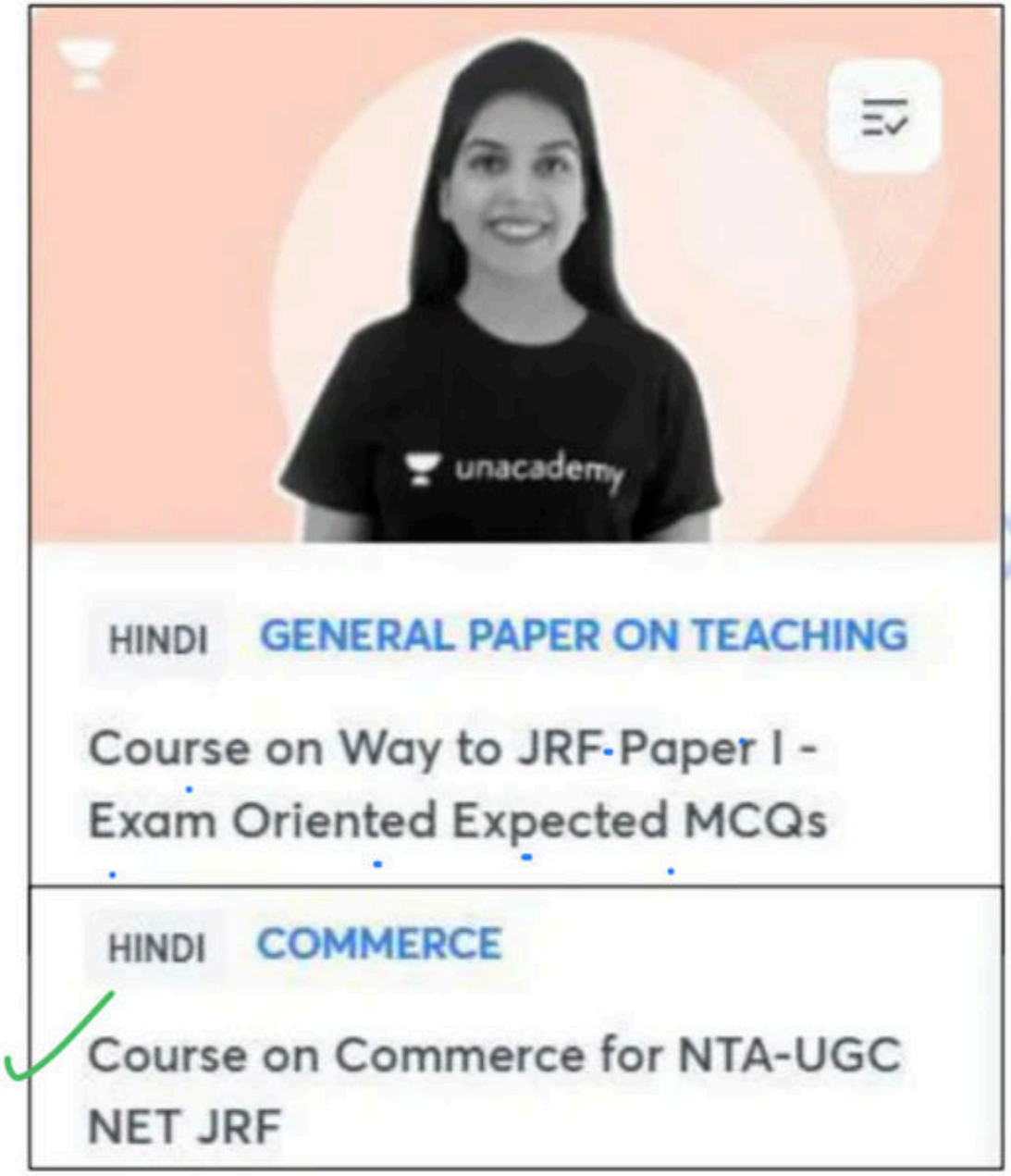

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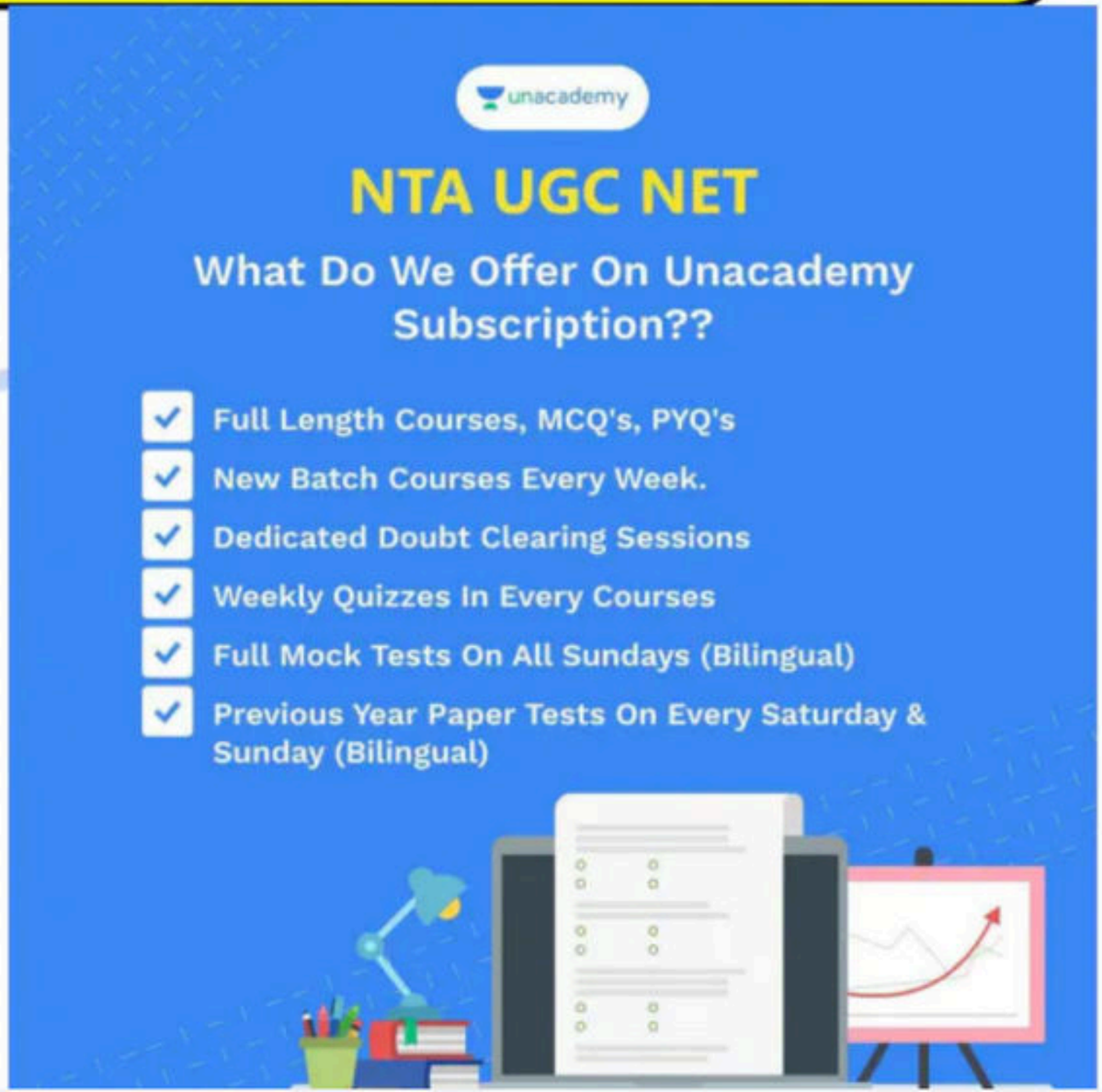

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Nav Classes NET JRF

34,067 subscribers

t.me/navclasses

Link

Nav classes is YouTube channel providing online classes for tricks to crack any exam easily

Description

Dates of UGC NET JRF Exam: 6 Oct to 11 Oct 2021

2 Days in August

Cover Hard Topics remaining portion

If done Keep Solving All PYQs & Expected MCQs

30 Days in September

After Covering Syllabus

Max to max cover till 15 September

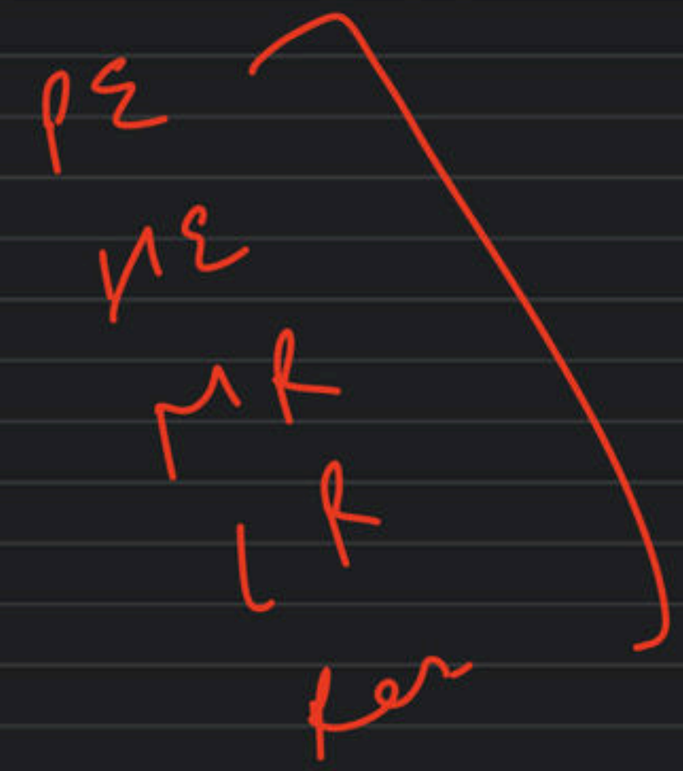
If done Keep Solving All PYQs & Expected MCQs

Solve Max to Max Expected MCQs & Test Series

5 Days in October

Just Revision of Quick notes & Maha Episodes

Revision Classes on Unacademy Special Classes by Navdeep Kaur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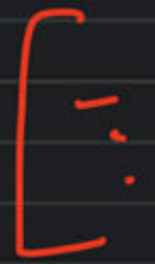

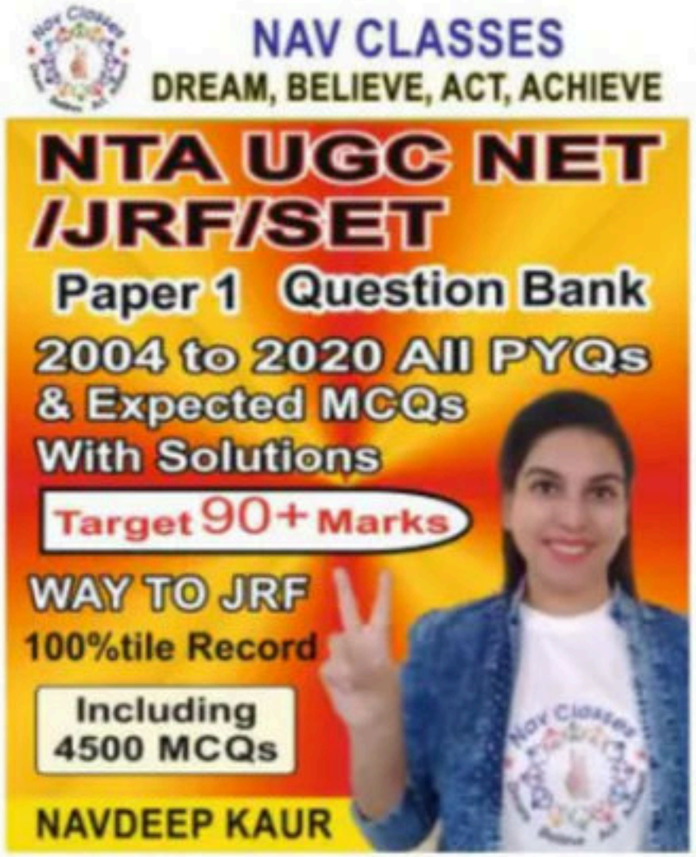

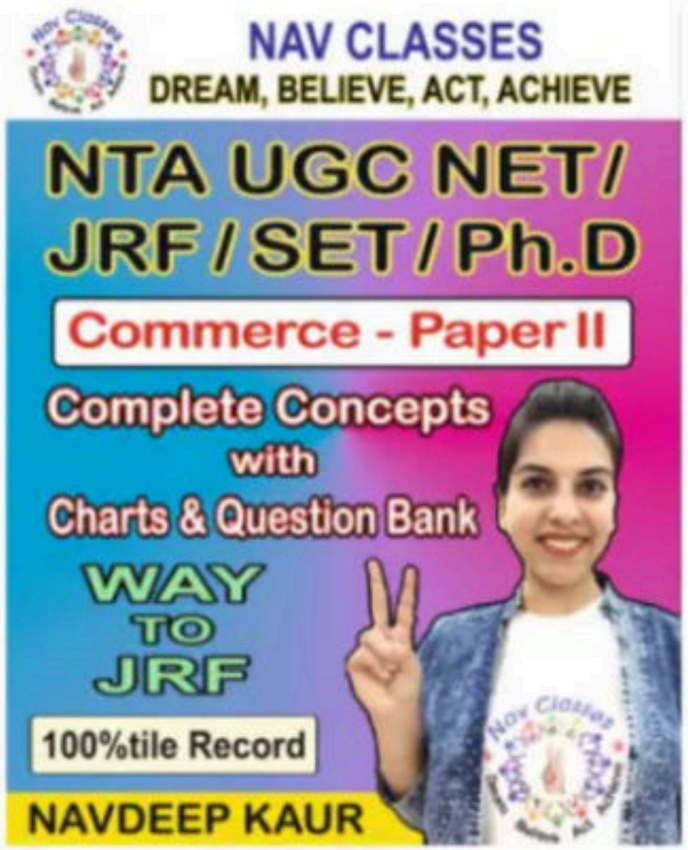

UGC NET JRF Exam
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$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

$$\text{Distance} = \text{Speed} \times \text{Time}$$

$S = \frac{D}{T}$

$T = \frac{D}{S}$

$S \times T = D$

2000 m ⟶ 2km

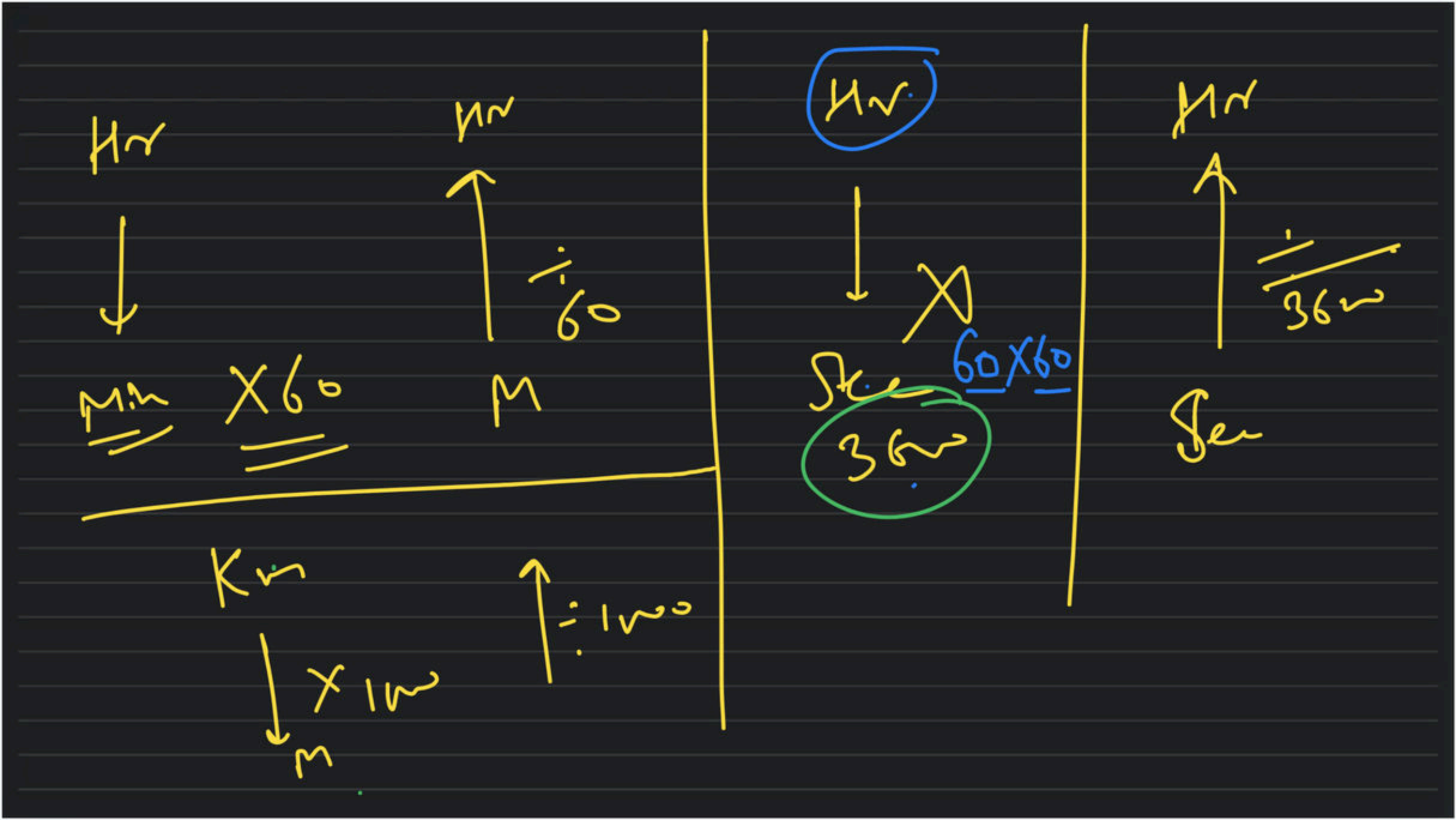
$\frac{2000}{1000}$

4 km ⟶ 4x1000 m

Hours 1

Minutes 60 min → 60 sec

Seconds 60 × 60 = 3600


Hr
Min
X60
Hr
M
÷60
Km
X 1000
M
÷1000
Hr.
Sec
X
60X60
36
Hr
Sec
÷
36

Speed

Km/hr

m/s

$\frac{D}{T}$ $\left(\frac{Km}{hr}\right)$

(per) → divide

$\frac{Km}{hr}$

$\frac{5}{\cancel{18}\cancel{0}} \times \frac{M}{S}$

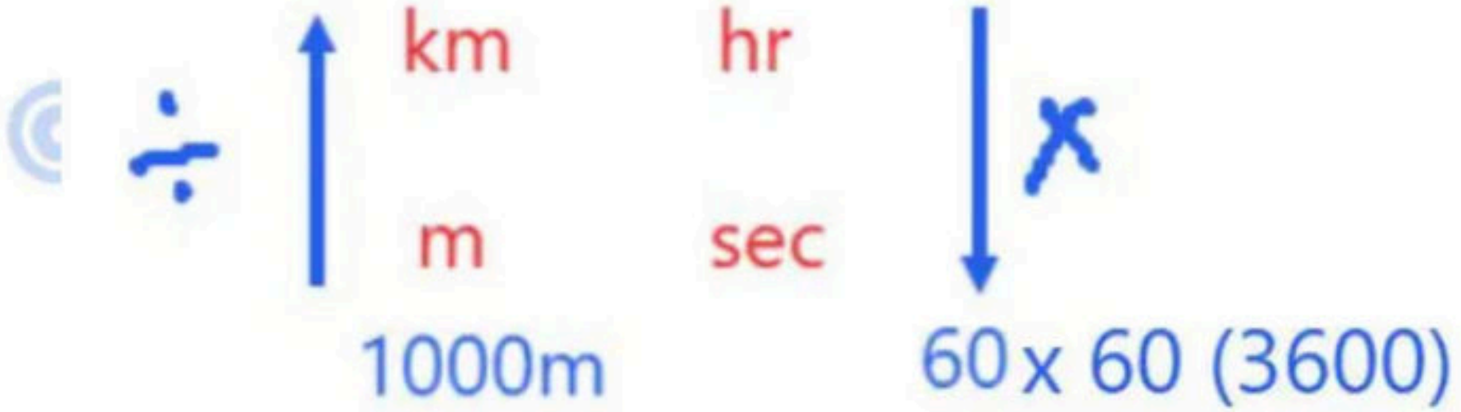
$\times \frac{5}{18}$

$\frac{\cancel{36}\cancel{0}}{18}$

$\frac{M.}{S.} \longrightarrow \frac{km}{hr}$

$\frac{36}{Two} = \frac{18}{5}$


to convert
Km/h
m/s
x 5/18
m/s
km/h
x 18/5


÷
km
m
hr
sec
x
1000m
60 x 60 (3600)

S 5 : 3
T 3 : 5

If the ratio of the speeds of A and B is a : b, then the ratio of the

the times taken by then to cover the same distance is $\frac{1}{a} : \frac{1}{b}$

Speed a: b
Time b: a

Suppose a man covers a certain distance at x km/hr and an equal distance at y km/hr. Then,

the average speed during the whole journey is $\frac{2xy}{x+y}$ km/hr.

$\frac{2\ s1\ s2}{s1 + s2}$

$\frac{\text{Total Distance}}{\text{Total Time}}$

$x \cdot y = \dfrac{2}{\frac{1}{x} + \frac{1}{y}}$

$\dfrac{2xy}{x+y}$

$\dfrac{2}{\frac{y+x}{xy}}$

xy

$$\frac{4}{\frac{1}{n} + \frac{1}{7} + \frac{1}{2} + \frac{1}{9}}$$

the average speed during the whole journey is $\frac{2\,s1\,s2}{s1 + s2}$ km/hr.

total Journey is $\frac{\text{Time}\ 2\,s1\,s2}{s1 + s2}$ km/hr.

Dis. $S \times T$

$\frac{2s}{s+s} \times T$

Distance

$$\frac{\text{Change in time} \times s1 \times s2}{s1 \sim s2}$$

Trick

Late + Early

Early + late

Trick

Late - Late

Early - Early

10 Km

5 late min

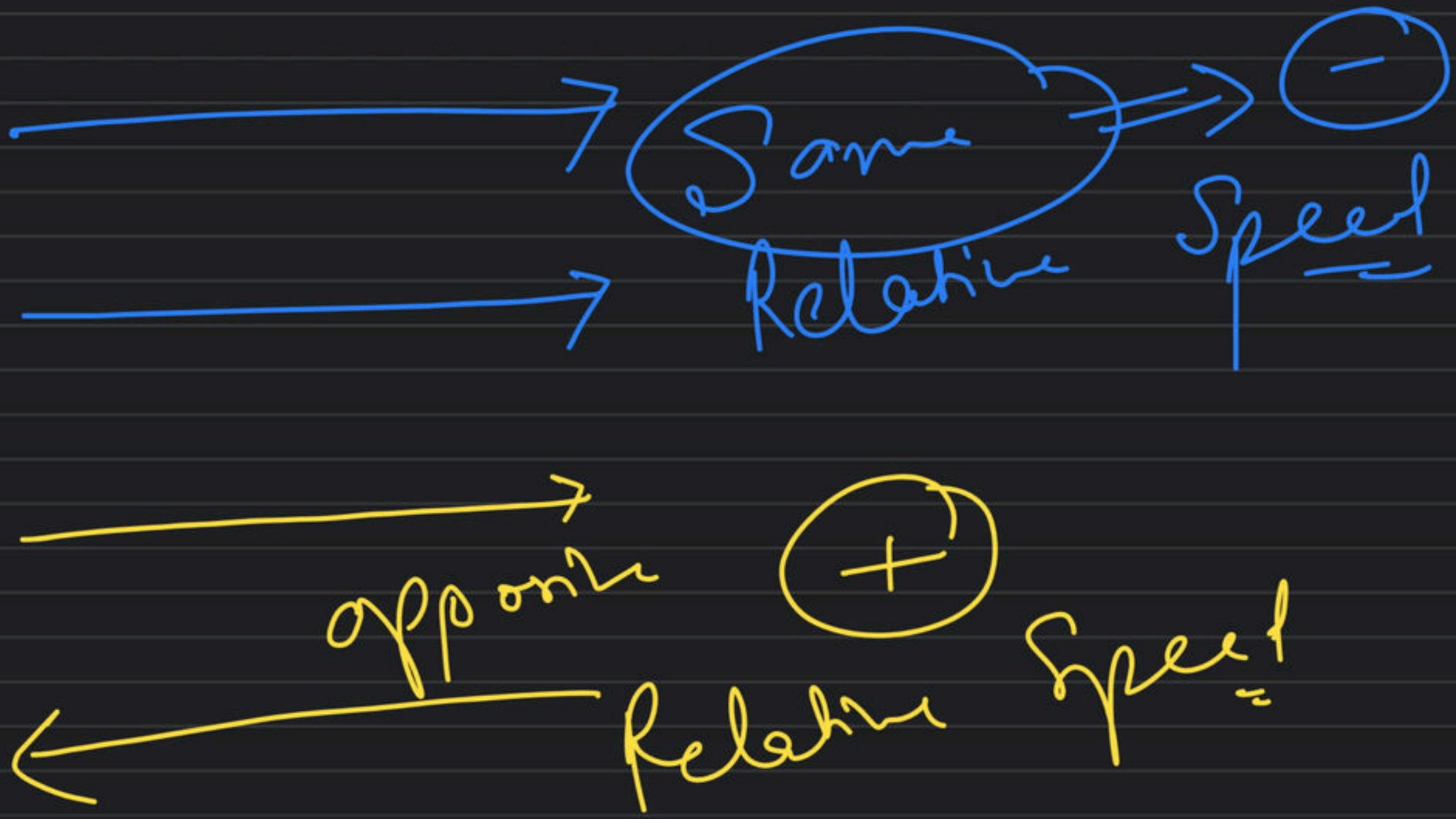
10 Early min 20 Km

K

$\frac{15}{60}$ hour $\times S_1 \times S_2$

$\frac{10 \times 20}{S_1 \sim S_2}$

$20 - 10$


Same
Relative
Speed
−
opposite
Relative
Speed
+

Two trains, 140 m and 160 m long, move in opposite directions on parallel lines at 60 km/hr and 40 km/hr, respectively. The time it takes them to cross each other in seconds is:

A. 10.40
B. 10.80
C. 10.10
D. 11

140 मीटर और 160 मीटर लंबी दो ट्रेनें समानांतर रेखाओं पर क्रमशः 60 किमी/घंटा और 40 किमी/घंटा की गति से विपरीत दिशाओं में चलती हैं। उन्हें एक दूसरे को सेकंडों में पार करने में लगने वाला समय है:

Two trains, 140 m and 160 m long, move in opposite directions on parallel lines at 60 km/hr and 40 km/hr, respectively. The time it takes them to cross each other in seconds is:

A. 10.40
B. 10.80
C. 10.10
D. 11

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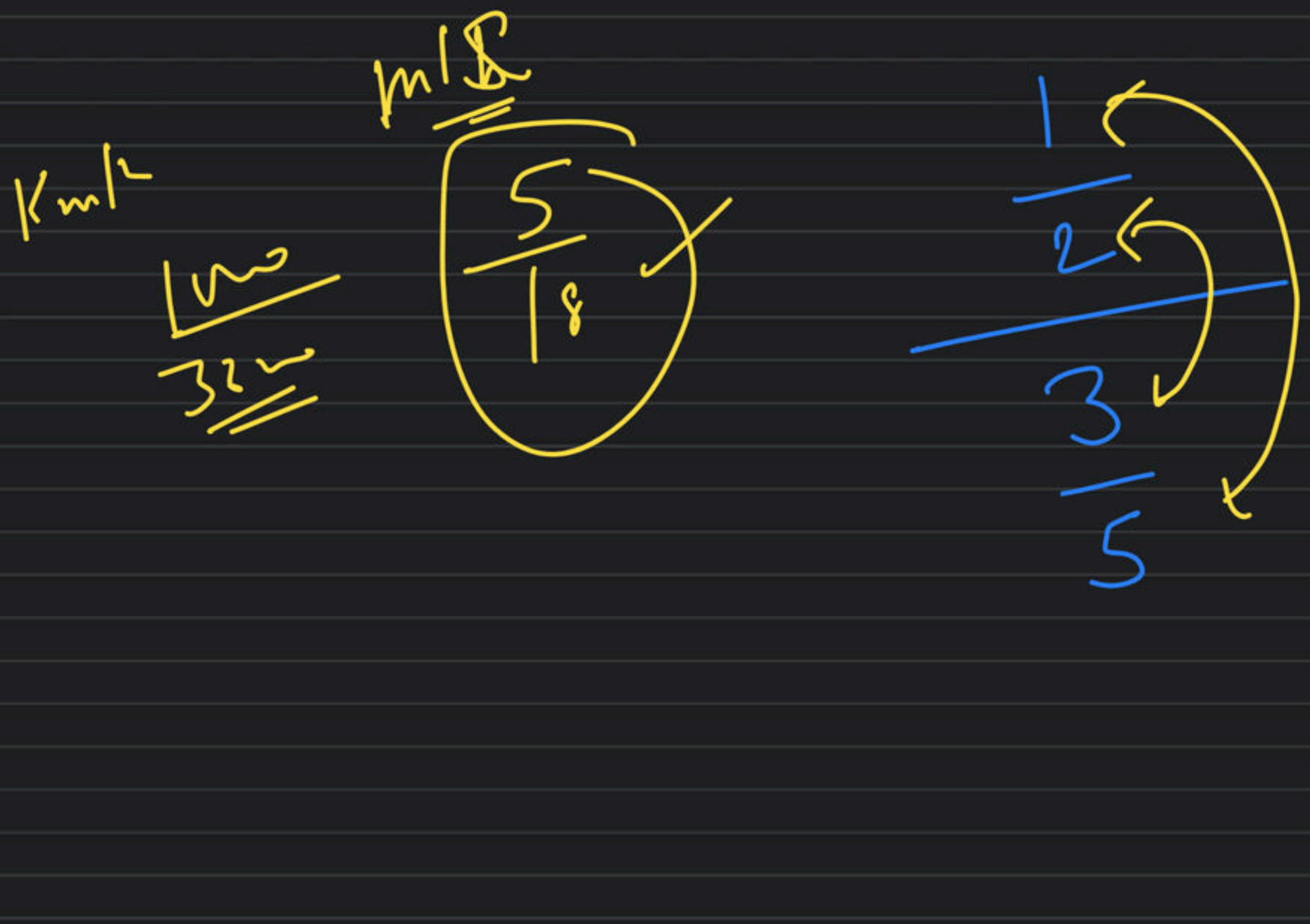
<u>300 m</u>

100 * 5/18 = 27.777

300/ 27.77 = 10.80


mls
Km/h
5
18
1
2
3
5

A train 125 m long passes a man, running at 5 km/hr in the same direction in which the train is going, in 10 seconds. The speed of the train is:

A. 49 km/hr
B. 50 km/hr
C. 51 km/hr
D. 52 km/hr

Relative speed = $\frac{125}{10} = \frac{25}{2}$ m/s

$\frac{25}{2} \times \frac{18}{5} = 45$ km/h

$S_T - 5 = 45$

$S_T = 45 + 5 = 50$

125 मीटर लंबी एक ट्रेन उसी दिशा में 5 किमी/घंटा की गति से चल रहे एक व्यक्ति को 10 सेकंड में पार कर जाती है। ट्रेन की गति है:

A train 125 m long passes a man, running at 5 km/hr in the same direction in which the train is going, in 10 seconds. The speed of the train is:

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Relative speed = D/T = 125 / 10 = 25/2
In km/hr = 25/2 * 18/5 = 45 km/hr

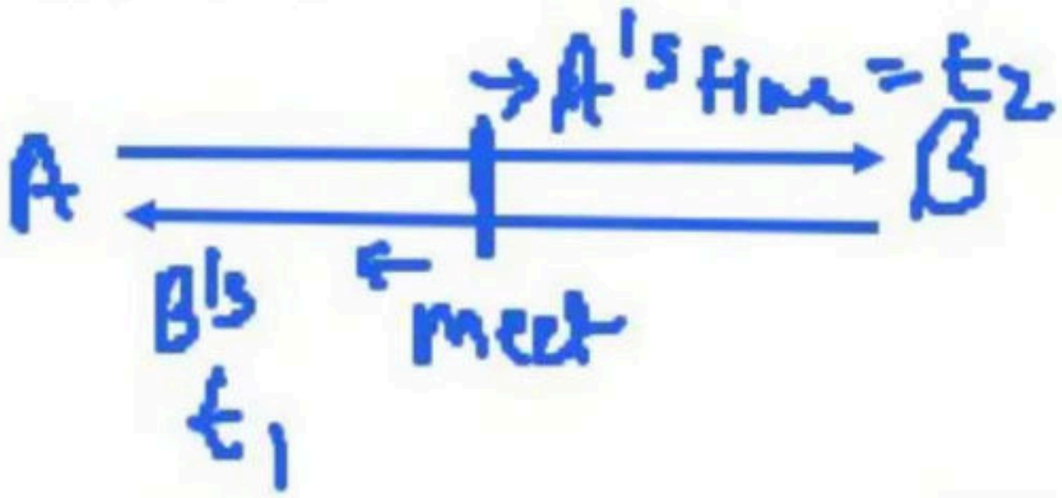
Lets train speed x

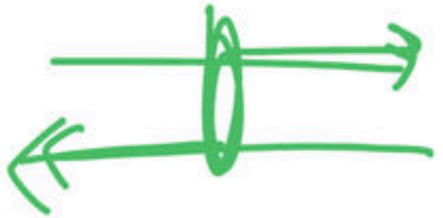
Relative = x-5 = 45
X = 50

$S_T - S_n = \text{Rel}$

0

Meet with each other



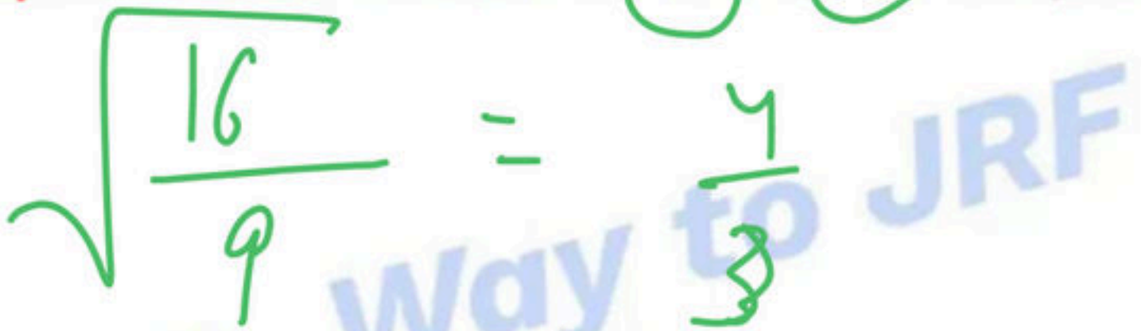


$$\frac{A\text{'s speed}}{B\text{'s speed}} = \sqrt{\frac{t_B}{t_A}}$$

$$\frac{A\text{'s speed}}{B\text{'s speed}} = \sqrt{\frac{t_B}{t_A}}$$

Two trains depart at the same time, one from Delhi to Patna and the other from Patna to Delhi. After meeting, the trains arrive at their respective destinations after 9 and 16 hours, respectively. What will the train's speed ratio be?

A. 3 : 2
B. 1 :3
C. 3 : 4
D. 4 : 3



एक ही समय में दो ट्रेनें चलती हैं, एक दिल्ली से पटना के लिए और दूसरी पटना से दिल्ली के लिए। मिलने के बाद, ट्रेनें क्रमशः 9 और 16 घंटे बाद अपने-अपने गंतव्य पर पहुंचती हैं। ट्रेन की गति का अनुपात क्या होगा?

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The trains A and B.
Then, (A's speed) : (B's speed)
= √b : √a = √16 : √9 = 4:3

If a person walks at 4 mph, he covers a certain distance. If he walks at 9 mph, he covers 7.5 miles more. How much distance did he actually cover?

A. 60 mile, 15 hours
B. 6 mile, 1.5 hours
C. 9 mile, 3 hours
D. 12 mile, 4 hours

$$\frac{D}{S} \qquad \frac{D}{S}$$

$$\frac{D}{4} = \frac{D+7.5}{9}$$

If a person walks at 4 mph, he covers a certain distance. If he walks at 9 mph, he covers 7.5 miles more. How much distance did he actually cover?

A. 60 mile, 15 hours
B. 6 mile, 1.5 hours
C. 9 mile, 3 hours
D. 12 mile, 4 hours

$$\frac{D}{S} = T$$

$$\frac{x}{4} = \frac{x+7.5}{9}$$

$$9x = 4x + 30$$

$$5x = 30$$

$$x = 6$$

If a person walks at 4 mph, he covers a certain distance. If he walks at 9 mph, he covers 7.5 miles more. How much distance did he actually cover?

A. 60 mile, 15 hours
B. 6 mile, 1.5 hours
C. 9 mile, 3 hours
D. 12 mile, 4 hours

$\frac{D}{S} = T$

$\frac{x}{4} = \frac{x+7.5}{9}$

$9x = 4x + 30$

$5x = 30$

$x = 6$

$T = \frac{D}{S}$

$= \frac{6}{4}$

$= 1.5$

A boy go to school on bicycle having average speed of 10 kilometre per hour he is late by 15 minute if he go with the speed of 12 km per hour he is late by 5 minutes find distance between house and school

एक लड़का 10 किलोमीटर प्रति घंटे की औसत गति से साइकिल पर स्कूल जाता है, वह 15 मिनट देर से होता है यदि वह 12 किमी प्रति घंटे की गति के साथ जाता है तो उसे घर और स्कूल के बीच की दूरी का पता लगाने में 5 मिनट की देरी होती है।

1. 10km
2. 100km
3. 12km
4. 60km

$S_1 = 10$

$S_2 = 12$

15 late

5 late

$$= \frac{\Delta t \times S_1 S_2}{S_1 \sim S_2}$$

A boy go to school on bicycle having average speed of 10 kilometre per hour he is late by 15 minute if he go with the speed of 12 km per hour he is late by 5 minutes find distance between house and school

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1. 10km
2. 100km
3. 12km
4. 60km

Distance

$$\frac{\text{Change in time} \times s1 \times s2}{s1 \sim s2}$$

$\frac{15}{60} \times \frac{10 \times 12}{2} = 10$

A boy go to school on bicycle having average speed of 10 kilometre per hour he is late by 15 minute if he go with the speed of 12 km per hour he is late by 5 minutes find distance between house and school

एक लड़का 10 किलोमीटर प्रति घंटे की औसत गति से साइकिल पर स्कूल जाता है, वह 15 मिनट देर से होता है यदि वह 12 किमी प्रति घंटे की गति के साथ जाता है तो उसे घर और स्कूल के बीच की दूरी का पता लगाने में 5 मिनट की देरी होती है।

1. 10km
2. 100km
3. 12km
4. 60km

Distance

$$\frac{\text{Change in time} \times s1 \times s2}{s1 \sim s2}$$

$\frac{10}{60}$ $\frac{10 \times 12}{2} = 10\,Km$

Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?

ठहराव को छोड़कर, एक बस की गति 54 किमी प्रति घंटा है और ठहराव सहित, यह 45 किमी प्रति घंटे है। प्रति घंटे बस कितने मिनट के लिए रुकती है?

A. 9
B. 10
C. 12
D. 20

Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?

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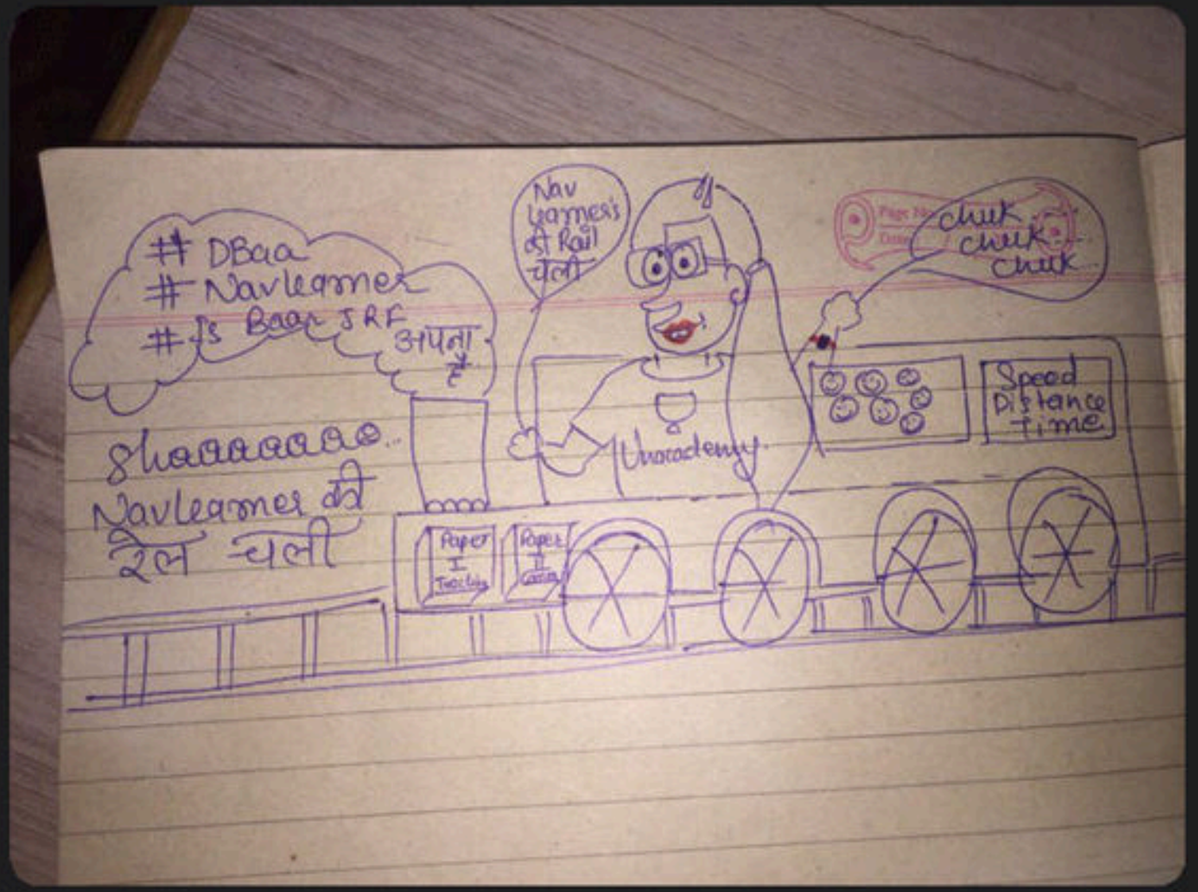
A. 9
B. 10
C. 12
D. 20

1hr----- 54 km without stoppage.
1hr----- 45 km with stoppage.
Speed = 54 km/hr.
Bus losses (54-45=) 9 km in 1hr.

Time = distance/speed.
= 9 km/54 km/hr.
= 9*60/54.
= 10 min.
Bus needs 10 min. To travel 9 km. So it losses 10 min to travel 9 km per hour.

Question
from Nain



A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is:

A. 100 kmph
B. 110 kmph
C. 120 kmph
D. 130 kmph

A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is:

A. 100 kmph
B. 110 kmph
C. 120 kmph
D. 130 kmph

Let speed of car = x

Speed of train = $\frac{150}{100} x = \frac{3}{2}x$

Distance = 75km

$$\frac{75}{x} - \frac{75}{\frac{3}{2}x} = \frac{12.5}{60}$$

$$\frac{75}{x} - \frac{50}{x} = \frac{5}{24}$$

$$x = \frac{24 \times 25}{5}$$

$$= 120 \text{ Kmph}$$

Golden Tips

If have less time then for FREE Learners just go through All Videos of
Maha Episode paper 1
& Paper 2 Commerce

Then Keep solving PYQs 2020 to 2018 all Shifts

Then Expected MCQs in Question Bank book

Then 2017 to 2012 First
Keep Giving Test Series on Unacademy
Then if have time PYQs till 2004 (Skip too old concepts like illogical topics & current affairs of back dates)

Keep Attending My Free Classes 7.30AM, 10PM

Golden Tips

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Then Keep solving PYQs 2020 to 2018 all Shifts

Then Expected MCQs in Question Bank book
New Course on 25 August on Expected MCQs
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& current affairs of back dates)

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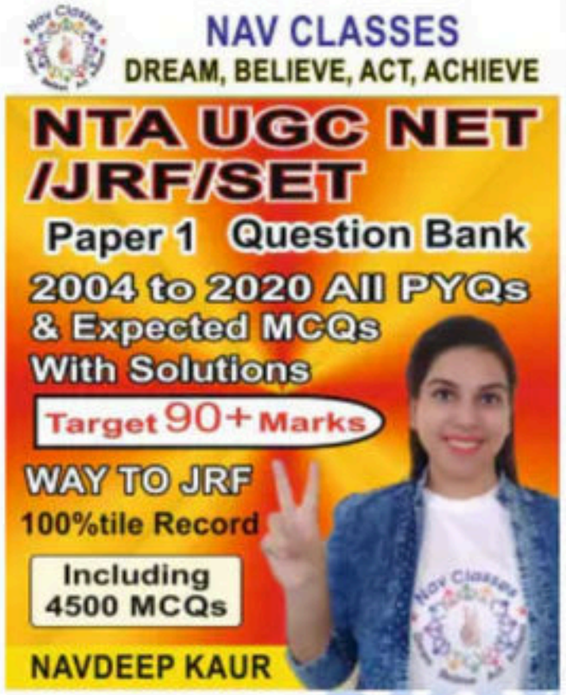

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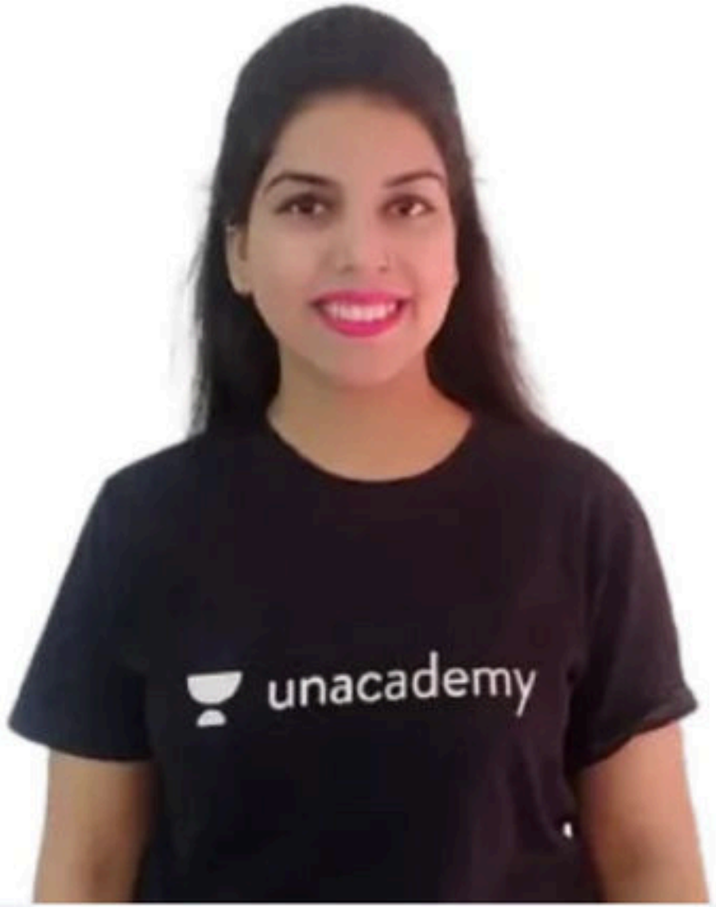

MAHA Episode

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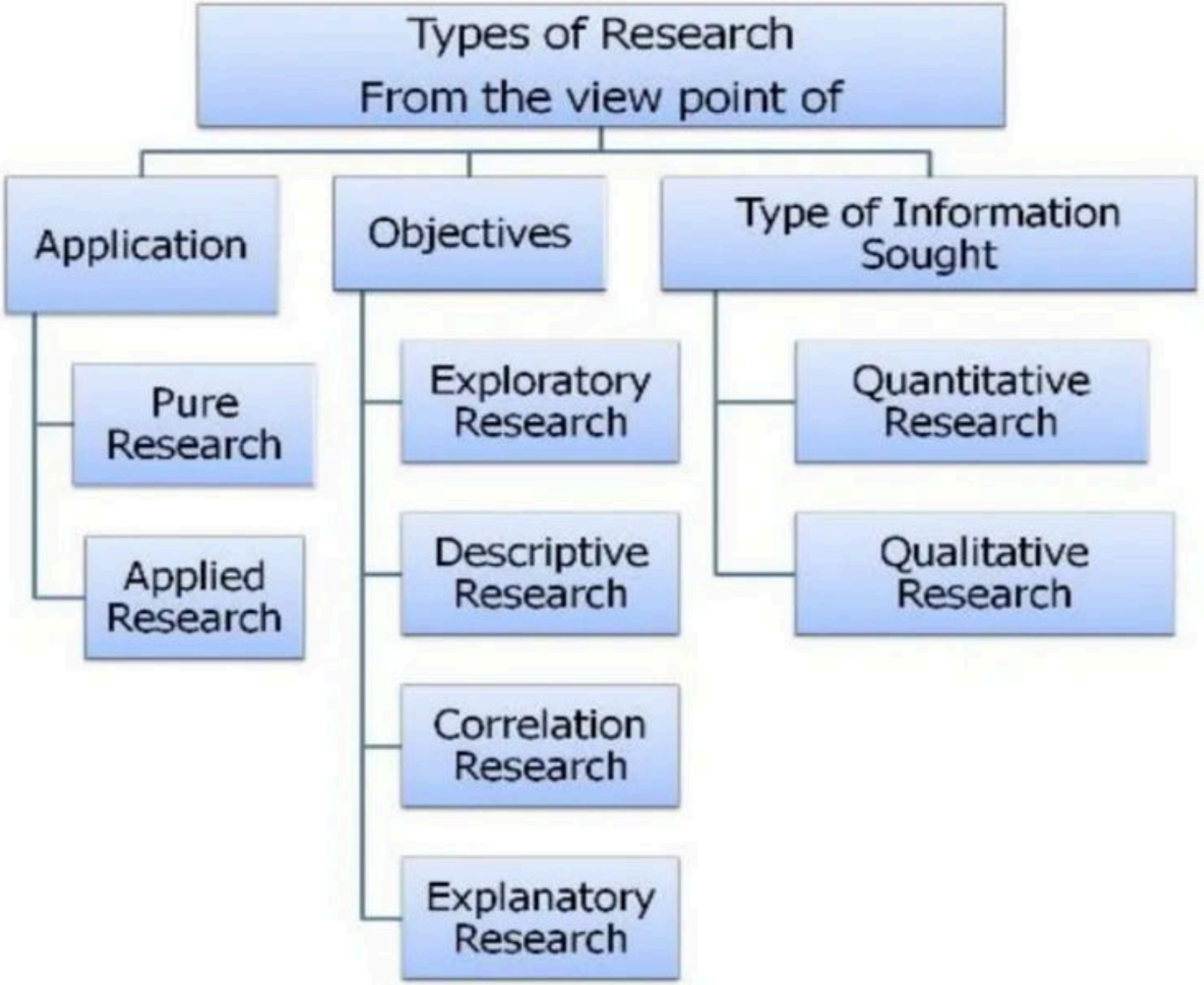
Research Aptitude

JRF is Mine

इस बार JRF लेकर रहेंगे

By Navdeep Kaur

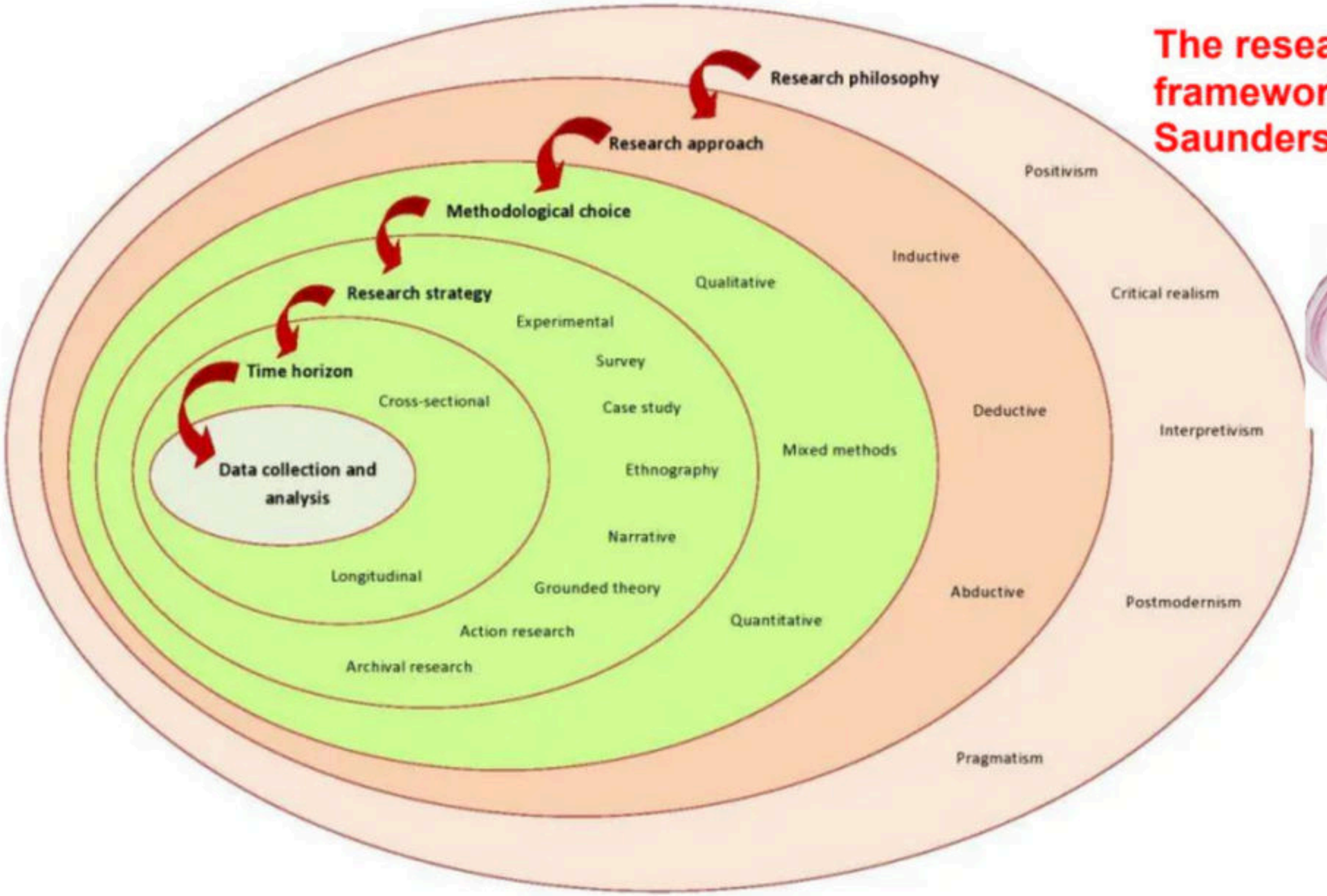


1. **On the basis of the outcome of the research, research can be classified as- Applied or Basic Research**
2. **On the basis of the type of data used, research can be classified as- Qualitative or Quantitative Research**
3. **On the basis of contacts, research can be classified as- Longitudinal or Cross-sectional research**
4. **On the basis of the objectives, research can be classified as- Descriptive, Correlational, Explanatory, Exploratory, Experimental.**

Inductive / qualitative / subjective / Particular to general	Deductive / quantitative / objective / general to particular

Type	Fundamental	Applied or Formal	Action	Evaluation or Explanatory	Exploratory	Descriptive	Causal or Exprmntl

Type	Analytical or Historical	Quasi-Experimental	Ex-post or Causal comparative	Ethnography	phenomenological	Narrative	Case study



The research onion framework presented by Saunders et al. (2012),

	Induction approach	Deduction approach	Abduction approach
Logic	Here, a researcher use premises developed from observations to draw untested conclusions	Here, when premises based on an existing theory are true then the conclusions are also true	Here, a known premises (Generally some surprising or incomplete conclusions) are used to generate testable conclusions
Generalization process	From specific to general	From general to specific	Interaction between the specific and the general
Generalizability	The findings cannot be	The findings can be generalised to the research settings or the context the theory is applied	The findings can be generalised to the research settings or the context the theory is applied

Source : Saunders et al. (2019)

Figure 1.
Participatory Research Process

By Navdeep Kaur

A poster presentation, at a congress or conference with an academic or professional focus, is the presentation of research information, usually peer-reviewed work, in the form of a paper poster that conference participants may view. A poster session is an event at which many such posters are presented

References usually come at the end of a text (essay or research report) and should contain only those works cited within the text. So, use the term 'References' to cover works cited, and 'Additional Bibliography' to refer to works read as general background.

A Bibliography is any list of references at the end of a text, whether cited or not. It includes texts you made use of, not only texts you referred to in your paper, but your own additional background reading, and any other articles you think the reader might need as background reading.

- APA (American Psychological Association) is used by commerce Education, Psychology, and Sciences 1929
- MLA (Modern Language Association) style is used by the Humanities MLA Style was established in 1951 by the Modern Language Association; the first MLA handbook was established in 1977.
- Chicago/Turabian style is generally used by Business, History, and the Fine Arts 1906.

	workshop	seminar	conference	symposium	colloquium	convention

Symposium

- A Symposium is a formal gathering in an academic setting where participants are experts in their fields.
- These experts present or deliver their opinions or viewpoints on a chosen topic of discussion.
- It would be correct to label a symposium as a small scale conference as the number of delegates is smaller.

- There are the usual discussions on the chosen topic after the experts have presented their speeches.
- The chief characteristic of a symposium is that it covers a single topic or subject and all the lectures given by experts are completed in a single day.
- A Symposium - prestigious conferences, generally leading venues in their respective fields.

A Conference refers to a formal meeting where participants exchange their views on various topics.

- ➔ Conference can take place in different fields, and it need not be academic in nature all the time.
- ➔ Thus, we have parent teacher conferences, sport conferences, a trade conference, a conference of journalists, conference of doctors, a conference of research scholars, and so on.
- ➔ A conference is a meeting that has been prearranged and involves consultation and discussion on a number of topics by the delegates.
- ➔ Conference and symposium are similar events where speakers come together and give their opinions on a chosen subject.
- ➔ Symposium can be described as a smaller conference that gets over in a single day with a lesser number of delegates.

Conference

A Seminar is a form of academic instruction, either at a university or offered by a commercial or professional organization.

- ➔ It has the function of bringing together small groups for recurring meetings, focusing each time on some particular subject, in which everyone present is requested to actively participate.
- ➔ The Instructor has prepared the concepts and techniques they will present and discuss through a combination of visual materials, interactive tools or equipment, and demonstrations.
- ➔ It includes some take home material for the participants that relates to the lecture. A full laboratory phase is not a requirement.

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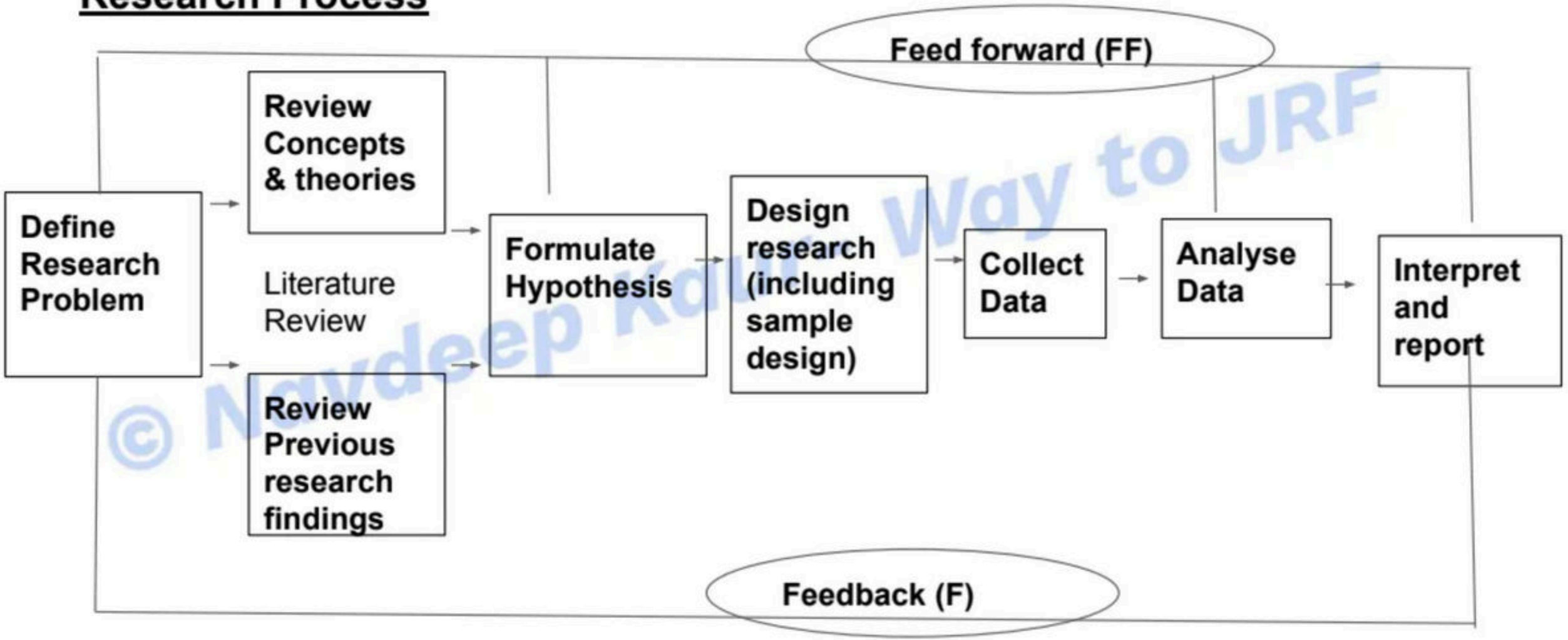
Seminar

Unacademy Plus By Navdeep Kaur

A Workshop includes all the elements of the Seminar, but with the largest portion being emphasized on "hand-on-practice" or laboratory work.

The Lab work is designed to reinforce, imprint and bring forward an immediate functioning dimension to the participant's eye and hands by implementing and practicing the actual concept or technique that was taught through the lecture and demonstration process.

Research Process



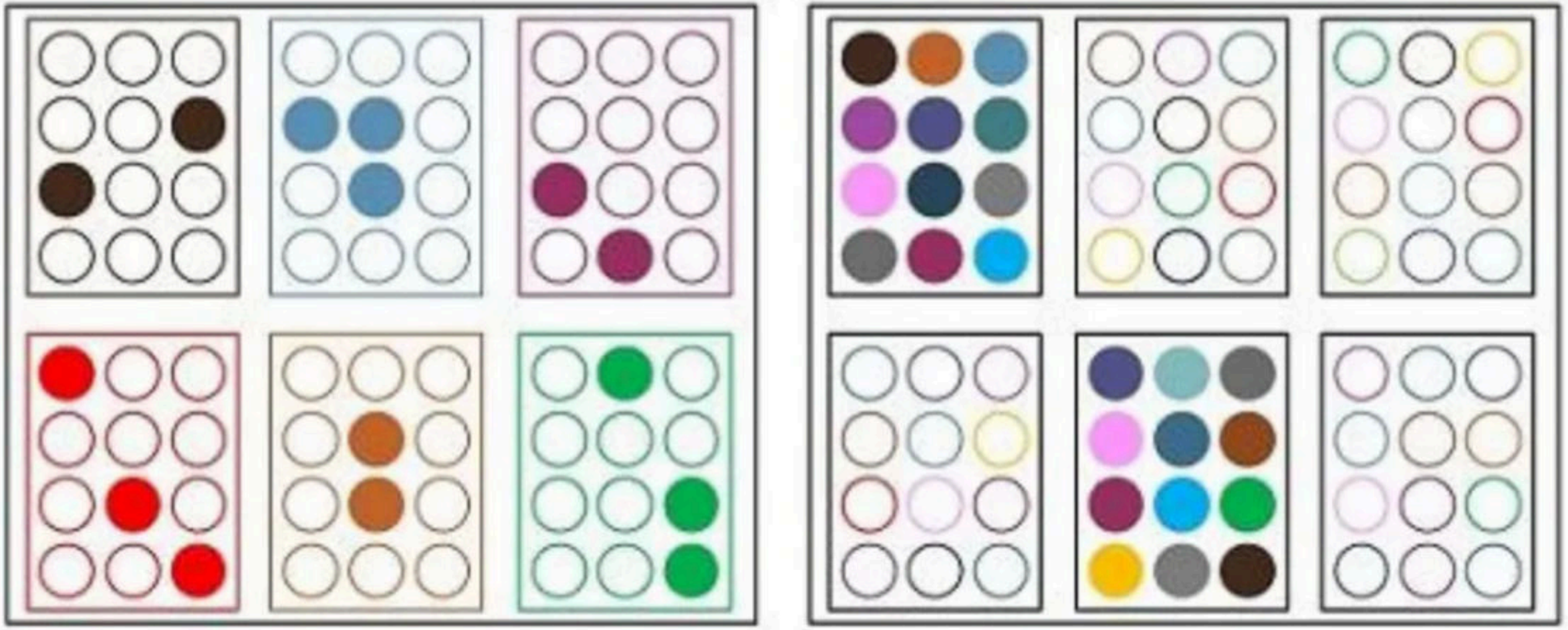
Types of Sampling

Probability sampling (Representative samples)

Probability samples are selected in such a way as to be representative of the population. They provide the most valid or credible results because they reflect the characteristics of the population from which they are selected (e.g., residents of a particular community, students at an elementary school, etc.). There are two types of probability samples: random and stratified.

1 Random sample

The term random has a very precise meaning. Each individual in the population of interest has an equal likelihood of selection. This is a very strict meaning -- you can't just collect responses on the street and have a random sample.



Stratified Sampling Vs Cluster Sampling

Method	Type	When to Use
Stratified Random Sampling	Probability	Heterogeneous population, several different groups (strata); some groups are related to study topic.
Cluster Sampling	Probability	Population made of units instead of individuals,
Quota Sampling	Non-Probability	Strata are present but stratified sampling isn't possible because of constraints.

Inductive reasoning

"In science, there is a constant interplay between inductive inference (based on observations) and deductive inference (based on theory), until we get closer and closer to the 'truth,' which we can only approach but not ascertain with complete certainty."

An example of inductive logic is, "The coin I pulled from the bag is a penny. That coin is a penny. A third coin from the bag is a penny. Therefore, all the coins in the bag are pennies."

Positivism is a philosophical theory stating that certain ("positive") knowledge is based on natural phenomena and their properties and relations.
Scientific Method: Deductive: postulate theories that we can test EMPIRICALLY
Thus, information derived from sensory experience, interpreted through reason and logic, forms the exclusive source of all certain knowledge.

Positivism holds that valid knowledge (certitude or truth) is found only in this a posteriori knowledge.

Positivism also holds that society, like the physical world, operates according to general laws.

Introspective and intuitive knowledge is rejected, as are metaphysics and theology because metaphysical and theological claims cannot be verified by sense experience.

Characteristics	Positivism	Post positivism
Data Type	Quantitative	Qualitative
Perspective	Objectivist	Subjectivist
Focus	Scientific	Humanistic
Methodology	Experimentalist	Interpretivist
Context	Traditionalist	Reflective/ reactive

approach which is based on the assumption that social phenomena can be explain by observing cause and effect is

a.positivism

b. interpretivism

c. both

d.none

Characteristics	Positivism	Post positivism
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CHARACTERISTIC	POSITIVIST	NON-POSITIVIST
Dominant data type	Quantitative	Qualitative
perspective	Objectivist	Subjectivist
focus	Scientific	Humanistic
methodology	Experimentalist	Interpretivist
context	Traditionalist	Reflexive/ reactive

ICT in Research helps

- ➔ find information
- ➔ web based tools to research
- ➔ Collection of data
- ➔ online journal
- ➔ MOOCs
- ➔ web based services
- ➔ institutional resources
- ➔ archives
- ➔ presentation and visualisation
- ➔ Research processes are more effective, efficient
- ➔ Qualitative, quantitative softwares
- ➔ web discoveries
- ➔ online questionnaires
- ➔ research data management
- ➔ statistical analysis
- ➔ grammar or summary making
- ➔ paraphrasing
- ➔ Microblogging: short msgs
- ➔ Plagiarism checking
- ➔ data sharing
- ➔ collaborative writing
- ➔ reference management
- ➔ Research design tools

Plagiarism detection Software

Software	Developer	First public release	Latest stable version	License	Deployment options
Unicheck	Unicheck	2014	SaaS	Proprietary	SaaS
Turnitin	iParadigms	1997		proprietary	
PlagTracker	Devellar	2011		freemium	
PlagScan	PlagScan GmbH	2008		limited	SaaS
iThenticate	iParadigms	2004	2017	proprietary	
HelioBLAST	Virginia Bioinformatics Institute			?	(free of charge web service)
Grammarly	Grammarly, Inc.		2016	freemium	SaaS
Copyscape	Indigo Stream Technologies, Ltd.	2004		freemium	

Proprietary software: also known as "closed-source software", is non-free computer software

Freemium: provided free of charge, but money (premium) is charged for additional features, services, or virtual (online) or physical (offline) goods

SaaS: Software as a service is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. It is sometimes referred to as "on-demand software", and was formerly referred to as "software plus services" by Microsoft

Grounded Theory: theory is developed from the data, rather than the other way around. That makes this is an inductive approach, meaning that it moves from the specific to the more general.

The method of study is essentially based on three elements: concepts, categories and propositions, or what was originally called "hypotheses".

However, concepts are the key elements of analysis since the theory is developed from the conceptualization of data, rather than the actual data.

Grounded theory, pioneered by Glaser and Strauss

Strauss & Corbin, authors of "Basics of Qualitative research: Grounded Theory Procedures and Techniques" are two of the model's greatest advocates, and define it as follows:

"The grounded theory approach is a qualitative research method that uses a systemat

The goal is to go from the general to the specific without losing sight of what makes the subject of a study unique.

Stages of analysis

Stage	Purpose
Codes	Identifying anchors that allow the key points of the data to be gathered
Concepts	Collections of codes of similar content that allows the data to be grouped
Categories	Broad groups of similar concepts that are used to generate a theory
Theory	A collection of categories that detail the subject of the research

Research articles are published in journals/magazines while Research papers are presented at conferences.

A research article is an original research published in a peer-reviewed journal.
Research paper is also original research published in a conference and presented as an oral presentation or as a poster.

By Navdeep Kaur

Other Types of Ethical Violations

- **Duplicate publication/submission** of research findings; failure to inform the editor of related papers that the author has under consideration or "in press"
- **Unrevealed conflicts** of interest that could affect the interpretation of the findings
- **Misrepresentation of research findings** - use of selective or fraudulent data to support a hypothesis or claim

By Navdeep Kaur

Misleading data can also arise from poor experimental design or careless measurements as well as from improper manipulation.

When a mistake appears in a journal article or book, it should be corrected in a note, erratum (for a production error), or Additions/Corrections

Sooner or later ……. ethical violations get exposed

By Navdeep Kaur

Research Ethics

An alternative hypothesis (H1) is a statement that directly contradicts a null hypothesis by stating that that the actual value of a population parameter is less than, greater than, or not equal to the value stated in the null hypothesis.

The alternative hypothesis states what we think is wrong about the null hypothesis

To choose which Hypothesis will come in Null and which in Alternate We can refer Following chart of Nav Chart:

Null hypothesis Ho	=	Independent	Negative	Indifference
Alternative hypothesis Ha	≠	Dependent	Positive	Difference

By Navdeep Kaur

	State of Nature	
Decision we make	H_o is true	H_o is false
Accept H_o	ok	Type II error probability β
Reject H_o	Type I error probability α	ok

Type I errors are generally considered more serious than Type II errors. The probability of a Type I error (α) is called the significance level and is set by the experimenter.

One uses the abbreviation *ibid.*(abbreviation for the Latin *Ibidem*, meaning "The same"). in footnotes or endnotes when citing the same page from the same consecutively. If, for example, you reference this article more than once, you may use the abbreviation in your footnotes like so:

1. Susan Peck MacDonald, "The Erasure of Language," *College Composition and Communication* 58, no. 4 (2007): 619.
2. Ibid.

Op. cit. (abbreviation for the Latin *opus citatum*, meaning "the work cited") is used to direct your reader to a previously noted full citation located somewhere else in your work. It is falling into disuse. It must include some indication of the work you are referring to, the abbreviation op. cit. and should include the page number. An example of use would appear like so:

1. MacDonald *op. cit.*, p.620
2. EXAMPLES

4. R. Poirer, "Learning physics," (Academic, New York, 1993), p. 4.
5. *Ibid.*, p. 9.
6. T. Eliot, "Astrophysics," (Springer, Berlin, 1989), p. 141.
7. R. Builder, *J Phys Chem* 20(3) 1654-57, 1991.
8. Eliot, *op. cit.*, p.148.

Loc. cit.

Loc. cit. (Latin, short for ***loco citato***, meaning "in the place cited") is a footnote or endnote term used to repeat the title and page number for a given work (and author). *Loc. cit.* is used in place of ibid. when the reference is not only to the work immediately preceding, but also refers to the same page. *Loc. cit.* is also used instead of *op. cit.* when reference is made to a work previously cited and to the same page in that work. As such, *loc. cit.* is never followed by volume or page numbers.

· Example 1:

9. R. Millan, "Art of Latin grammar" (Academic, New York, 1997), p. 23.

10. *Loc. cit.*

In the above example, the *loc. cit.* in reference #10 refers to reference #9 in its entirety, including page number. Note that *loc. cit.* is capitalized in this instance.

Example 2:

9. R. Millan, "Art of Latin grammar" (Academic, New York, 1997), p. 23.
10. G. Wiki, "Blah and its uses" (Blah Ltd., Old York, 2000), p. 12.
11. Millan, *loc. cit.*

In the second example, the *loc. cit.* in reference #11 refers to reference #9, including page number.

et al. **et** alia indicates other contributors (authors, editors, etc.) When dealing with a work by more authors For example:

(Lucas, Horowitz, & Stovitz, 1995)

On subsequent references to that source, use the first author's last name in the signal phrase or parentheses followed by **et al**.

(Lucas et al., 1995)

The impact factor (IF) or journal impact factor (JIF) of an academic journal is a measure reflecting the yearly average number of citations to recent articles published in that journal. It is frequently used as a proxy for the relative importance of a journal within its field; journals with higher impact factors are often deemed to be more important than those with lower ones.

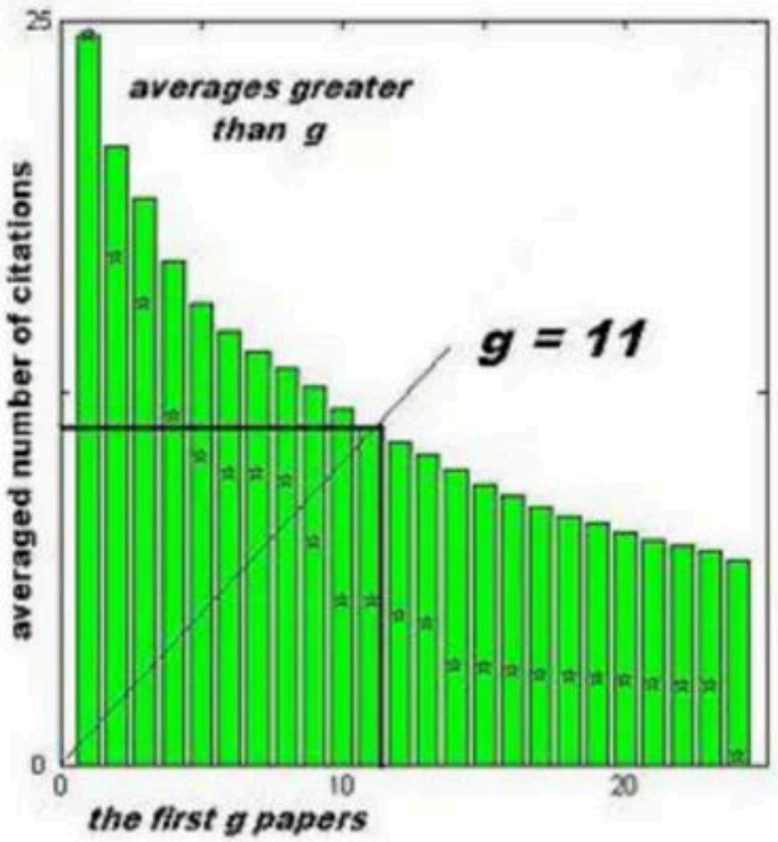
The **h-index** is an author-level metric that attempts to measure both the productivity and citation **impact** of the publications of a scientist or scholar.
The h index was proposed by J.E. Hirsch in 2005

H- index: Citation must be more than or equal to Article rank

G-index

The g-index is an index for quantifying productivity in science, based on publication record (an author-level metric). It was suggested in 2006 by Leo Egghe.

The index is calculated based on the distribution of citations received by a given researcher's publications, such that given a set of articles ranked in decreasing order of the number of citations that they received, the **g-index** is the unique largest number such that the top g articles received together at least g^2 citations.



G- index: CF of citation must be more or equal to g^2 (Rank square)

i10-Index. Created by Google Scholar and used in Google's My Citations feature.**i10-Index** = the number of publications with at least 10 citations. This very simple measure is only used by Google Scholar, and is another way to help gauge the productivity of a scholar

i10- index: Articles having more or equal to than 10 citations

Firstly rearrange citations in descending order

Rank of Author 1	citation	CF of citation	g^2 (Rank square)
1	30	30	1
2	19	49	4
3	15	64	9
4	13	77	16
5	8	85	25
6	6	91	36
7	5	96	49
8	4	100	64
9	3	103	81
10	1	104	100

For Author 1

H- index: Citation must be more than or equal to Article rank

G- index: CF of citation must be more or equal to g^2 (Rank square)

i10- index: Articles having more or equal to than 10 citations

Firstly rearrange citations in descending order

Rank of Author 1	citation	CF of citation	g^2 (Rank square)
1	30	30	1
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4	13	77	16
5	8	85	25
6	6	91	36
7	5	96	49
8	4	100	64
9	3	103	81
10	1	104	100

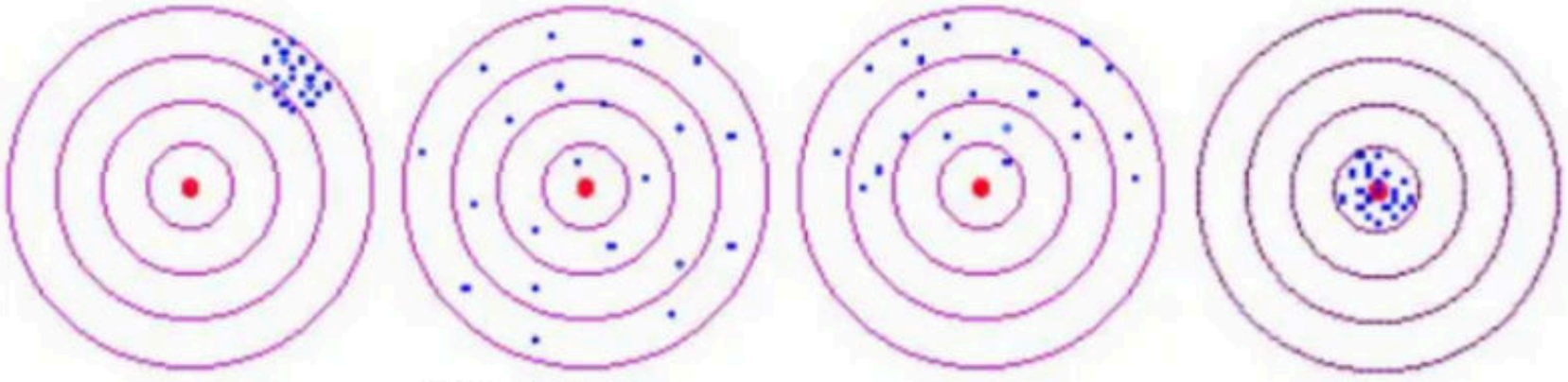
For Author 1

H- index: Citation must be more than or equal to Article rank = 6

G- index: CF of citation must be more or equal to g^2 (Rank square) = 10

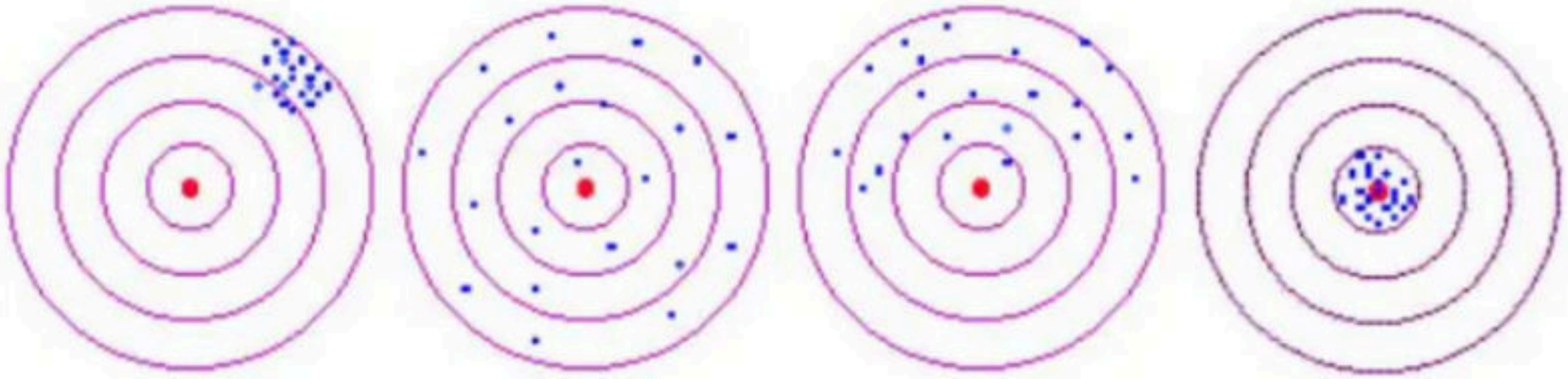
i10- index: Articles having more or equal to than 10 citations = 4

RELIABILITY OR VALIDITY - WHICH IS MORE IMPORTANT



1: the gun is not pointed at the target, making it invalid, but there is great consistency in the shots in one direction, indicating that it is reliable (In a sense, it is very reliably invalid).

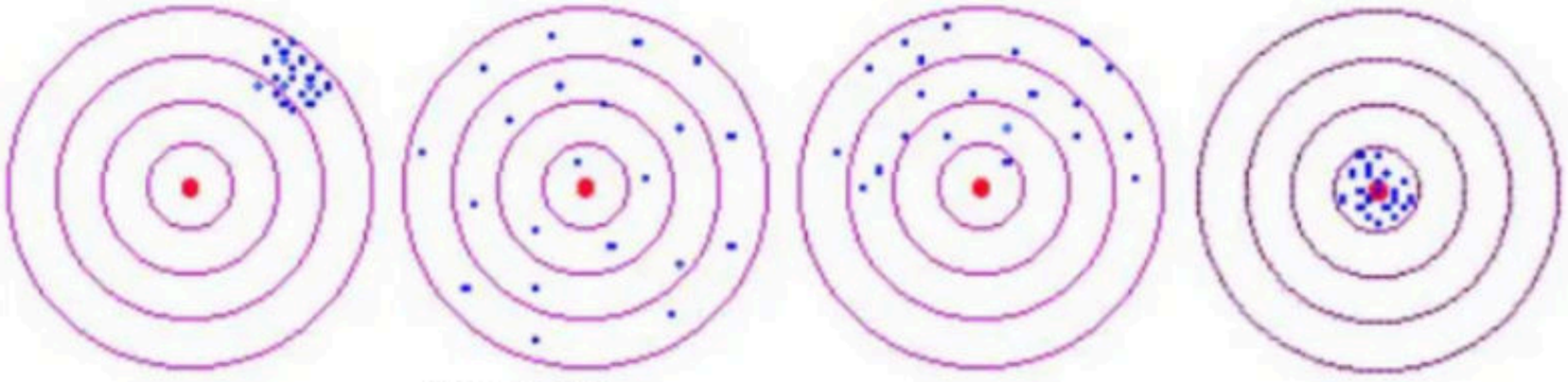
RELIABILITY OR VALIDITY - WHICH IS MORE IMPORTANT



Reliable Not Valid | Loosely Valid Not Reliable | Neither Reliable Nor Valid | Both Reliable And Valid

2: the gun is also aimed in the direction of the target, but the shots are widely scattered, indicating low consistency or reliability. Thus the poor reliability undermines an attempt to achieve validity.

RELIABILITY OR VALIDITY - WHICH IS MORE IMPORTANT



Reliable
Not Valid

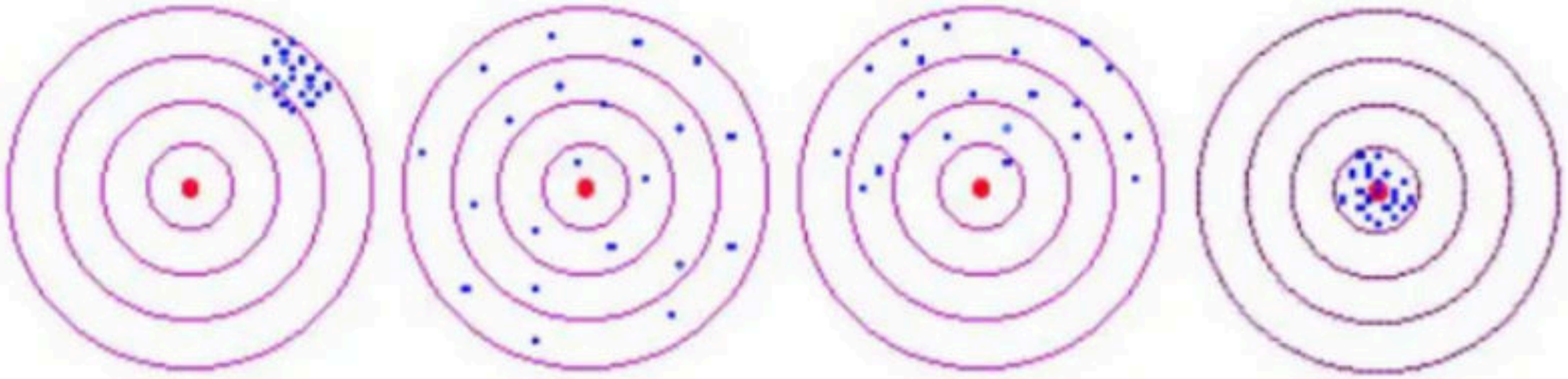
Loosely
Valid
Not Reliable

Neither Reliable
Nor Valid

Both Reliable
And Valid

3: the gun is not pointed at the target making it invalid, and the lack of consistency in the direction of the shots indicates its poor reliability.

RELIABILITY OR VALIDITY - WHICH IS MORE IMPORTANT



Reliable
Not Valid

Loosely
Valid
Not Reliable

Neither Reliable
Nor Valid

Both Reliable
And Valid

4: the gun is aimed in a valid direction towards the target, and all the shots are consistently directed, indicating that they are reliable.

Three basic methods for establishing the reliability of empirical measurements are:

i) Test - Retest Method

ii) Alternative Form Method / Equivalent Form / Parallel Form

iii) Split-Half Method: This is done by comparing the results of one half of a test with the results from the other half.

Kuder–Richardson: Formula 20 (KR-20), first published in 1937, is a measure of internal consistency reliability for measures with dichotomous choices. It was developed by Kuder and Richardson.

Approaches to Validation of Measuring Instrument

i) Logical validity / Face validity

ii) Jury opinion This is an extension of the method of logical validation, except that in this case the confirmation of the logic is secured from a group of persons who would be considered experts in the field in which the measuring instrument is being used.

iii) Known-group

iv) Independent criteria

v) Content validity

vi) Construct validity

vii) Criterion-related validity

Which one of the following research procedures will figure under post positivistic approach?

1. Normative survey
2. Experimental study
3. Ethnographic study
4. Ex post facto study

निम्नलिखित में से कौन सी अनुसंधान प्रक्रिया पोस्ट पॉज़िटिव दृष्टिकोण के तहत पता लगाएगी?

1. सामान्य सर्वेक्षण
2. प्रायोगिक अध्ययन
3. नृवंशविज्ञान अध्ययन
4. पूर्व पोस्ट वास्तविक अध्ययन

Which one of the following research procedures will figure under post positivistic approach?

1. **Normative survey**
2. **Experimental study**
3. **Ethnographic study**
4. **Ex post facto study**

Post positivist approach is qualitative in nature from options Normative are ethics and surveys are quantitative, Experimental study and Ex post facto study are quantitative
Ethnographic study is based on culture hence is correct answer

निम्नलिखित में से कौन सी अनुसंधान प्रक्रिया पोस्ट पॉज़िटिव दृष्टिकोण के तहत पता लगाएगी?

1. **सामान्य सर्वेक्षण**
2. **प्रायोगिक अध्ययन**
3. **नृवंशविज्ञान अध्ययन**
4. **पूर्व पोस्ट वास्तविक अध्ययन**

In using the hypothetico-deductive research paradigm which of the following sequences is considered appropriate?

1. Hypothesis making, Hypothesis testing, Arriving at generalization and Conclusion
2. Establishing a research problem, Hypothesis making, Hypothesis testing, Arriving at generalization and Conclusion
3. Hypothesis making, Establishing a research problem, Hypothesis testing, Arriving at generalization and Conclusion
4. Hypothesis testing, Hypothesis making, Finalizing the research problem, Arriving at generalization and Conclusion

हाइपेटिको-डिडक्टिव रिसर्च प्रतिमान का उपयोग करने में निम्नलिखित में से कौन सा अनुक्रम उपयुक्त माना जाता है?

1. परिकल्पना बनाना, परिकल्पना परीक्षण, सामान्यीकरण और निष्कर्ष पर पहुंचना
2. एक शोध समस्या की स्थापना, परिकल्पना बनाना, परिकल्पना परीक्षण, सामान्यीकरण और निष्कर्ष पर पहुंचना
3. परिकल्पना बनाना, एक शोध समस्या की स्थापना, परिकल्पना परीक्षण, पर पहुंचना सामान्यीकरण और निष्कर्ष
4. परिकल्पना परीक्षण, परिकल्पना बनाना, शोध समस्या को अंतिम रूप देना, सामान्यीकरण और निष्कर्ष पर पहुंचना

In using the hypothetico-deductive research paradigm which of the following sequences is considered appropriate?

1. Hypothesis making, Hypothesis testing, Arriving at generalization and Conclusion
2. Establishing a research problem, Hypothesis making, Hypothesis testing, Arriving at generalization and Conclusion
3. Hypothesis making, Establishing a research problem, Hypothesis testing, Arriving at generalization and Conclusion
4. Hypothesis testing, Hypothesis making, Finalizing the research problem, Arriving at generalization and Conclusion

हाइपेटिको-डिडक्टिव रिसर्च प्रतिमान का उपयोग करने में निम्नलिखित में से कौन सा अनुक्रम उपयुक्त माना जाता है?

1. परिकल्पना बनाना, परिकल्पना परीक्षण, सामान्यीकरण और निष्कर्ष पर पहुंचना
2. एक शोध समस्या की स्थापना, परिकल्पना बनाना, परिकल्पना परीक्षण, सामान्यीकरण और निष्कर्ष पर पहुंचना
3. परिकल्पना बनाना, एक शोध समस्या की स्थापना, परिकल्पना परीक्षण, पर पहुंचना सामान्यीकरण और निष्कर्ष
4. परिकल्पना परीक्षण, परिकल्पना बनाना, शोध समस्या को अंतिम रूप देना, सामान्यीकरण और निष्कर्ष पर पहुंचना

Hypothetico-deductive is quantitative and deductive in nature and in steps of deductive Hypothesis making come in initial stages also at end specific conclusion is deduced

The personalistic styles of writing a research report are permissible in which of the following research?

A. Grounded theory research
B. Experimental research
C. Participant-observation based research
D. Historical research
E. Case study research

Choose the correct answer from the options given below:

1. A, B and Conly
2. B, C and D only
3. C, D and E only
4. A, C and E only

शोध रिपोर्ट लिखने की व्यक्तिगत शैली निम्नलिखित में से किस अनुसंधान में स्वीकार्य है?

A. ग्राउंडेड थ्योरी रिसर्च
B. प्रायोगिक अनुसंधान
C. प्रतिभागी-अवलोकन आधारित अनुसंधान
डी। ऐतिहासिक शोध
ई। केस स्टडी रिसर्च

नीचे दिए गए विकल्पों में से सही उत्तर चुनें:

The personalistic styles of writing a research report are permissible in which of the following research?

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Choose the correct answer from the options given below:

1. A, B and Conly
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3. C, D and E only
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डी। ऐतिहासिक शोध
ई। केस स्टडी रिसर्च

Personalistic styles means where researcher is more involved with sample or participants and is qualitative in nature
> Grounded theory is method to do fundamental research
Participant-observation based research are qualitative
> Experiment is quantitative hence cannot be answer
> Historical is qualitative but is based on past data hence cannot be answer
> case study can be qualitative or qualitative as per Question. Hence in this can as B, D cannot be answer, we consider case study as qualitative

College teacher plants research program in which he/she intend to improve so emotional aspect of his or her classroom climate during teaching which of following process method will be considered appropriate in this context
A) Experimental method
B) Descriptive method
C) Historical method
D) Action research method

कॉलेज के शिक्षक ने अनुसंधान कार्यक्रम जिसमें वह / उसकी कक्षा के जलवायु के इतने भावनात्मक पहलू को सुधारने का इरादा शिक्षण के दौरान निम्नलिखित में से कौन सा प्रक्रिया विधि इस संदर्भ में उपयुक्त माना जाएगा?
ए) प्रायोगिक विधि
बी) वर्णनात्मक विधि
ग) ऐतिहासिक विधि
डी) कार्रवाई अनुसंधान विधि

College teacher plants research program in which he/she intend to improve so emotional aspect of his or her classroom climate during teaching which of following process method will be considered appropriate in this context

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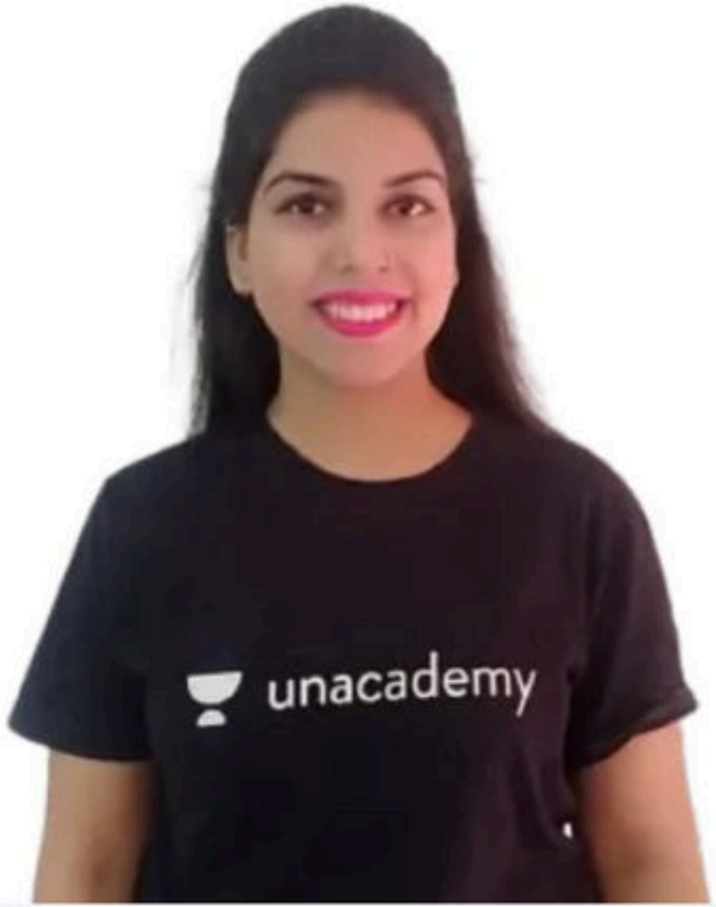
ए) प्रायोगिक विधि
बी) वर्णनात्मक विधि
ग) ऐतिहासिक विधि
डी) कार्रवाई अनुसंधान विधि

Action research method is done to solve problem and improve present situation hence as per Question researcher intend to improve so emotional aspect

NTA UGC NET - Way to JRF 2021

Target: 100 Percentile AIR- 1



MAHA Episode

Complete in 1 Class

Teaching Aptitude

JRF is Mine

इस बार JRF लेकर रहेंगे

Definition of teaching

Teaching includes all the activities of providing education to other. The person who provides education is called a teacher. The teacher uses different methods for giving best knowledge to his students. He tries his best to make understand students. His duty is to encourage students to learn the subjects.

Teaching means interaction of teacher and students. They participate for their mutual benefits. Both have their own objective and target is to achieve them.

Many great teachers of the world define teaching in a different way and we can say that teaching is just to train the students so that they can stand on their own foot in society.

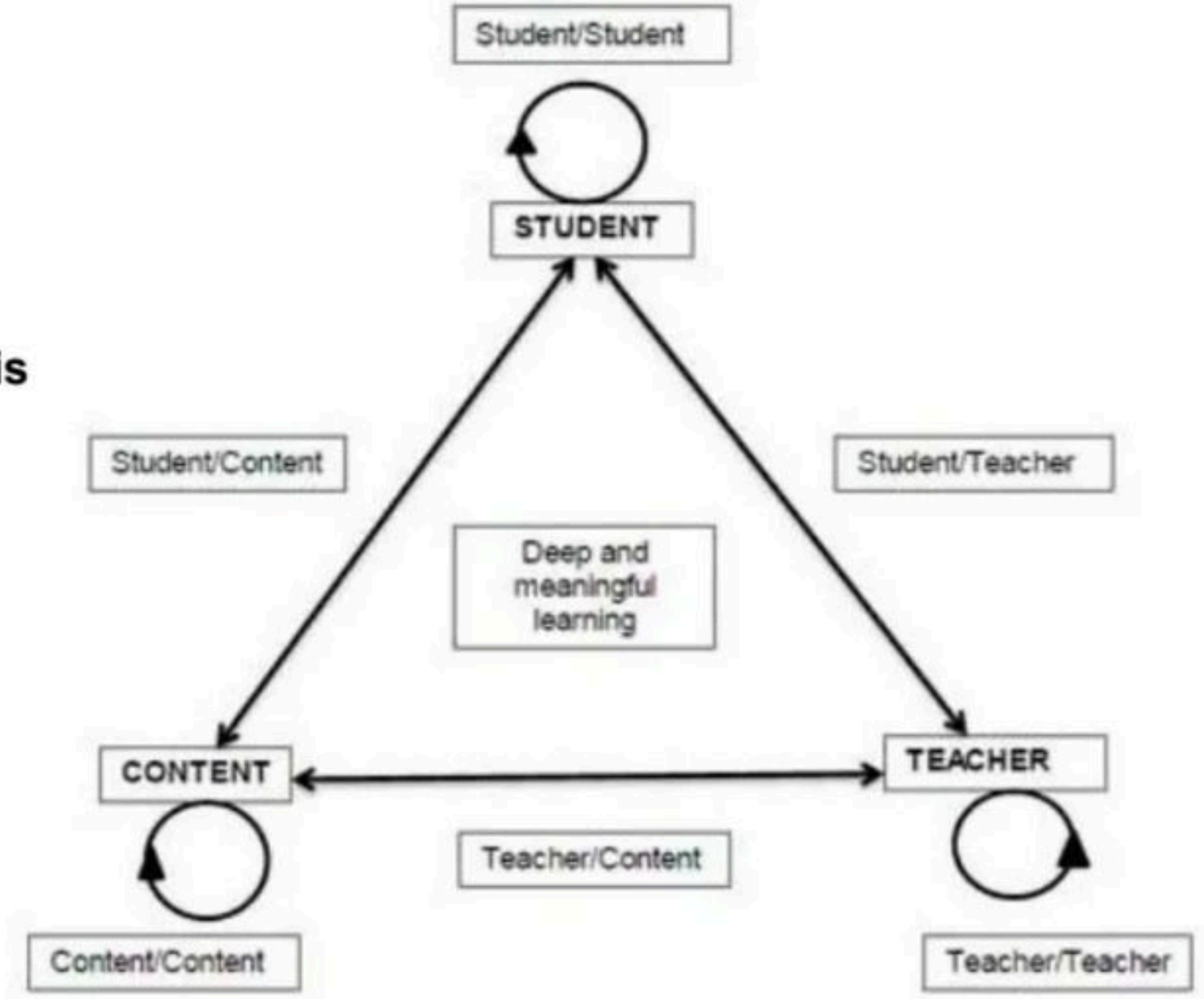
In teaching, three main aspects comes in our front

1st is teacher

2nd is students

3rd is education

Education, according to John Dewey, is a three-part process. Any educational system that does not have a social component is incomplete. The social milieu in which the educator and educand interact is included in the modern understanding of education. The educator, the educand, and the social environment all interact in education. As a result, education is thought to be tripolar.



Nature and characteristics of teaching

1. The main character of teaching is to provide guidance and training.
2. Teaching is an interaction between teacher and students.
3. Teaching is an art to giving knowledge to students with effective way.
4. Teaching is a science to educate fact and causes of different topics of different subjects.
5. Teaching is continuing process.
6. A teacher can teach effectively if he has full confidence on the subject.

7. Teaching encourages students to learn more and more.
8. Teaching is formal as well as informal
9. Teaching is communication of information to students. In teaching, teacher imparts information in an interesting way so that students can easily understand the information.
10. Teaching is a tool to help the student to adjust himself in society and its environment.
11 Intellectual activity meaningful functioning of mind

There are different types of teaching Techniques which can be categorised into three broad types.

These are

- ➔ teacher-centred methods,
- ➔ learner-centred methods,
- ➔ content-focused methods and
- ➔ interactive/participative methods.

Effective teachers:

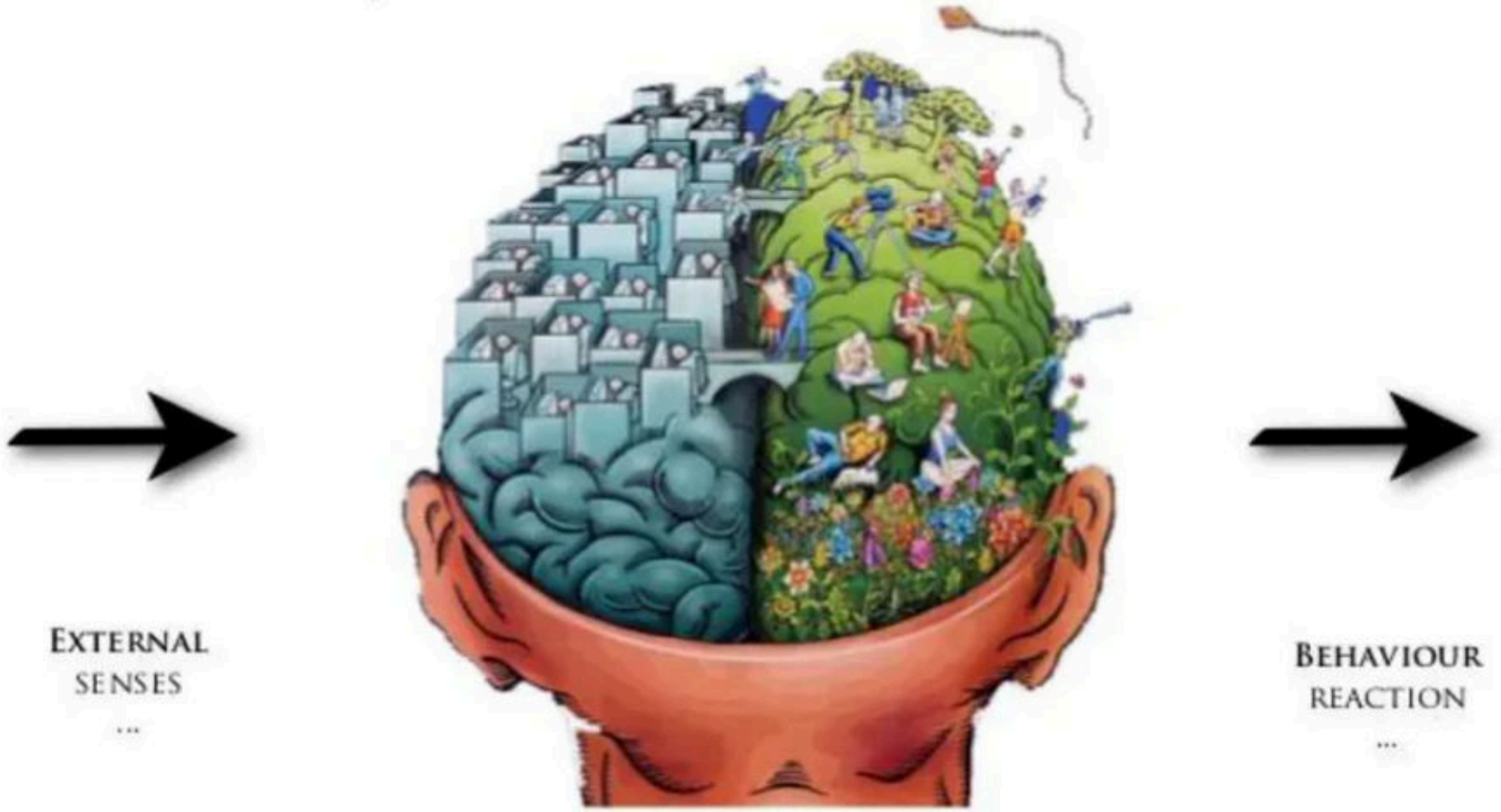
- are clear about instructional goals
- are knowledgeable about curriculum content and the strategies for teaching it
- communicate to their students what is expected of them – and why
- make expert use of existing instructional materials in order to devote more time to practices that enrich and clarify the content
- are knowledgeable about their students, adapting instruction to their needs and anticipating misconceptions in their existing knowledge

- **teach students metacognitive strategies and give them opportunities to master them**

Metacognitive strategies refers to methods used to help students understand the way they learn; in other words, it means processes designed for students to 'think' about their 'thinking'.

- **address higher- as well as lower-level cognitive objectives**
- **monitor students' understanding by offering regular appropriate feedback**
- **integrate their instruction with that in other subject areas**
- **accept responsibility for student outcomes**

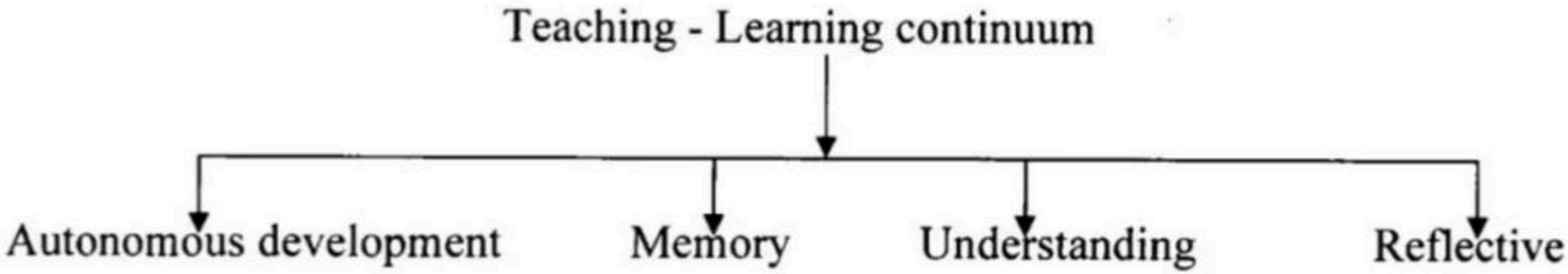
Cognitive Psychology



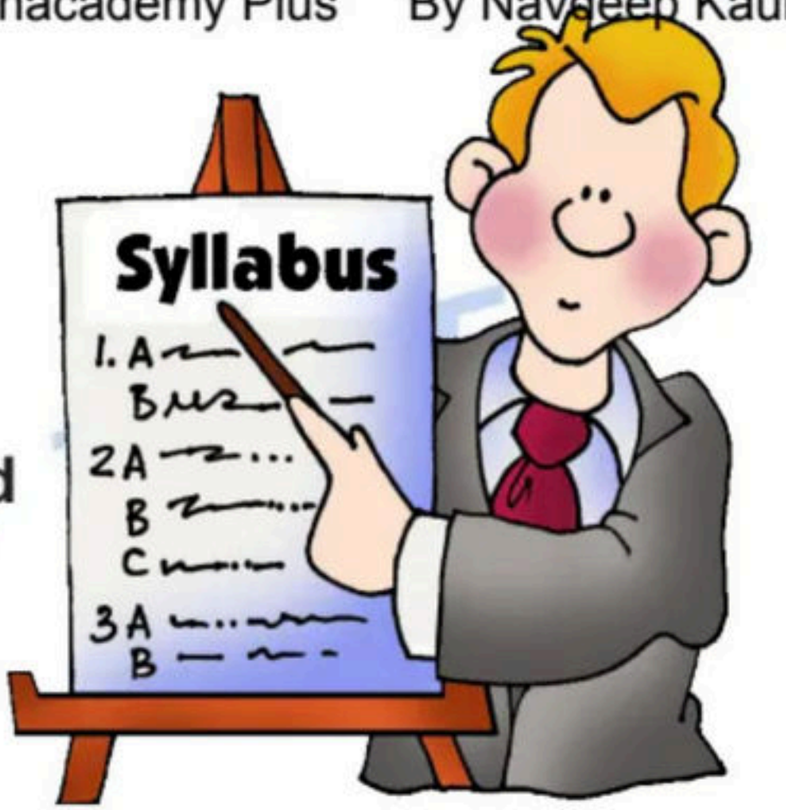
Different levels of teaching

Morris L. Biggie (1976) is his work 'Learning theories for Teachers' observes that teaching learning situations may be characterized according to where they fall on a continuum that ranges from 'thoughtless' to 'thoughtful' modes of operation.

The four levels of teaching and learning may be shown on a continuum in the following way:



Syllabus:



- ➔ outline a summary of topics to be covered in education or training course
- ➔ descriptive in nature
- ➔ syllabus is either set by exam board or prepared by professor who supervise or control course quality

Curriculum:

- ➔ define the prescribed course of study, which students must fulfill in order to pass examination
- ➔ sum total of all experiences that student undergoes in school including academic co-curricular activities other type of exposure

Co-curricular activities refers to activities, programs, and learning experiences that complement, in some way, what students are learning in school—i.e., the experiences that are connected to or mirror the academic curriculum.

Some examples of co-curricular activities are:

- ➔ Debating
- ➔ Essay Writing
- ➔ Spelling Bees
- ➔ Indoor Sports
- ➔ Outdoor Sports
- ➔ Helping Organize School Events
- ➔ Being active in School Clubs

Extracurricular activities as the name suggests are extra or additional activities that take place outside the curriculum and outside the classroom.

examples of extracurricular activities are:

- ➔ Playing a musical Instrument
- ➔ Singing
- ➔ Dance
- ➔ Drawing and painting
- ➔ Tailoring
- ➔ Art and craft
- ➔ Weaving

Aims of Teaching

a. Change the behaviour of students – Teaching
b. Improve learning skills of students – Conditioning
c. Shaping behaviour & conduct – Training
d. Acquisition of knowledge – Instruction
e. Formation of beliefs - Indoctrination

MAXIMS सिद्धांत / PRINCIPLE OF TEACHING

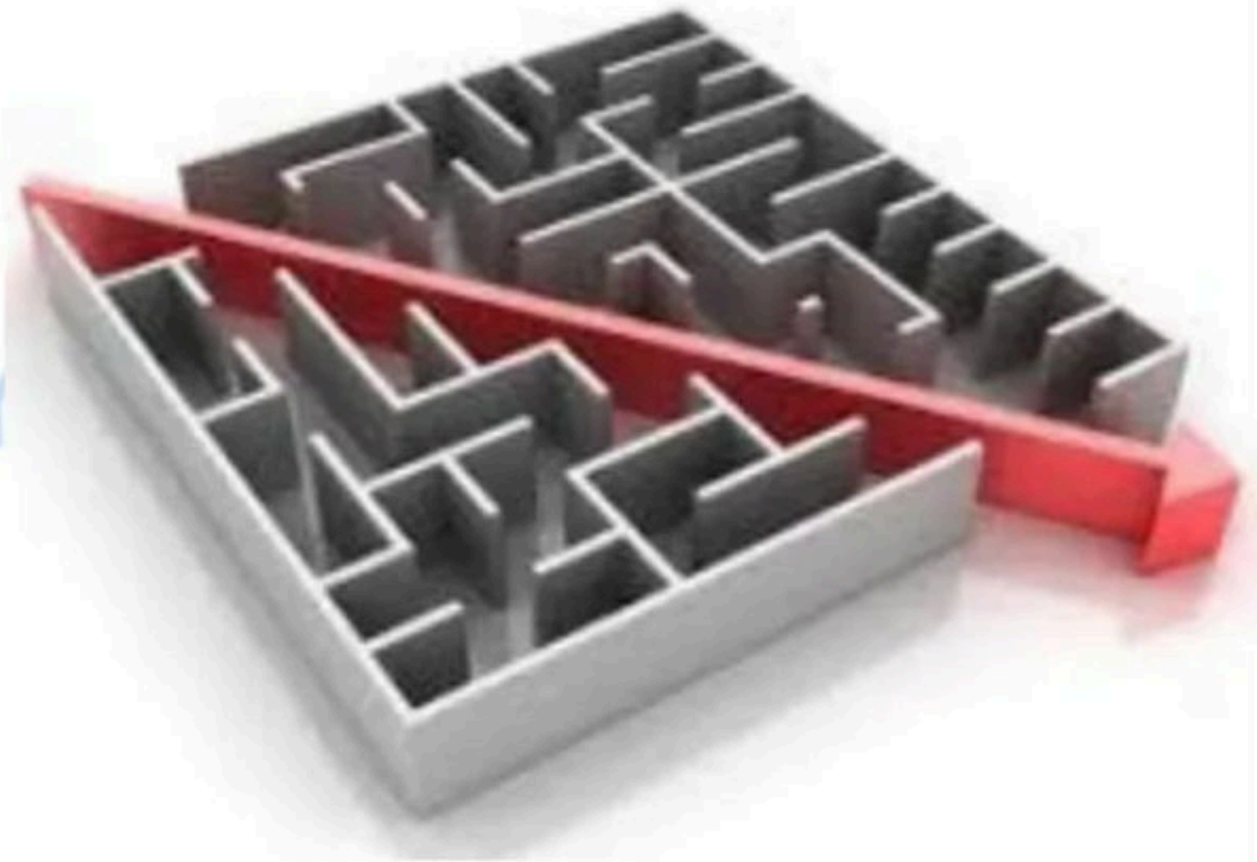
Every teacher wants to make maximum involvement and participation of the learners in the learning process.

He sets the classroom in such a way so that it becomes attractive for them. He uses different methods, rules, principles etc in order to make his lesson effective and purposeful.

He uses general rule or formula and applies it to particular example in order to make teaching – learning process easy and upto the understandable level of students.

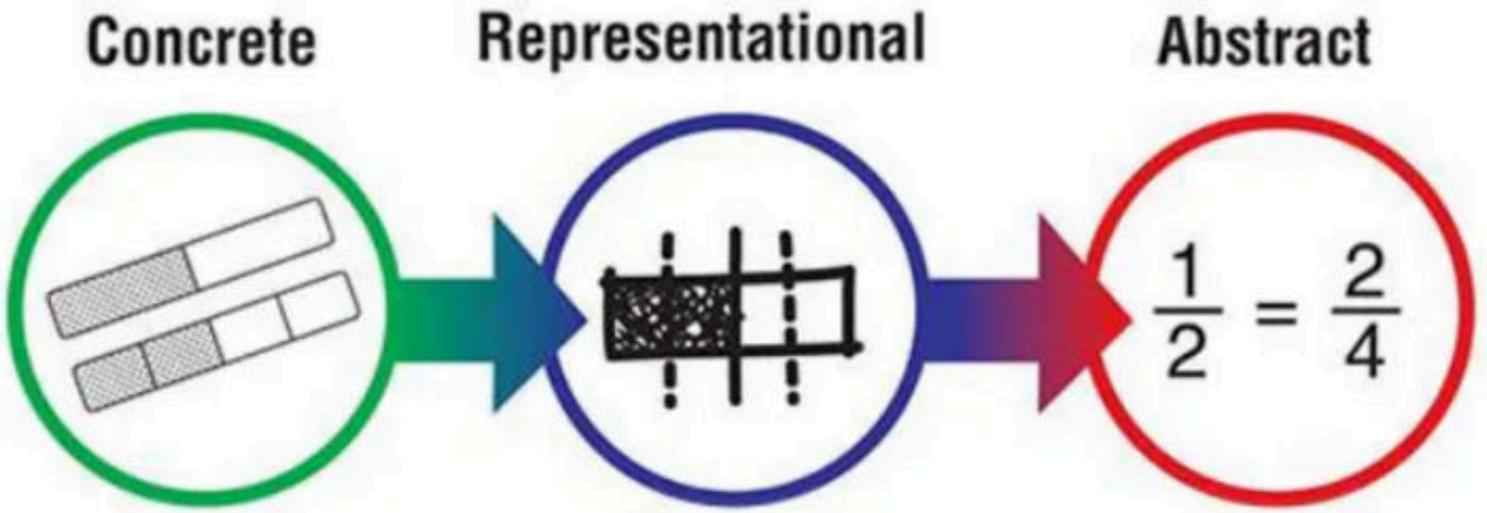
1. From known to unknown

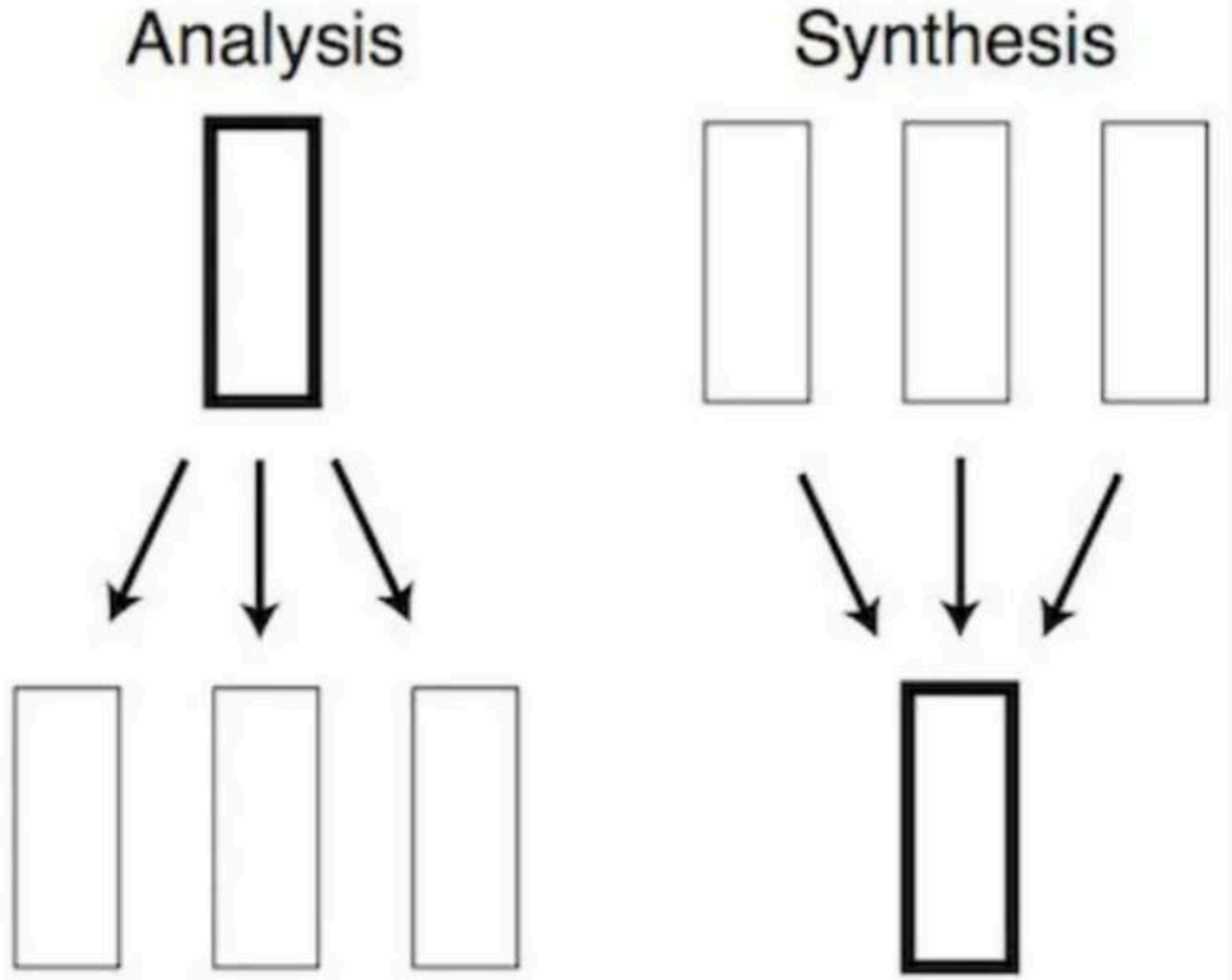
2. From simple to complex:-



3. From concrete to abstract:-

Concrete things are solid things and they can be visualized but abstract things are only imaginative things.



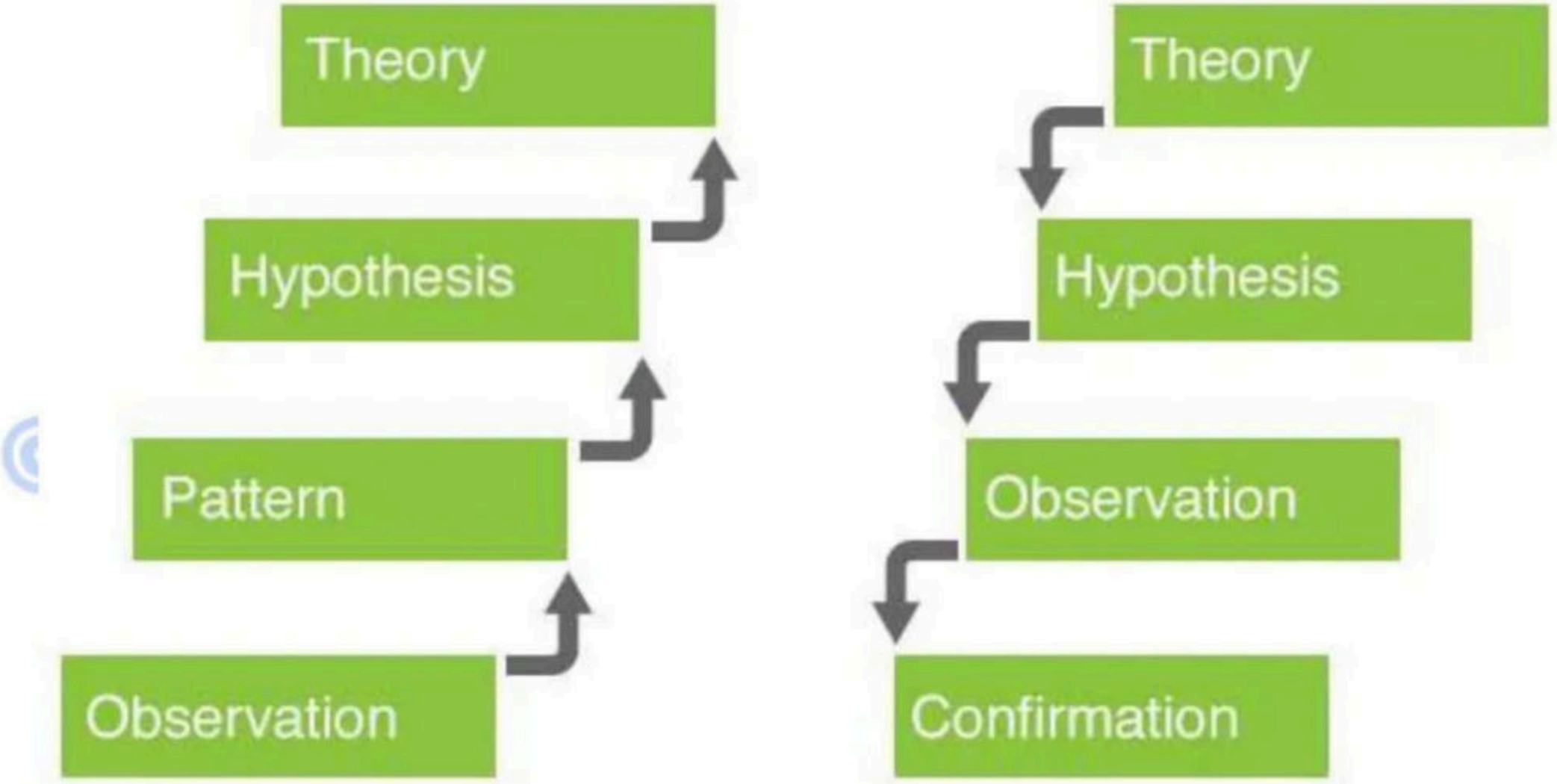


5. From particular to general

7. From induction to deduction:-

The process of deriving general laws, rules or formulae from particular examples is called induction. In it if a statement is true in a special situation, it will also be true in other similar situations. It means drawing a conclusion from set of examples.

Inductive Reasoning vs Deductive Reasoning



6. From empirical to rational:-

Empirical knowledge is that which is based on observation and experience about which no reasoning is needed at all. It is concrete, particular and simple. We can feel and experience it.

On the other hand rational knowledge is based upon arguments and explanations.

Inductive approach

- Particular cases to general rules of formulae
- Concrete instance to abstract rules
- Known to unknown
- Simple to complex

Deductive method

- General rule to specific instances
- Unknown to know
- Abstract rule to concrete instance
- Complex to simple

11. From definite to indefinite:

A teacher should always start from definite because definiteness has its limited boundaries and jurisdiction than indefinite things.

Hence a teacher while teaching any content should first present definite things, ideas and then he can learn indefinite things easily.

12 training of senses According to Maria Montessori, babies experience life, learn, and develop intelligence through the use of touch, taste, smell, sight, and sound. “The senses, being explorers of the world, open the way to knowledge.

13. encourage self study: Dalton’s System

Generational Differences in the Classroom

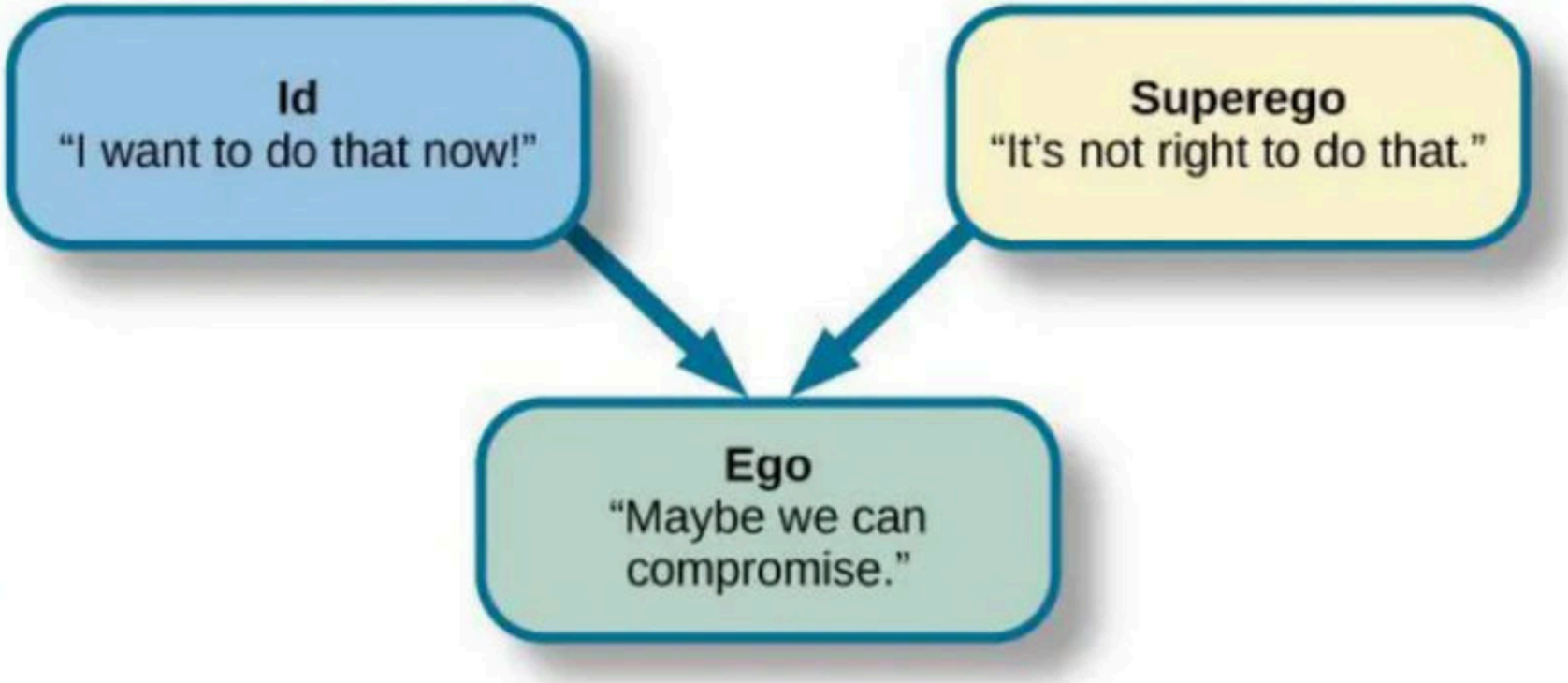
- The greatest generation (1910 to 1920s)
- The Silent Generation (born mid-1920s to early 1940s)
- Baby Boomers (born early 1940s to early 1960s)
- Generation X (born early 1960s to early 1980s)
- Millennials (born early 1980s to early 2000s)
- A Gen Z (1995 to 2014) participant sharing online account management expertise with a Silent.
- Generation Alpha (2015 to 2030)
- Think of generational differences in the classroom as an aspect of adult learning that influences individual learning styles.

The theory of multiple intelligences was developed in 1983 by Dr. Howard Gardner, professor of education at Harvard University. It suggests that the traditional notion of intelligence, based on I.Q. testing, is far too limited. Instead, Dr. Gardner proposes eight different intelligences to account for a broader range of human potential in children and adults. Whatever you are teaching or learning, see how you might connect it with:

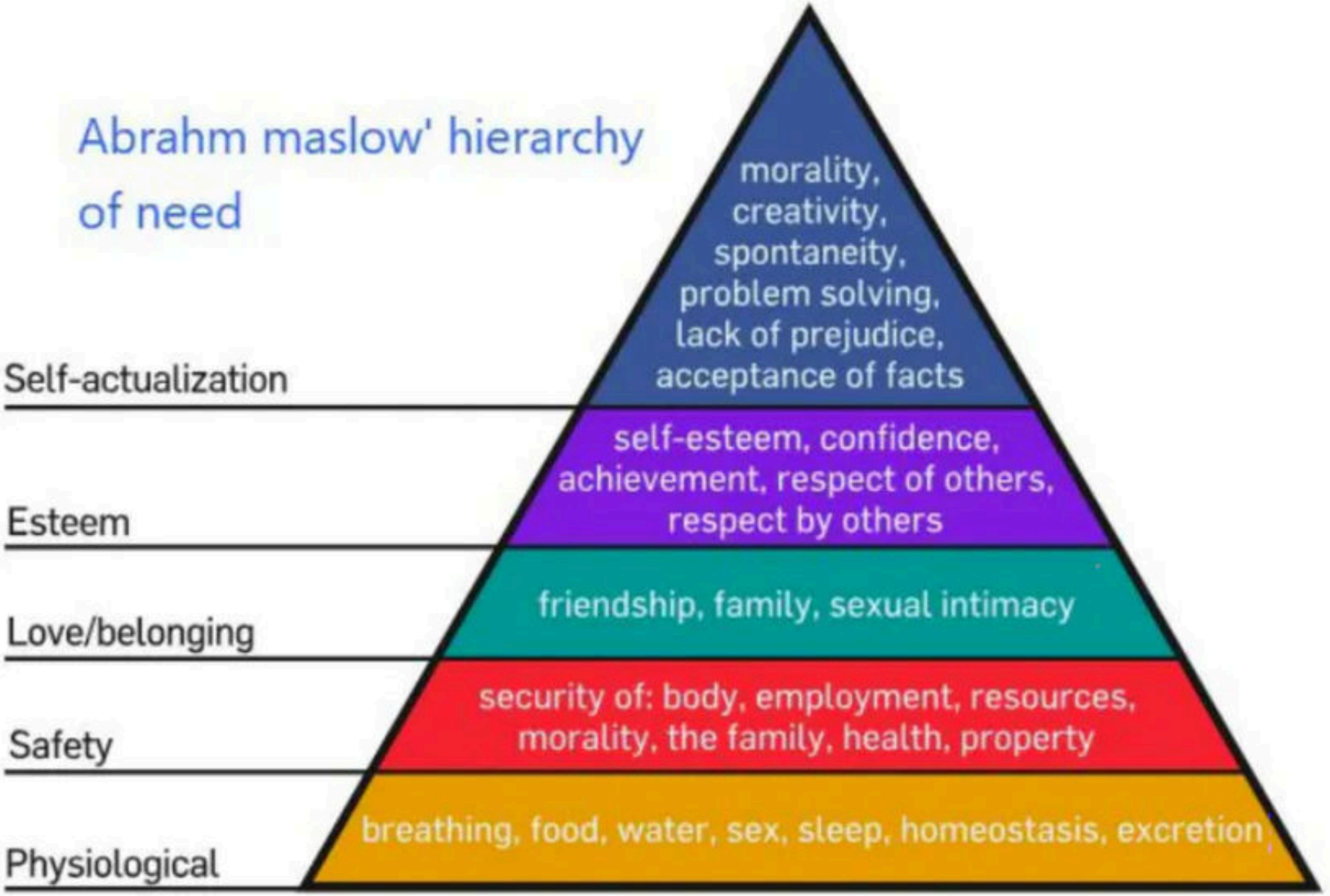
- Linguistic intelligence ("word smart")
- Logical-mathematical intelligence ("number/reasoning smart")
- Spatial intelligence ("picture smart")
- Bodily-Kinesthetic intelligence ("body smart")
- Musical intelligence ("music smart")
- Interpersonal intelligence ("people smart")
- Intrapersonal intelligence ("self smart")
- Naturalist intelligence ("nature smart")

The id represents a constant in the personality as it is always present. The id is governed by the 'pleasure principle'

Super-ego plays the critical and moralising role.



ego is the organized realistic part

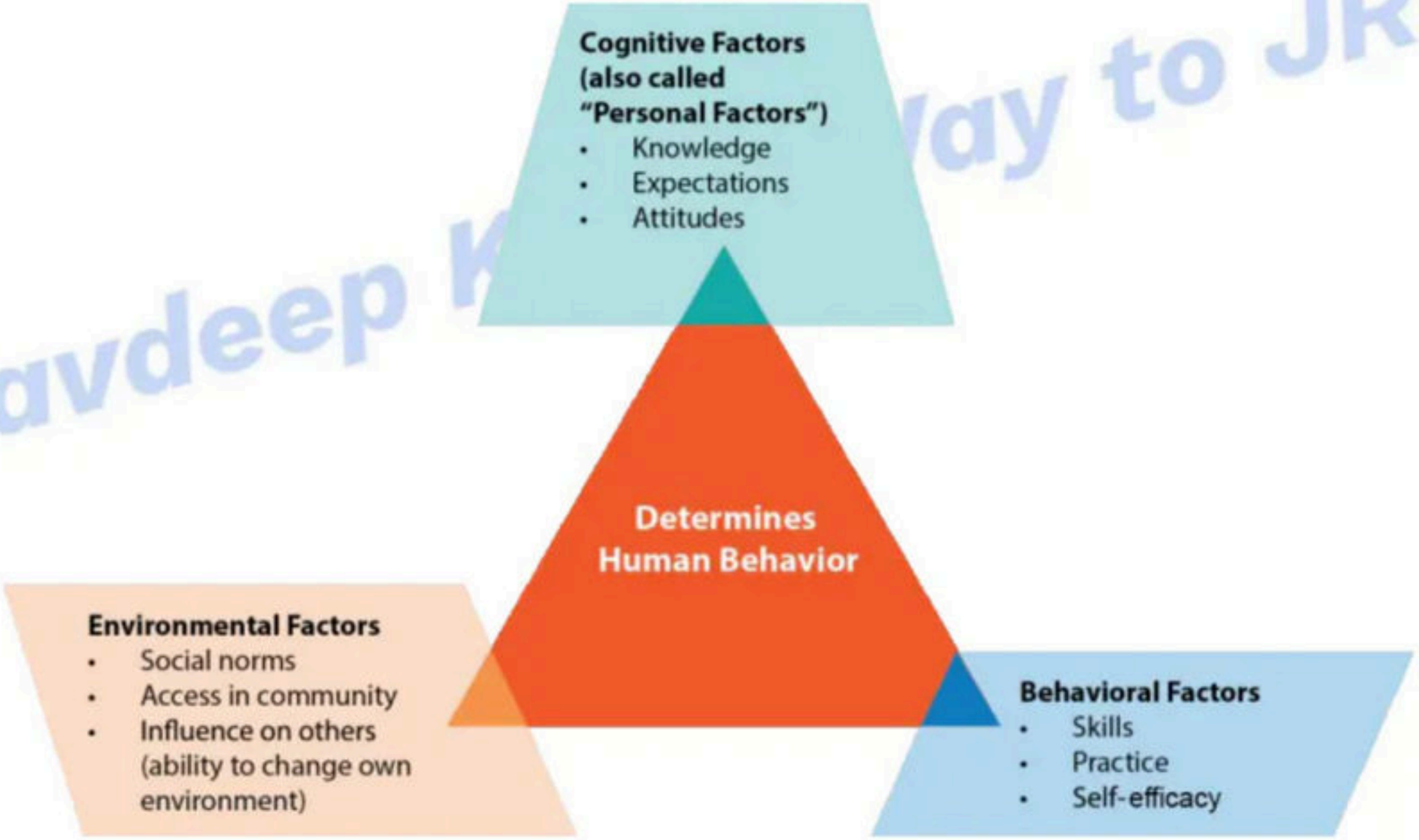

Abrahm maslow' hierarchy of need
morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
Self-actualization
self-esteem, confidence, achievement, respect of others, respect by others
Esteem
friendship, family, sexual intimacy
Love/belonging
security of: body, employment, resources, morality, the family, health, property
Safety
breathing, food, water, sex, sleep, homeostasis, excretion
Physiological

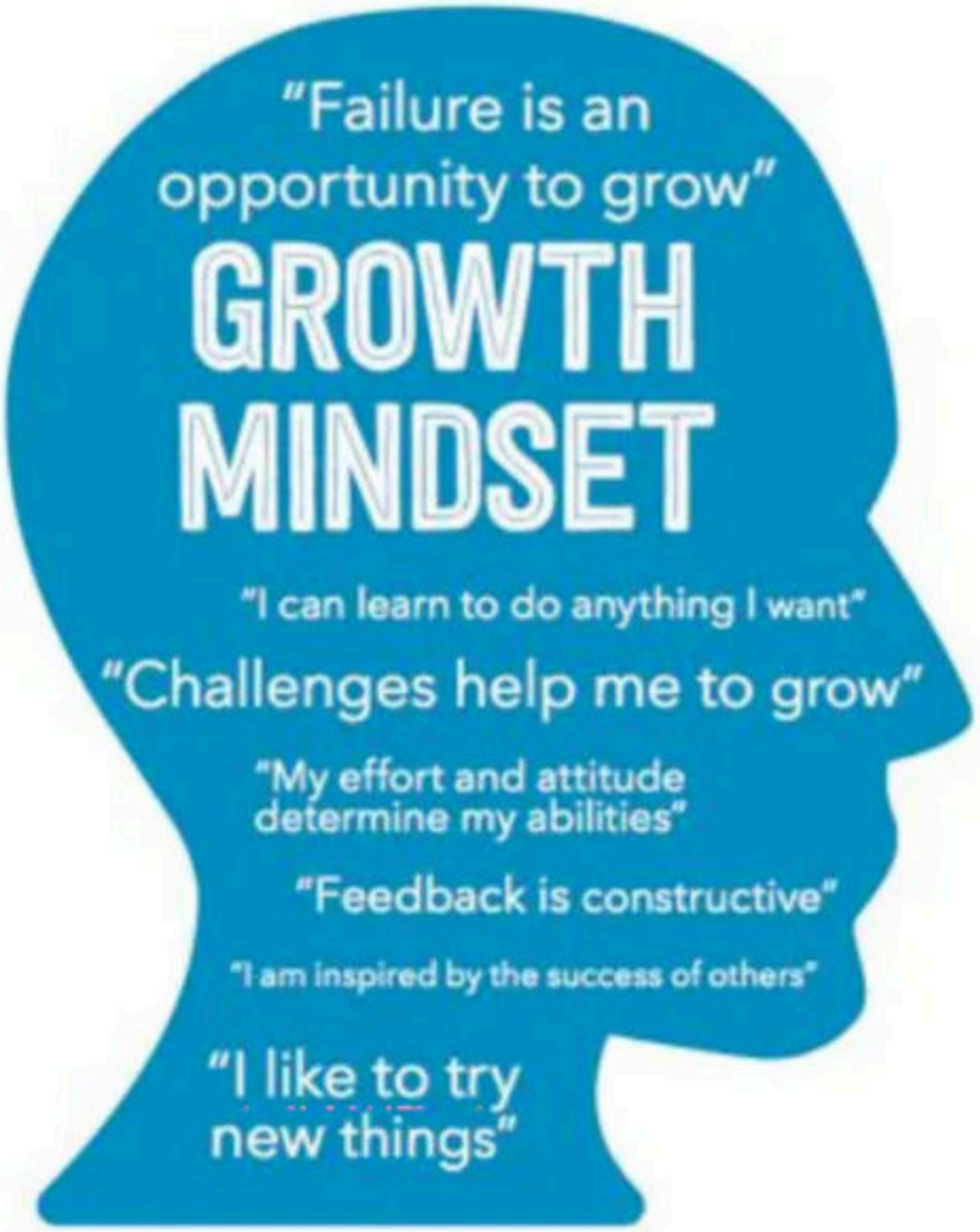
Piaget's Stages of Cognitive Development

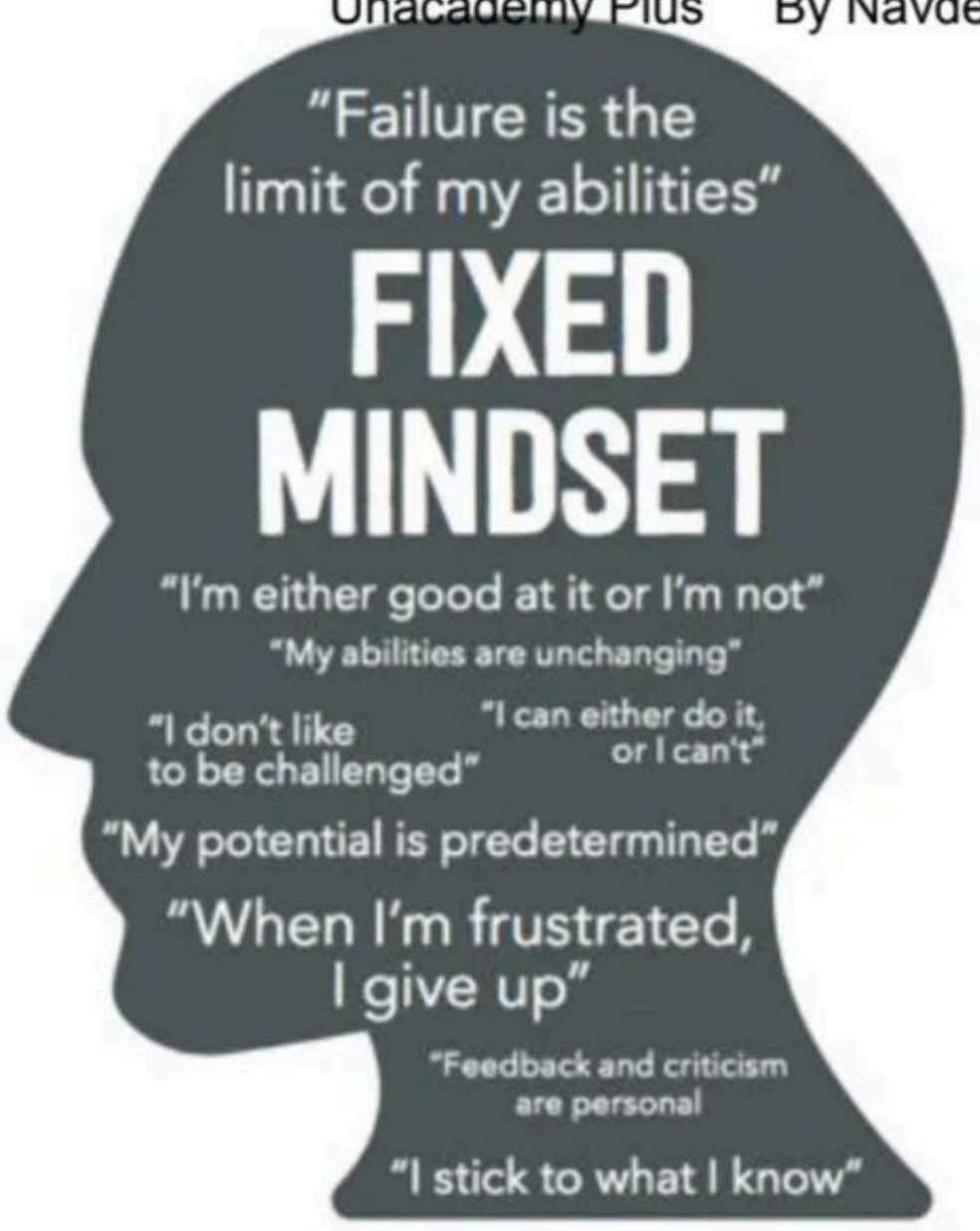
Stage	Age range	What happens at this stage?
Sensorimotor	0-2 years old	Coordination of senses with motor responses, sensory curiosity about the world. Language used for demands and cataloguing. Object permanence is developed.
Preoperational	2-7 years old	Symbolic thinking, use of proper syntax and grammar to express concepts. Imagination and intuition are strong, but complex abstract thoughts are still difficult. Conservation is developed.
Concrete Operational	7-11 years old	Concepts attached to concrete situations. Time, space, and quantity are understood and can be applied, but not as independent concepts.
Formal Operational	11 years old and older	Theoretical, hypothetical, and counterfactual thinking. Abstract logic and reasoning. Strategy and planning become possible. Concepts learned in one context can be applied to another.

Social Cognitive Theory (SCT)

Albert Bandura developed Social Cognitive Theory (SCT) from Social Learning Theory (SLT) in the 1960s. It was renamed the SCT in 1986, and it proposes that learning takes place in a social context, with a complex and reciprocal relationship between the individual, their environment, and their actions.




"Failure is an opportunity to grow"
GROWTH MINDSET
"I can learn to do anything I want"
"Challenges help me to grow"
"My effort and attitude determine my abilities"
"Feedback is constructive"
"I am inspired by the success of others"
"I like to try new things"


"Failure is the limit of my abilities"
FIXED MINDSET
"I'm either good at it or I'm not"
"My abilities are unchanging"
"I don't like to be challenged"
"I can either do it, or I can't"
"My potential is predetermined"
"When I'm frustrated, I give up"
"Feedback and criticism are personal"
"I stick to what I know"

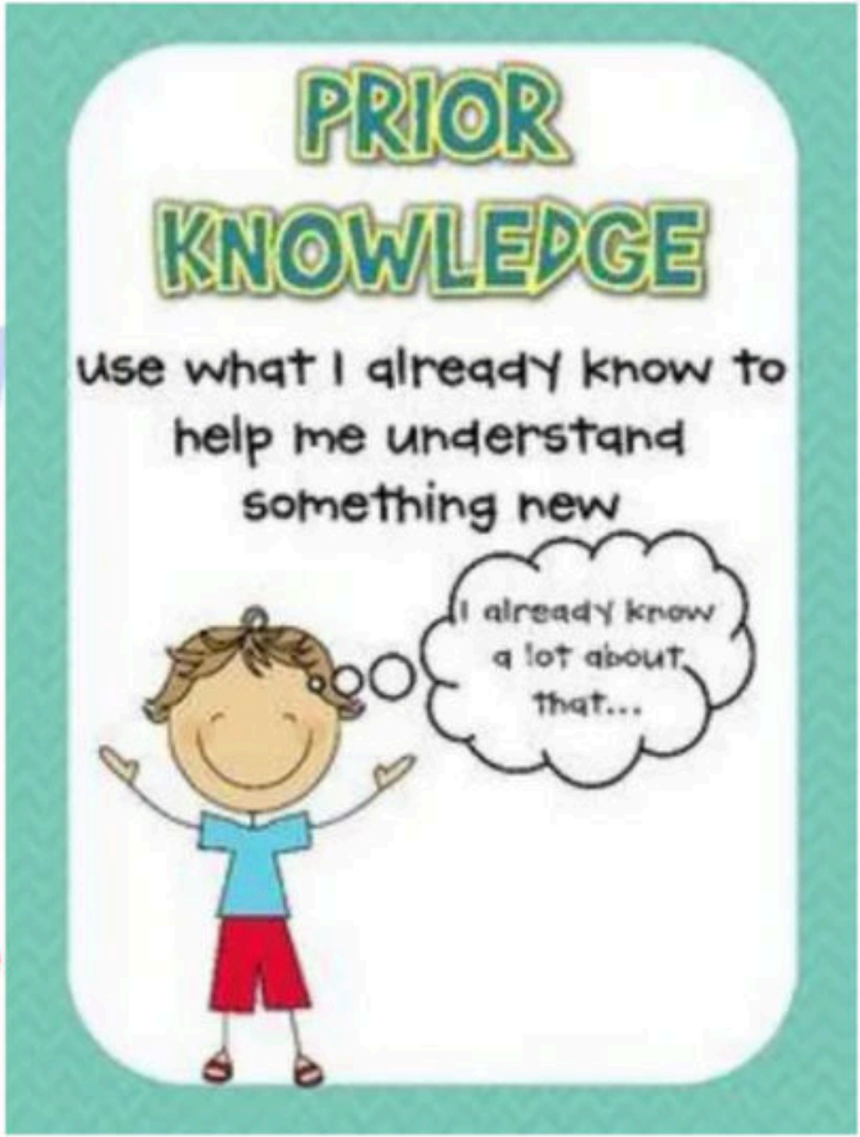
2. Prior knowledge

What students already know affects their learning.

Research shows that prior knowledge influences both conceptual growth and conceptual change in students.

➔ **With conceptual growth, students add to their existing knowledge, and with conceptual change, students correct misconceptions or errors in existing knowledge.**

Facilitating conceptual growth or change requires first obtaining a baseline level of student knowledge prior to the start of each unit through formative assessment.



school.

ASSESSMENT TYPES

All of the different assessment types work together to provide a complete valid, reliable, and fair picture of a student's abilities.

Diagnostic

Assesses a student's strengths, weaknesses, knowledge, and skills prior to instruction.

Norm-Referenced

Compare's a student's performance against a national or other "norm" group.

Formative

Assesses a student's performance during instruction, and usually occurs regularly throughout the instruction process.

Criterion-Referenced

Measures a student's performance against a goal, specific objective, or standard.

Summative

Measures a student's achievement at the end of instruction.

Interim/ Benchmark

Evaluates student performance at periodic intervals, frequently at the end of a grading period. Can predict student performance on end-of-year

Differences between NRTs and CRTs

1. NRT—Typically covers a Typically covers a large domain of learning tasks, with just a few items measuring domain of learning tasks, with just a few items measuring each specific task.
CRT—Typically focuses on a delimited (delimited: having fixed boundaries or limits.) domain of learning tasks, with a relatively large
number of items measuring each specific task.
2. NRT—Emphasizes discrimination among individuals in terms of relative level of learning.
CRT-Emphasizes description of what learning tasks individuals can and cannot perform.
3. NRT—Favors items of average difficulty and typically omits easy items.
CRT—Matches item difficulty to learning tasks, without altering item difficulty or omitting easy items.

4. Below are given statements pertaining to evaluation systems. Identify those which correctly explain them.

(i) Criterion-Referenced Testing (CRT) focuses on a delimited domain of learning tasks.

(ii) Norm-Referenced Testing (NRT) requires a clearly defined group.

(iii) Formative tests are given at the end of a course.

(iv) Both Norm-Referenced Testing (NRT) and Criterion-Referenced Testing (CRT) use the same type of test items.

(v) Summative tests are used regularly during teaching transactions.

(vi) Mastery tests are examples of Norm-Referenced Testing.

Choose the correct answer from the code given below :

Code :

(1) (i), (ii) and (iii)

(2) (i), (ii) and (iv)

(3) (iv), (v) and (vi)

(4) (ii), (v) and (vi)

4. नीचे मूल्यांकन प्रणाली से संबंधित कथन दिए गए हैं। जो पहचानें उन्हें सही ढंग से समझाएं।

(i) मानदंड-संदर्भित परीक्षण (CRT) सीखने के एक सीमांकित डोमेन पर केंद्रित है कार्य।

(ii) सामान्य-संदर्भित परीक्षण (NRT) के लिए स्पष्ट रूप से परिभाषित समूह की आवश्यकता होती है।

(iii) एक पाठ्यक्रम के अंत में औपचारिक परीक्षण दिए गए हैं।

(iv) सामान्य-संदर्भित परीक्षण (NRT) और मानदंड-संदर्भित परीक्षण (CRT) दोनों एक ही प्रकार की परीक्षण वस्तुओं का उपयोग करें।

(v) शिक्षण लेनदेन के दौरान योगात्मक परीक्षणों का नियमित रूप से उपयोग किया जाता है।

(vi) महारत परीक्षण सामान्य-संदर्भित परीक्षण के उदाहरण हैं।

नीचे दिए गए कोड में से सही उत्तर चुनें:

4. Below are given statements pertaining to evaluation systems. Identify those which correctly explain them.

(i) Criterion-Referenced Testing (CRT) focuses on a delimited domain of learning tasks.

(ii) Norm-Referenced Testing (NRT) requires a clearly defined group.

(iii) Formative tests are given at the end of a course.

(iv) Both Norm-Referenced Testing (NRT) and Criterion-Referenced Testing (CRT) use the same type of test items.

(v) Summative tests are used regularly during teaching transactions.

(vi) Mastery tests are examples of Norm-Referenced Testing.

Choose the correct answer from the code given below :

Code :

(1) (i), (ii) and (iii)

(2) (i), (ii) and (iv)

(3) (iv), (v) and (vi)

(4) (ii), (v) and (vi)

Traditional assessment tools:

True/false tests

Multiple-choice tests

1. They are fast, easy, and economical to score. In fact, they are machine scorable.
2. They can be scored objectively and thus may give the test appearance of being fairer and/or more
reliable than subjectively scored tests.
3. They “look like” tests and may thus seem to be acceptable by convention.
4. They reduce the chances of learners guessing the correct items in comparison to true-false items

Essays: Essays are effective assessment tools since the questions are flexible and assess the higher order learning skills.

Short-answer tests: In short-answer tests “items are written either as a direct question requiring the
learner fill in a word or phrase or as statements in which a space has been left blank for a brief written answer”
The questions need to be precise.

Alternative assessment:

According to Simonson and others, there are three approaches

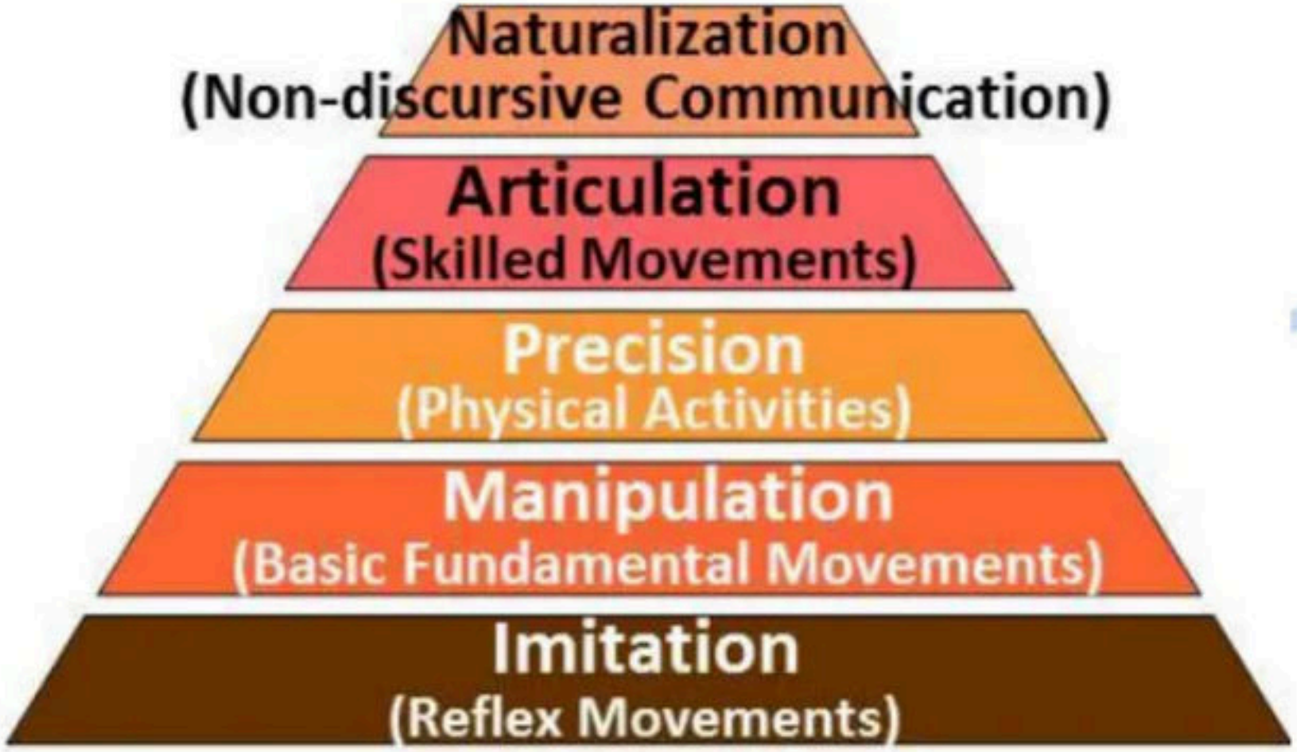
1. **Authentic assessment,**
2. **performance-based assessment, and**
3. **constructivist assessment.** Constructivist approach to assessment is a formative rather than a summative. Its purpose is to improve the quality of student learning, not to provide evidence for evaluating or grading students. Assessment have to respond to the particular needs and characteristics of the teachers, students and science content.

Similarly, Reeves (2000) suggests three main strategies to integrate alternative assessment into online learning settings:

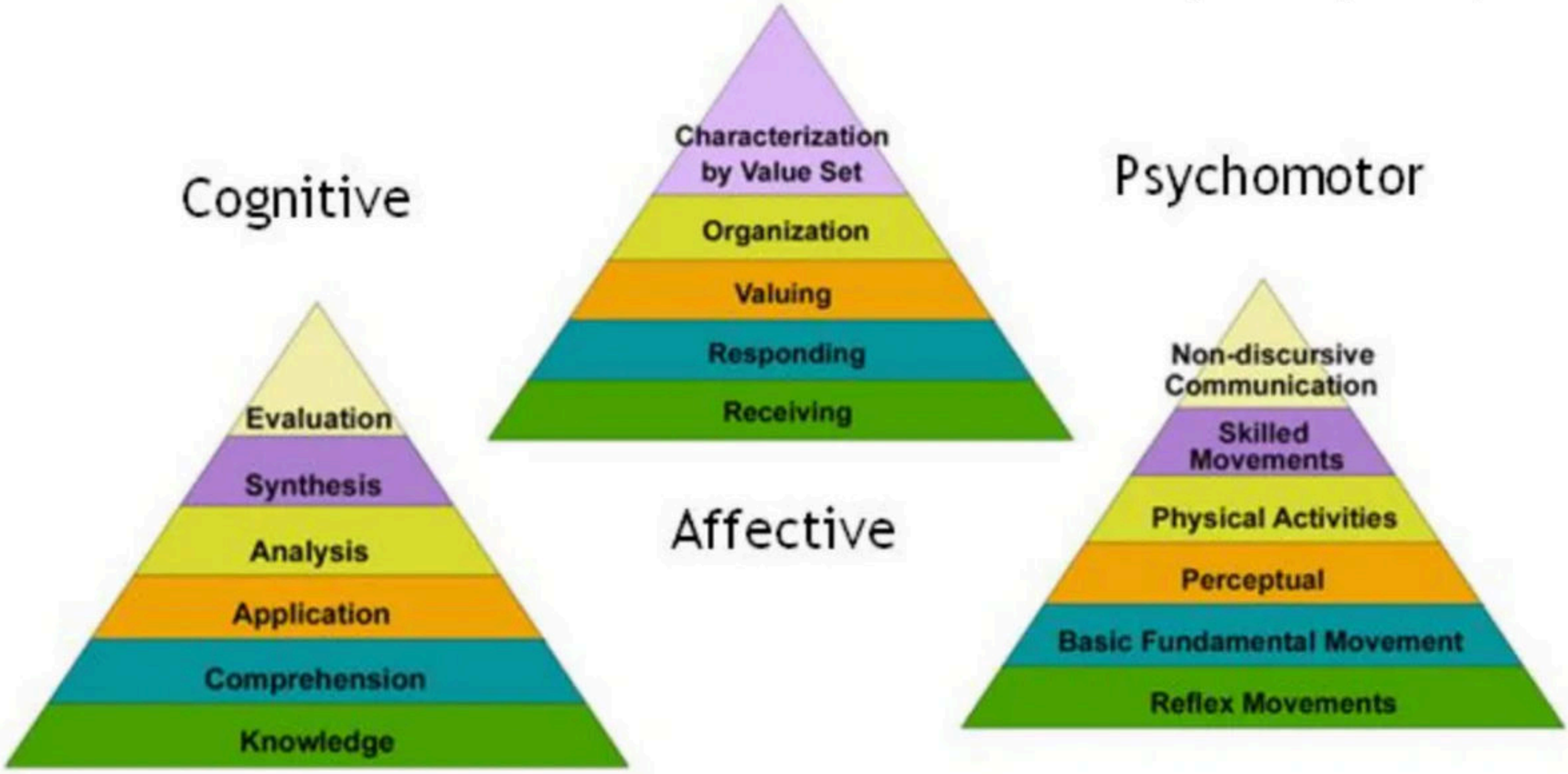
1. **cognitive assessment,**
2. **performance assessment,**
3. **portfolio assessment.**

Researchers and educators use the term performance-based, alternative, and authentic assessment interchangeably.

Psycho-Motor Domain

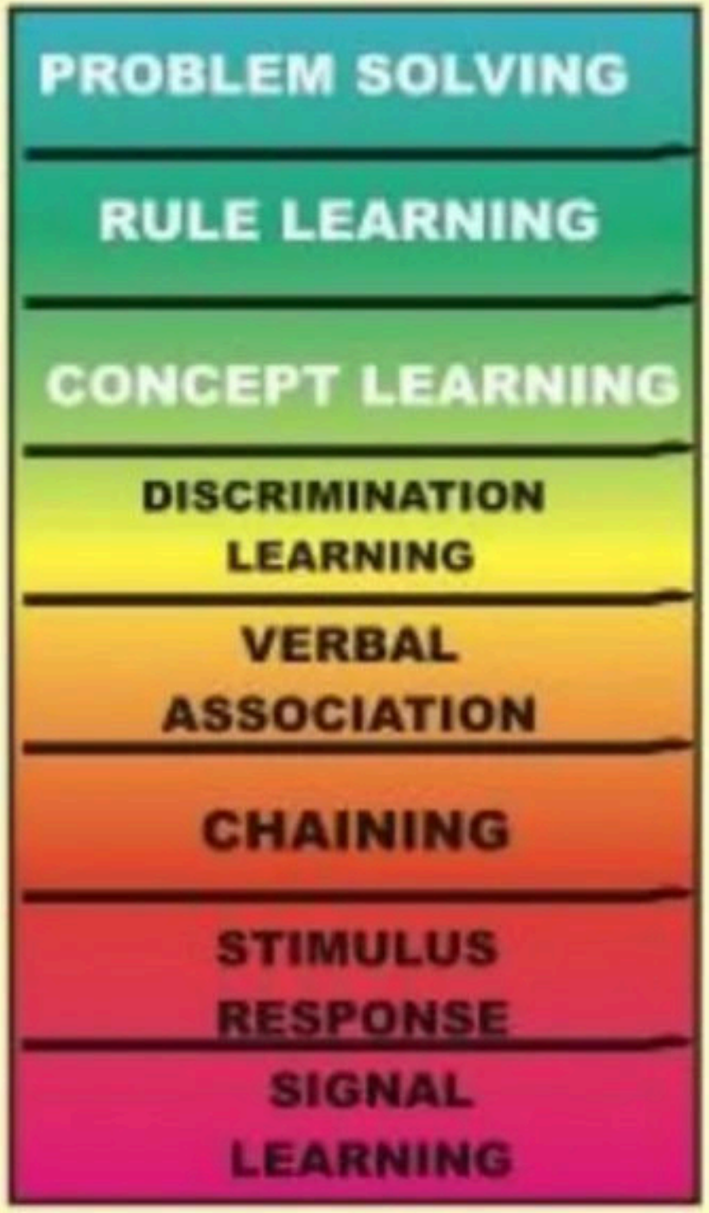


Based on Dave's Taxonomy (1975)


Cognitive
Evaluation
Synthesis
Analysis
Application
Comprehension
Knowledge
Affective
Characterization by Value Set
Organization
Valuing
Responding
Receiving
Psychomotor
Non-discursive Communication
Skilled Movements
Physical Activities
Perceptual
Basic Fundamental Movement
Reflex Movements

Gagne's Hierarchy of Learning

TRICK: SS ne CV m discriminate krke rule nikala problem ho gayi



The nine Events of Instruction can be divided into three segments;

Preparation

1 Gaining attention

2 Informing learners of the objective

3 Stimulating recall of prior learning

Instruction and Practice

4 Presenting the stimulus

5 Providing learning guidance

6 Eliciting performance

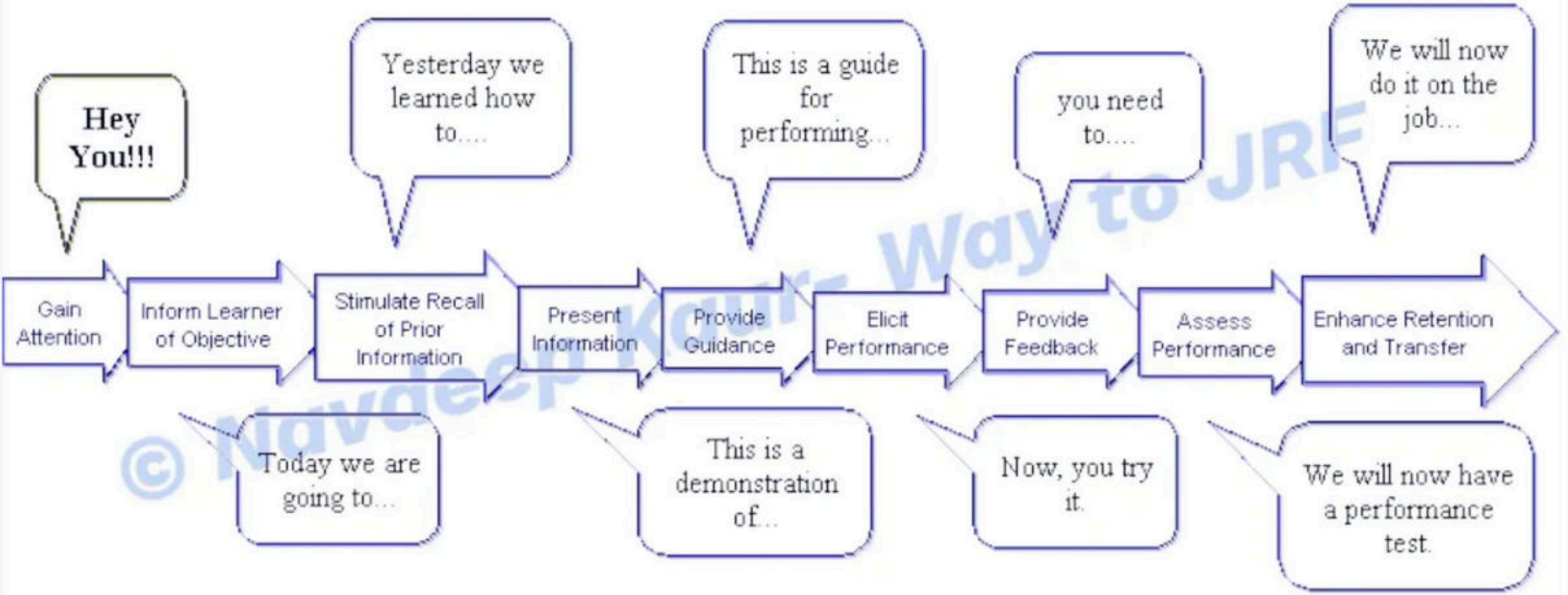
7 Providing feedback

Assessment and Transfer

8 Assessing performance

9 Enhancing retention and transfer

Learning Process



Visual learning style involves the use of seen or observed things, including pictures, diagrams, demonstrations, displays, handouts, films, flip-chart, etc.

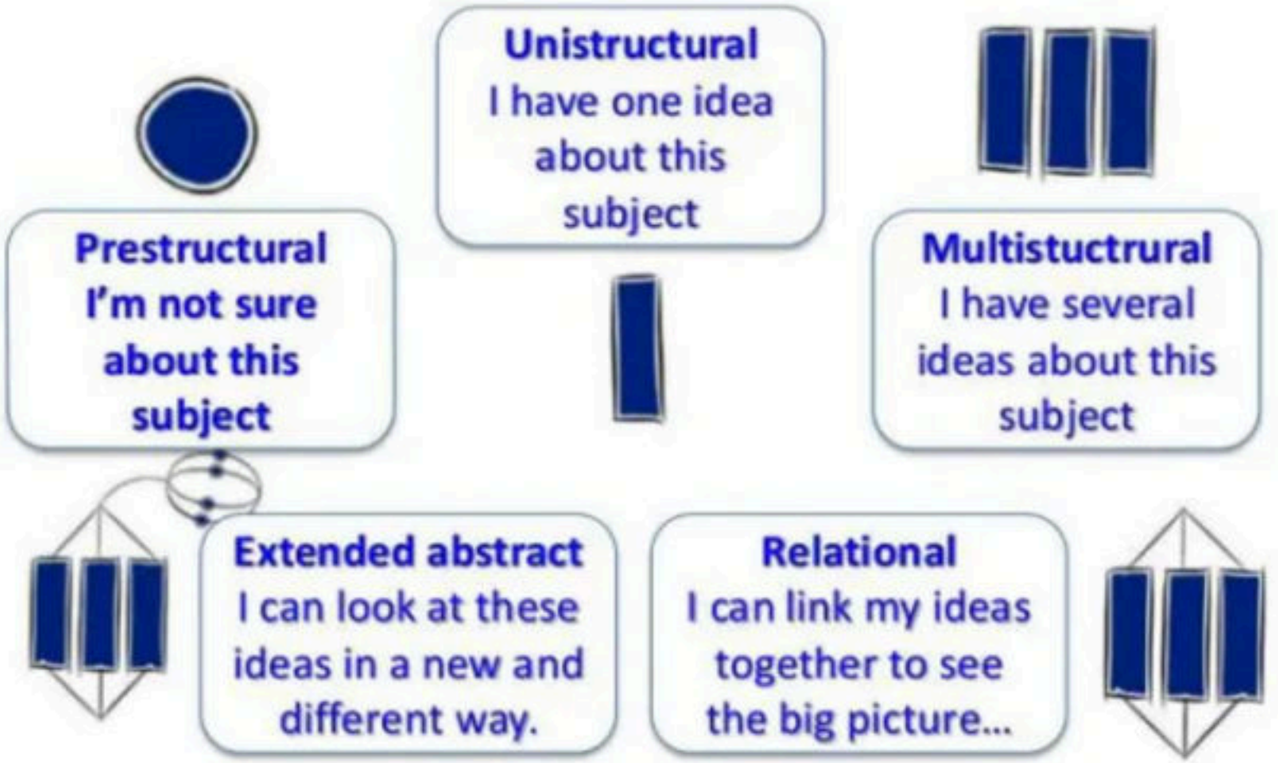
Auditory learning style involves the transfer of information through listening: to the spoken word, of self or others, of sounds and noises.

Kinesthetic learning involves physical experience – touching, feeling, holding, doing, practical hands-on experiences.

The structure of observed learning outcomes (SOLO) taxonomy is a model that describes levels of increasing complexity in student's understanding of subjects.

It was proposed by John B. Biggs and K. Collis and has since gained popularity.

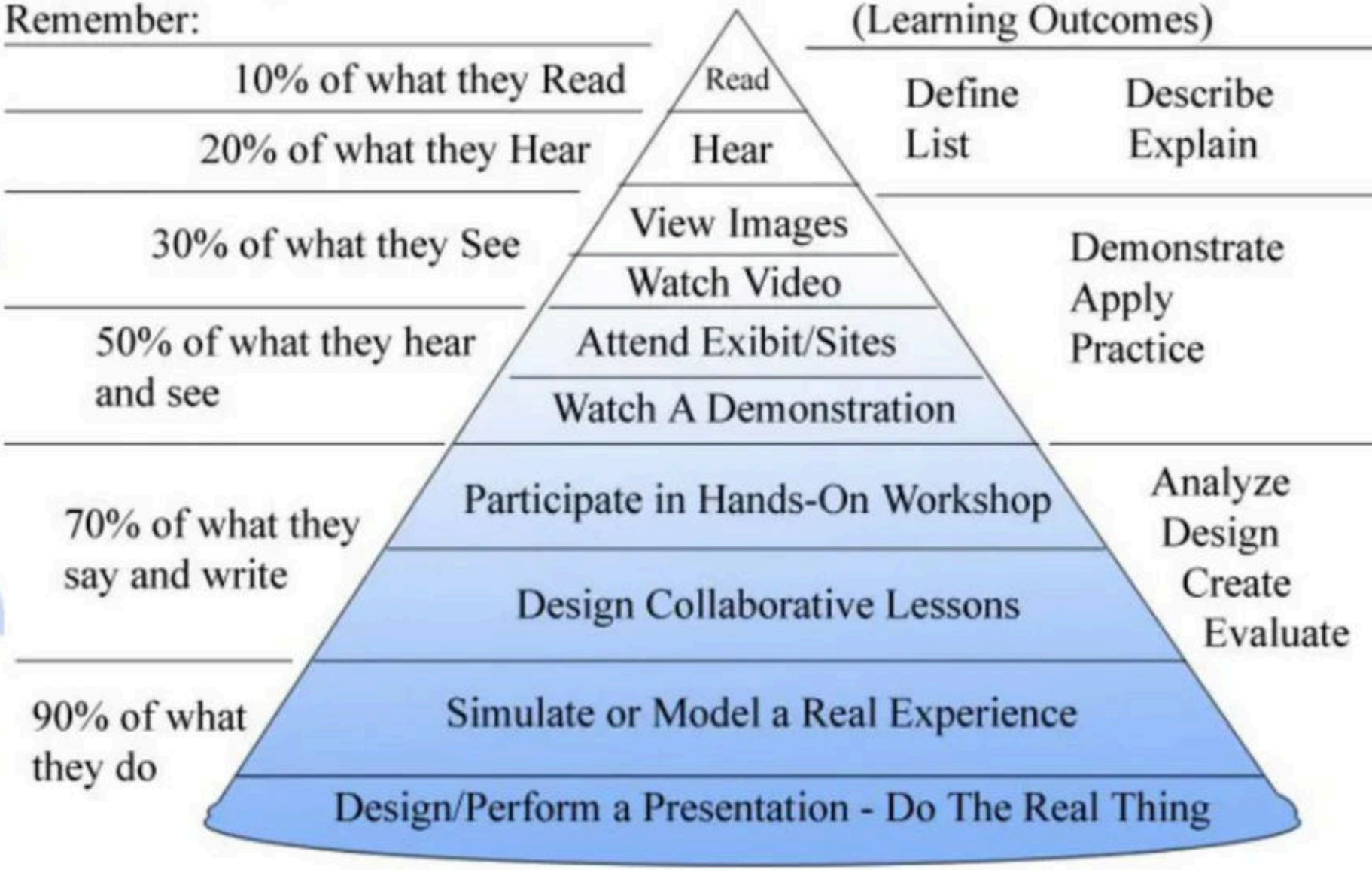
5 typical ways to answer a question



Edgar Dale's Cone of Classification

Experiential learning

In book 1946 Audio Visual methods of teaching



Dale's Cone of Experience

field-independent learners	field-dependent learners
> Not structures > Learners rely less on the teacher or other learners for support, like to study themselves	> Structured > Need proper guidance, Personalised curriculum

Process type	Content-type
> Divergent questions > Concept-based questions	> Convergent questions > Fact-based questions

Premack principle, which states that high probability behaviors can be used to reinforce low probability behaviors. You also examined some potential examples of the Premack principle and places where it can be used. - David Premack in 1965.

The law of effect principle developed by Edward Thorndike suggested that responses closely followed by satisfaction will become firmly attached to the situation and, therefore, more likely to reoccur when the situation is repeated.

Operant conditioning can be described as a process that attempts to modify behavior through the use of positive and negative reinforcement. Through operant conditioning, an individual makes an association between a particular behavior and a consequence (Skinner, 1938).

CLASSICAL CONDITIONING (PAVLOV) Classical conditioning is a reflexive or automatic type of learning in which a stimulus acquires the capacity to evoke a response that was originally evoked by another stimulus.

PEDAGOGY

The "Big 3" theories of cognitivism, constructionism and behaviorism will be briefly presented, as well as emerging theories related to transformative learning

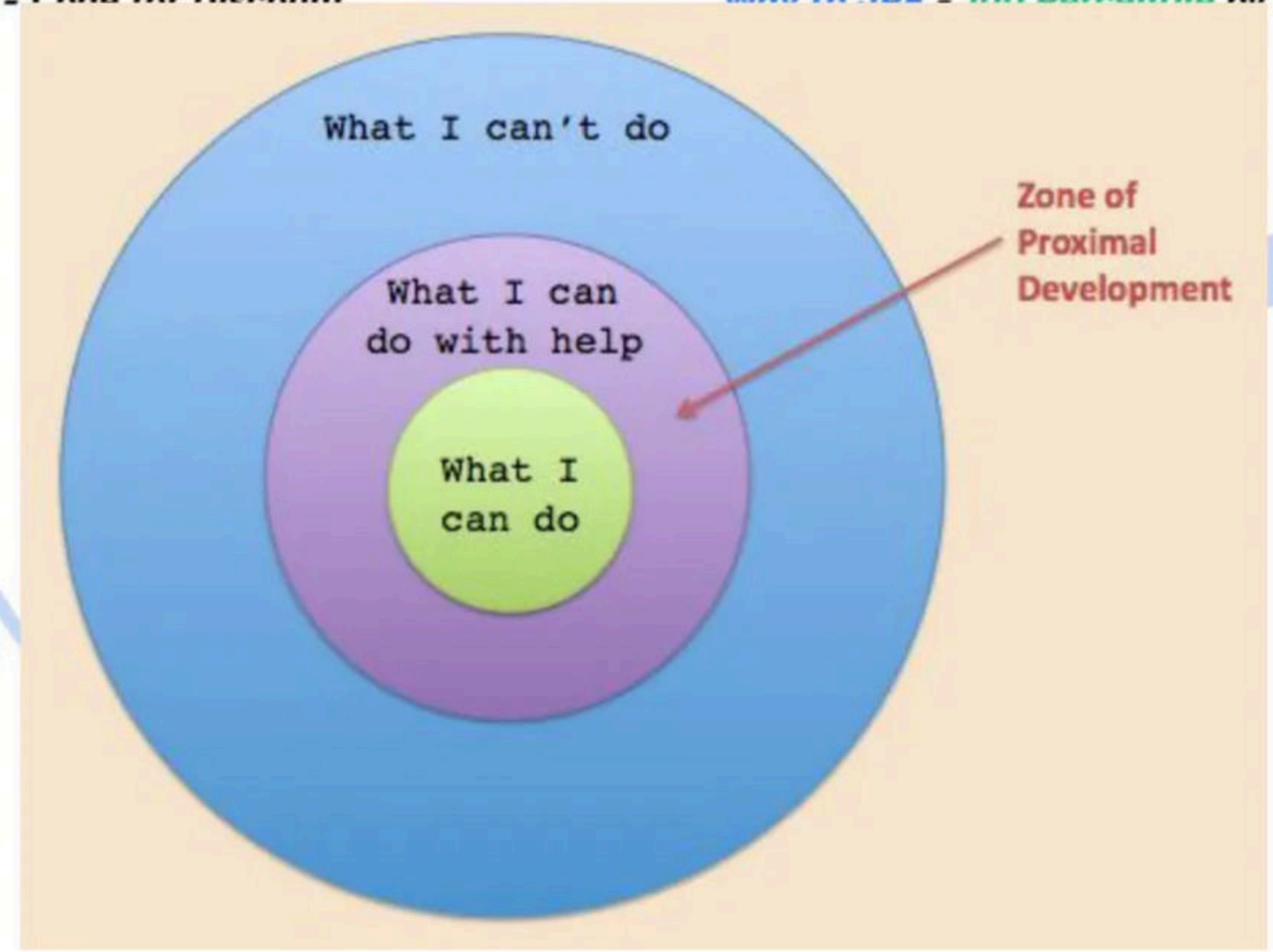
Cognitivism

The basis of cognitive learning theory is based around how the brain of the learner gains and processes information. Perhaps the most widely accepted cognitive learning theory is Gagne's conditions of learning theory.

One important component of cognitivism is the concept of learning styles. Kolb in 1984 outlined four types of learners

Learning Style Characteristics

1. Accommodators Hands-on learning
2. Converger Hands-on learning and theory
3. Diverger Real life experience and discussion
4. Assimilator Theories and facts


What I can't do
What I can do with help
What I can do
Zone of Proximal Development

Pedagogy,
Andragogy,
Heutagogy
compared.

Heutagogy:
The
management of
self-managed
learners

Teacher centered

Large Group method

- Lectures
- Team teaching
- Video presentation

Mixed

Small Group method

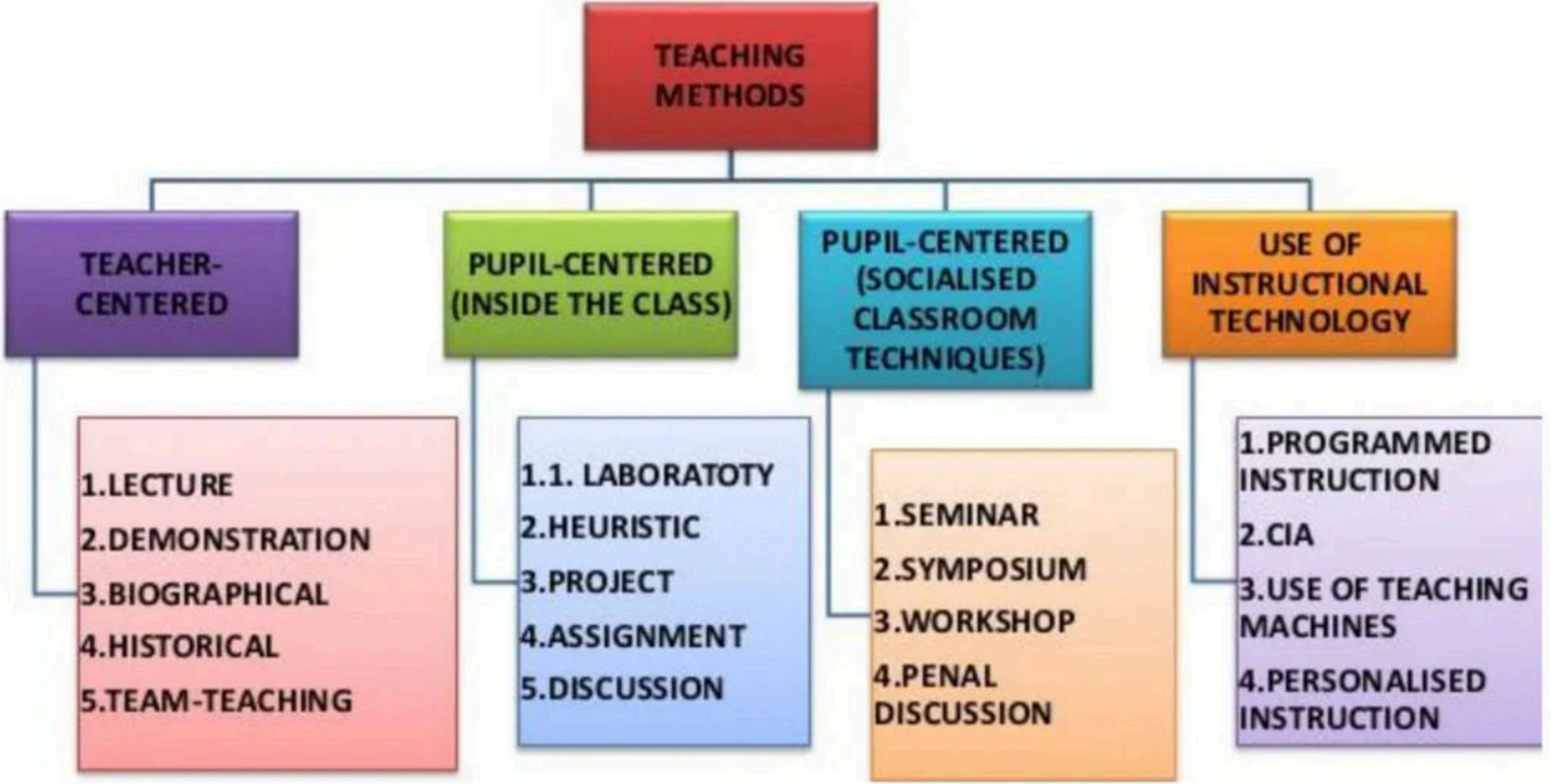
- GD
- Seminar
- Panel discussion
- Brainstorming
- Project Method
- Tutorial
- Case Study
- Role play
- Simulation
- Demonstration

Student centered

Individualized method

- Tutorials
- Assignments
- Project work
- Case Study
- Programmed instruction
- Computer assisted learning (CAL)
- Interactive video
- Open learning
- Personalised System of instruction (PSI)
- Heuristic Method

TEACHING METHODS



DIRECT/EXPOSITORY APPROACH

A. Methods or approaches of Teaching According to Different Schools of Philosophy

a. Methods by Idealism

- They speak of the general nature of teaching methods only
- They don't specify any method to be adopted while learning (used during the *Upanishadic* period too in India)
- aka informal dialectic method
- Idealist value use of well prepared & presented lectures
- Socrates – Question method
- Plato – Conversational method
- Aristotle – Inductive and Deductive methods
- Hegel – Logical method
- Pestalozzi – Self activity method
- Herbart – Discussion method
- Froebel's metaphor of 'Kindergarten'

emphasis on Spiritual aspects

b. Methods by Naturalism

- Rousseau believed education lasts throughout life & is gained everyday through various life experiences
- He believes learning should be based on actual experience & a practical problem must be studied in its natural setting
- Learning can also take place in the spirit & methods of play
- The methods recommended by Rousseau maybe identified with the heuristic method & experimental method advocated by John Dewey

Main advocates are Tagore, Rousseau, Herbert Spencer

c. Pragmatic Methods

- Focus on child and society and the activities therein
- Learning occurs as a result of an activity
- Children must learn how to discover & method of teaching experimental
- It must develop reflective thinking in children so that they ask 'Why?'
- The Project method of teaching is where a problematic act has to be carried out in completion in its natural setting
- focuses on learning by doing
- Human are active being and have ability to solve problems through logic of experiments and scientific methods
- Thinkers- CS Pierce and John Dewey

d. Existential Methods

- Ask questions until an acceptable conclusion is reached.
- Focuses on Inductive thinking
- Emphasis on individual education
- Homeschooling preferred over School Education
- Does not believe in indoctrination but enhancing the child's creativity
- a philosophical theory or approach which emphasizes the existence of the individual person as a free and responsible agent determining their own development through acts of the will.

Humanism is a paradigm/philosophy/pedagogical approach that believes learning is viewed as a personal act to fulfil one's potential.
Key proponents: Abraham Maslow, Carl Rogers, Malcolm Knowles

Believes in interest and welfare of all human being

Abraham
Maslow
1908-1970

The father of humanistic psychology and creator of Maslow's Hierarchy of Needs.

Rationalism

- ➔ Innate Ideas
- ➔ Deduction
- ➔ Plato
- ➔ We have inborn Knowledge
- ➔ Reason is main source of knowledge
- ➔ Maths and Spiritual
- ➔ Example: pythagoras theorem

Empiricism

- ➔ A posteriori
- ➔ Induction
- ➔ Learning through Experience
- ➔ Simple level: Perception
- ➔ Complex - takes more sense to understand experiences
- ➔ Nothing is certain
- ➔ Solipsism- Just projection of mind (advance level)

Gestalt psychology is an attempt to understand the laws behind the ability to acquire and maintain meaningful perceptions in an apparently chaotic world.

- Demonstrate significance of perception
- Complex learning need not occur gradually
- Can be developed through insight

THE PROGRAMMED INSTRUCTION METHOD

A method of self-instruction

By BF Skinner

1. To provide remedial instruction.

2. To provide make-up instruction for late arrivals, absentees, or translents.

3. To maintain previously learned skills which are not performed frequently enough.

4. To provide retraining on equipment and procedures which have become obsolete.

5. To upgrade production.

6. To accelerate capable students.

7. To provide enough common background among students.

8. To provide the review and practice of knowledge and skills.

1. Reduce failure rate.

2. Improves end-of-course proficiency.

3. Saves time.

4. Provides for self instruction.

1. Require local or commercial preparation.

2. Requires lengthy programmer training.

3. Increases expenses.

4. Requires considerable lead time.

THE STUDY ASSIGNMENT METHOD A method in which the instructor assigns reading to books, periodicals, project or research papers or exercises for the practice.	1. To orient students to a topic prior to classroom or Laboratory work. 2. To set the stage for a lecture demonstration or discussion. 3. To provide for or capitalise on individual differences in ability, background, or experience through differentiated assignments. 4. To provide for the review of material covered in class or to give practice. 5. To provide enrichment material.	1. Increase coverage of material. 2. Reduce classroom time. 3. Permits individual attention.	1. Require careful planning and follow up. 2. Poses evaluation problem. 3. Produce non-standard results.

THE TUTORIAL METHOD A method of instruction in which an instructor works directly with an individual student.	1. To reach highly complicated skills operations or operations involving danger or expensive equipment. 2. To provide individualised remedial assistance.	1. Permits adaptive instruction. 2. Stimulates active participation. 3. Promotes safety.	1. Requires highly competent instructor. 2. Demands time and money.

THE SEMINAR METHOD A tutorial arrangement involving the instructor and groups, rather than instructor and individual.	1. To provide general guidance for a group working on an advanced study or research project. 2. To exchange information on techniques and approaches being explored by members of a study or research group. 3. To develop new and imaginative solutions to problems under study by the group.	1. Provides motivation and report. 2. Stimulates active participation. 3. Permits adaptive instruction.	1. Requires highly competent instructor. 2. Poses evaluation problems. 3. Is more costly than most other methods.

THE DEMONSTRATION METHOD A method of instruction where the instructor by actually performing an operation or doing a job shows the students what to do, how to do it, and through explanations brings out why, where, and when it is done.	1. To teach manipulative operations or procedures. 2. To teach troubleshooting. 3. To illustrate principles. 4. To teach operation or functioning of equipment. 5. To teach teamwork. 6. To set standards of workmanship. 7. To teach safety procedures.	1. Minimise damage and waste 2. Saves time 3. Can be presented to large groups. 4 Gethers attention of students	1. Require careful preparation and rehearsal. 2. Requires special classroom arrangements.

THE BUZZ GROUP			
A buzz group is a small, intense discussion group usually involving to 3 persons responding to a specific question or in search of very precise information. Donald Phillips	1. To develop and express imaginative ideas, opinions. 2. Stimulate thinking.	1. Help trainers to draw breath. 2. Gauge the mood by listening to some discussion. 3. Change pace of discussion. 4. Encourage participants to reflect what was learnt.	1. Unfamiliarity in use. 2. Time required. 3. Need for group leaders.

BRAINSTORMING **Brainstorming is a large or small group activity that encourages students to focus on a topic and contribute to the free flow of ideas.** Classic brainstorming was invented by Alex Osborn in 1938.	**1. Discover new ideas, thoughts and responses very quickly.**	**1. Leads to a very animated and energising session.** **2. More reserved participants feel free to contribute.**	**1. It takes time particularly if it is a large group.** **2. May consume a lot of material e.g. flipcharts or writing materials.** **3. Requires high level facilitation skills.**

ROLE PLAYS Role-play is a technique that allows students to explore realistic situations by interacting with other people in a managed way in order to develop experience and trial different strategies in a supported environment.	1. Exploring and improving interviewing techniques and examining complexities and potential conflicts of groups. 2. To consolidate different lessons in one setting.	1. Good energizers. 2. Promotes empathy of trainees for other situation. 3. Encourages creativity in learning.	1. Participants might be reluctant. 2. May not work with trainees who do not know each other well.

Inquiring Based Teaching

- ➔ Problem based teaching
- ➔ Put student Inquiry at the center of Curriculum
- ➔ Teacher's goal- to let students generate their own questions
- ➔ Teacher Provoke students thinking & curiosity to plan questions

Team Teaching

As the name suggests it is a group of teachers, working as a team and teaching. The team can range from 2 to 5 teachers who will teach the same group of students.

The different type of teaching may include- Teaching a same group at the same time, shared teaching as per the area of expertise or teaching different subgroup within a large group of students.

The Laboratory Method is a planned learning activity dealing with original or raw data in the solution of problem. It is a procedure involving first hand experiences with materials or facts derived from investigations or experimentation.

the Laboratory Method is used to designate a teaching procedure in the physical sciences that uses experimentation with apparatus.

AIMS OF LABORATORY METHOD

1. To give first hand experience to students.
2. To provide student participation in original research.
3. To develop skill in the use of laboratory equipment and instruments.
4. To make use of the power of observation and reasoning.
5. To make use of reality to make learning easier and permanent.
6. To build scientific attitude in the students.

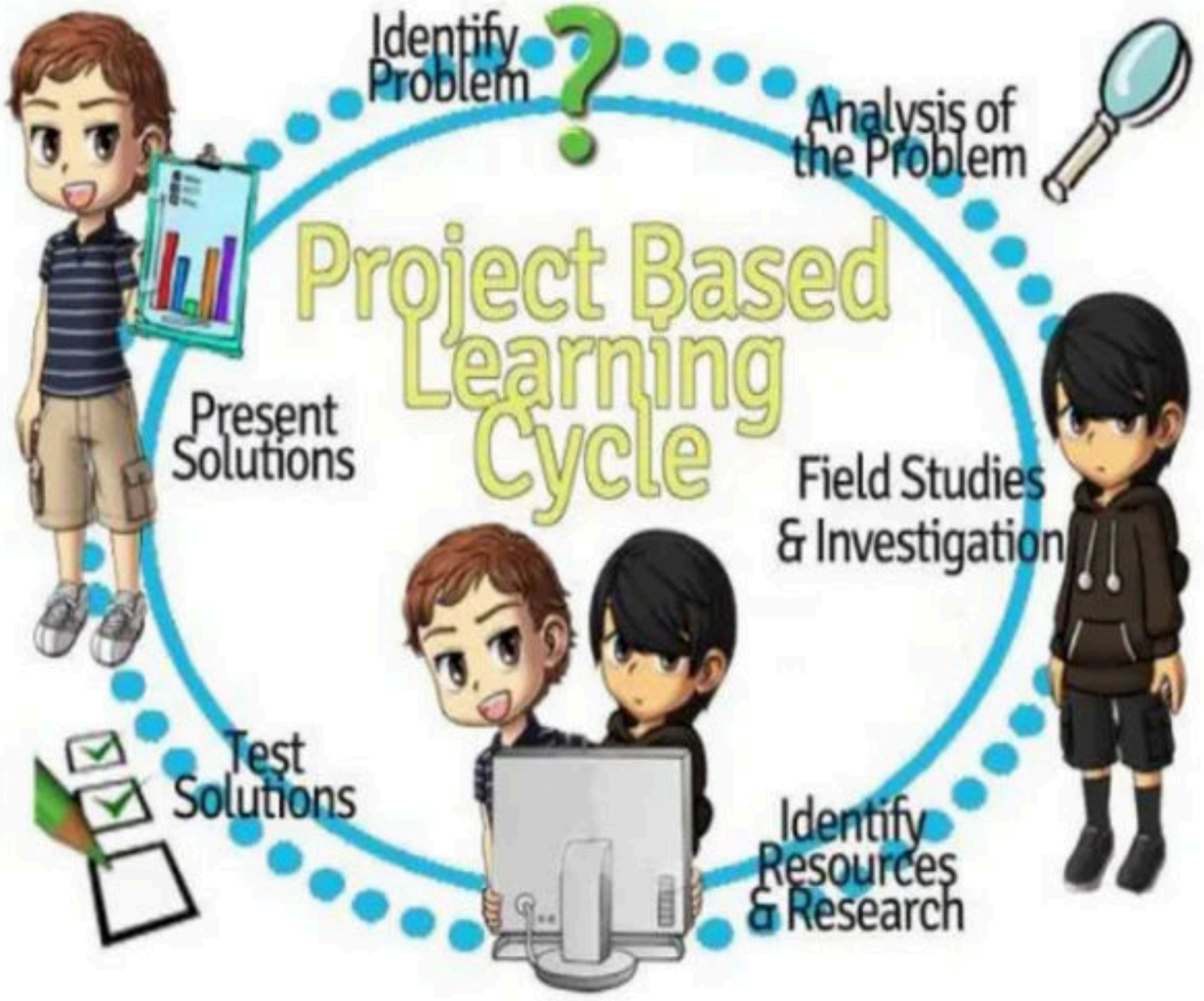
A panel discussion, or simply a panel, involves a group of people gathered to discuss a topic in front of an audience, typically at scientific, business or academic conferences, fan conventions, and on television shows.

Audience is not actively involved

Project method william kilpatrick is one of the modern method of teaching in which, the students point of view is given importance in designing the curricula and content of studies.

This method is based on the philosophy of Pragmatism and the principle of 'Learning by doing'

Like Homework:
plantation- what learnt



Role play

- Interesting method
- Creative thinking is encouraged.
- Students think beyond their knowledge.
- Students enjoy the situation
- Active learning
- Easy to learn

Case study

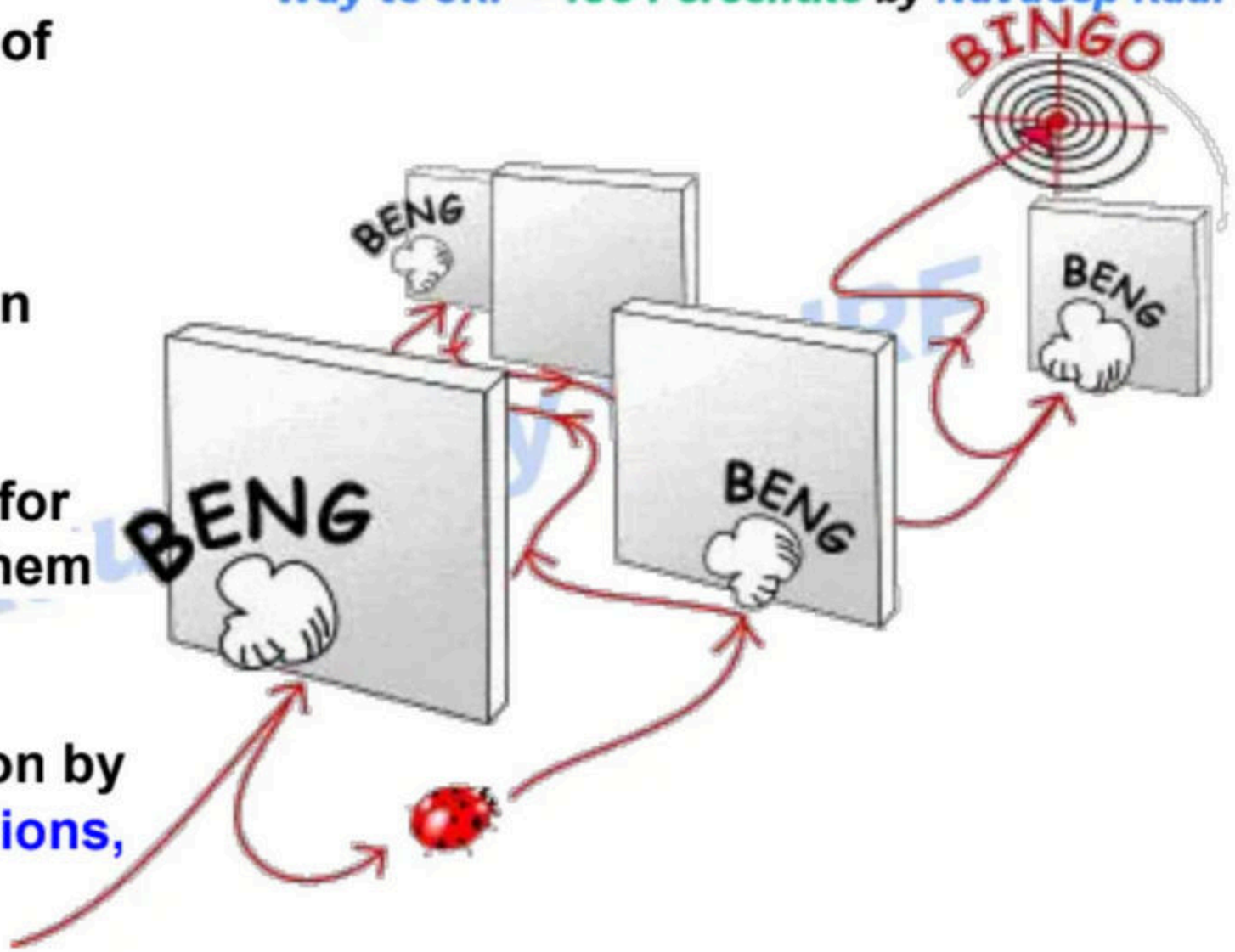
- Active learning
- Creative thinking is encouraged.
- Students think beyond their knowledge.

Heuristic method by Armstrong of teaching

The word `Heuristic` means to discover. in this method, the students be put in the place of an independent discoverer.

- ➔ The teacher sets a problem for the students and then ask them to discover the answer.
- ➔ Students find out the solution by experiments, group discussions, or any other means.

Example: chess



Steps in Micro - Teaching

i. Defining the skill
ii. Demonstrating the skill
iii.Planning the lesson
iv. Teaching the lesson
v.Discussion
vi. Re planning
vii. Re- Teaching
viii. Re-discussion
ix. Repeating the cycle till desired level of skill is achieved

D. Teaching Aids

Teaching aids helps students to improve their skills and make learning fun. There are various kinds of teaching aids.

1. Chart - Shows group facts in the form of a diagram, table or graph & includes an outline or word definitions

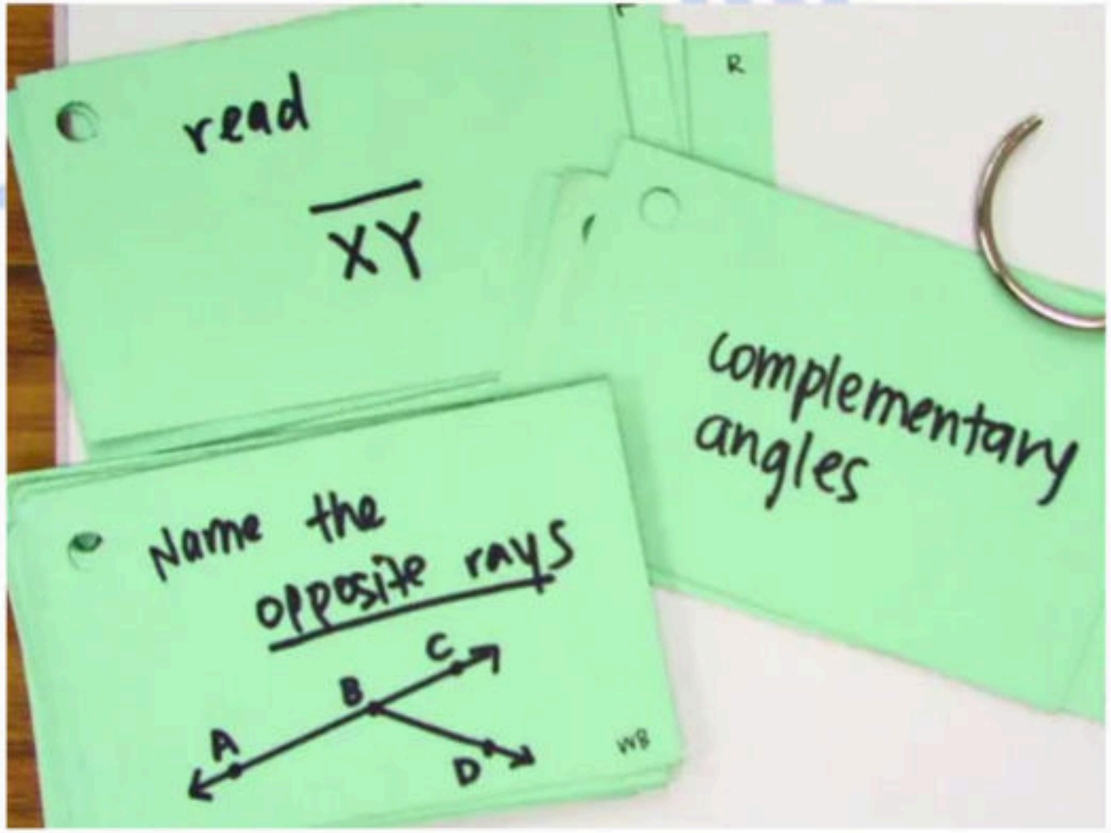
2. Flash Cards - A set of cards that have number, letters, pictures or words on it & are used for facts and enhance memory

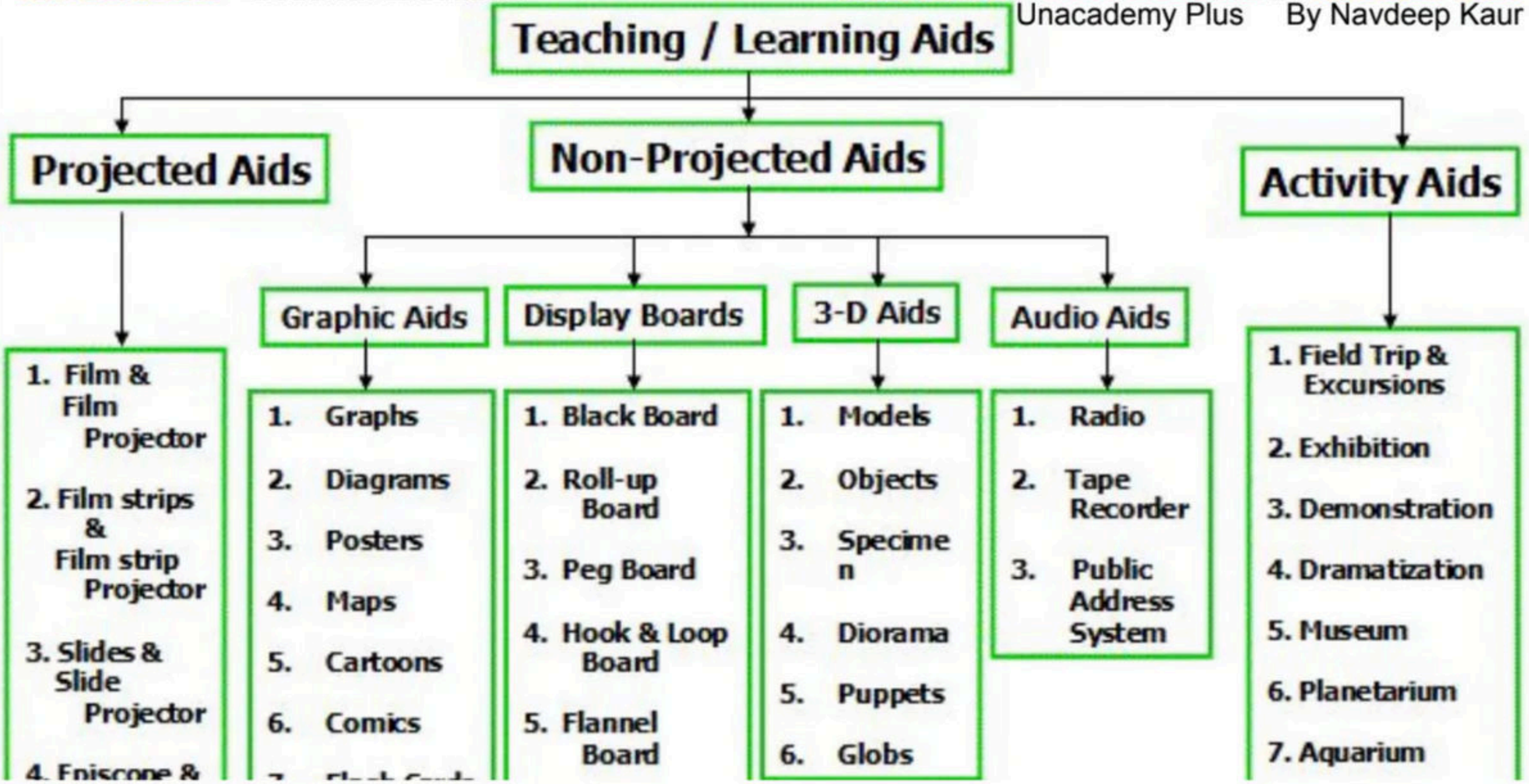
3. Flip Charts - Useful for teaching large groups at a time and while teaching a lesson which involves stages or a process.

4. Maps - Used in social studies so that students can understand spatial relations


FLIP CARDS
4,925
1/8
.75

Flash Cards


read
$\overline{XY}$
complementary angles
Name the opposite rays
A
B
C
D

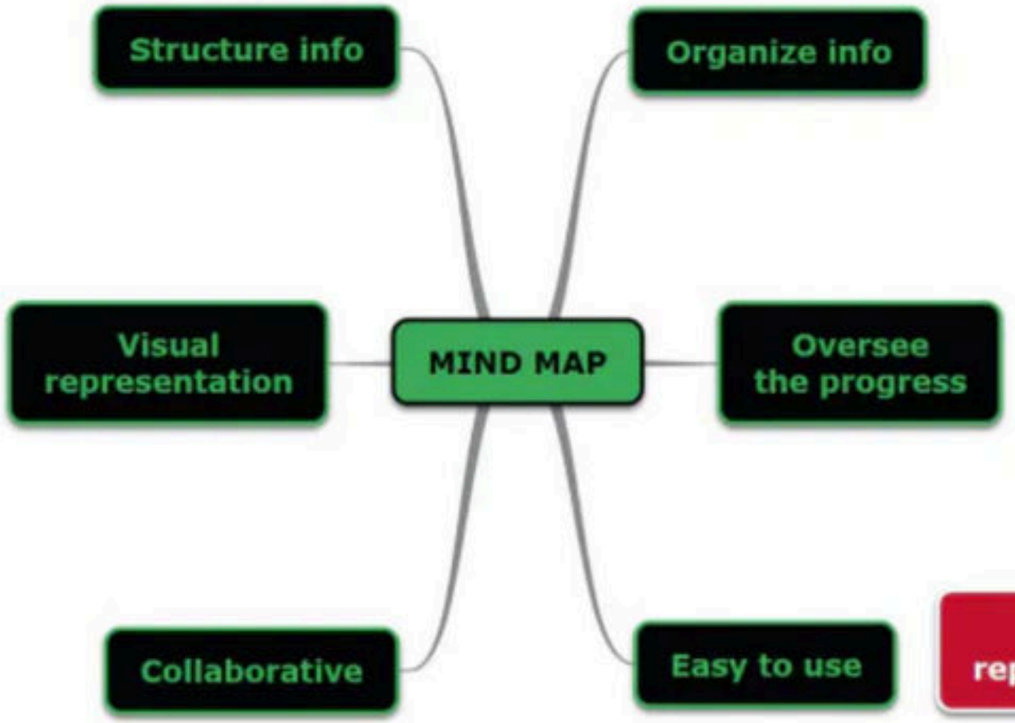


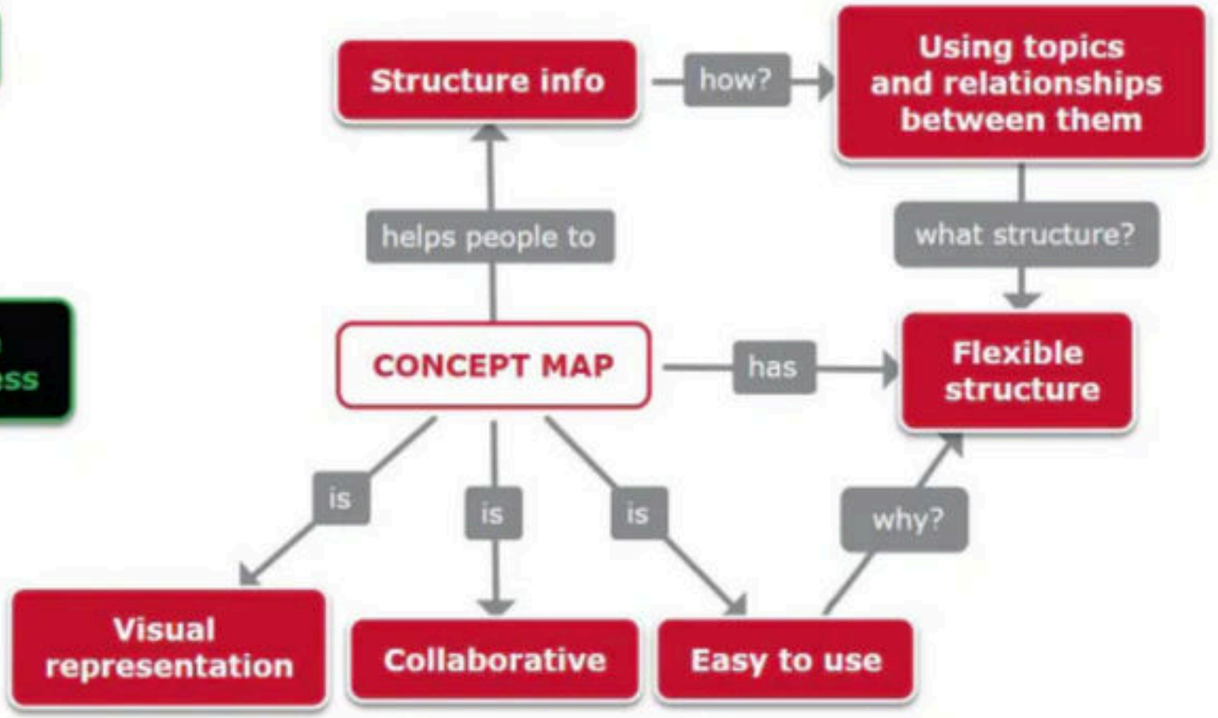
Diorama

Epidiascope

Concept mapping: Joseph D. Novak, an American professor and science researcher, pioneered the concept mapping technique in the 1970s. This method was used for studying and teaching in particular. concept map focus on multiple concepts or ideas with tree structure

Mind mapping: The first traces of diagrams similar to mind maps, on the other hand, were discovered in the 3rd century, but it was British psychology author Tony Buzan who popularised the term 'mind mapping' in 1974. Mind map focus on one particular concept with radial structure





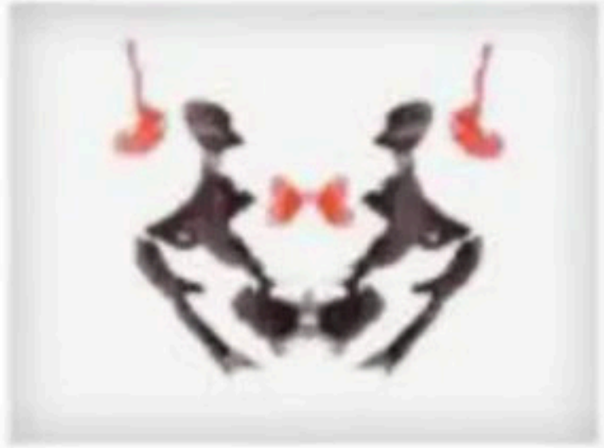
Projective Tests

- Helps to uncover unconscious motives
- An ambiguous stimulus is presented to the client who interprets it as they like thus projecting their personality through their responses.
- Two widely used Projective tests are : Rorschach Test & Thematic Apperception Test

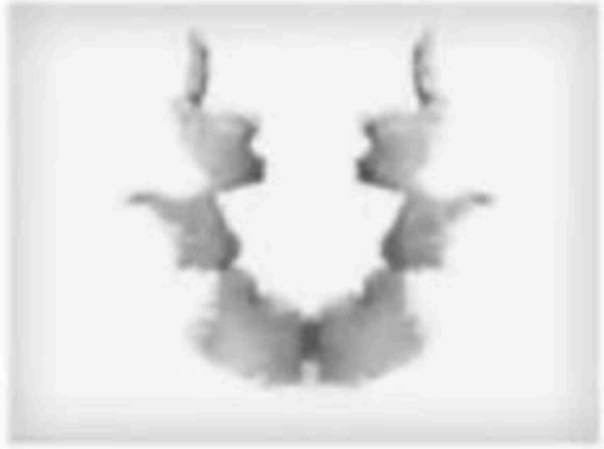
a. Rorschach Test

- Developed by Swiss psychiatrist Hermann Rorschach in the 1920's
- Series of 10 cards each displaying different inkblots either colored or black & white
- The subject is asked to look at each card one at a time & report everything seen on the card
- After all 10 cards are done, the examiners goes over every response to ask them what features of the blot game them that particular impression










You will write down your answers to one question for each inkblot.

b. Thematic Apperception Test (TAT)

- Developed at Harvard University by Henry Murray in 1930's
- Less ambiguous than Rorschach as it consists of actual scenes on 20 cards
- The subject is asked to base a story depending on the picture
- The test is intended to reveal the 'themes' that occur in the person's imaginations
- Apperceptions is perceptions of things in a certain way due to past experience
- If a problem is bothering a particular subject, they may show up in a number of stories.

3. Philosophical Evaluation

- Evaluation based on mastery of subject matter
- Test the memory, mastery and ability to apply the skills learnt

Evaluation is based two philosophies one, traditional philosophy is that ability to learn is randomly distributed in the general population. It means that if some learning task is assigned to a class and then a test is administered to study their performance. The result of the test shows

The new philosophy of measurement is based on democratic values and gives importance to the environment. It is based on the universalization of education. It assumes that if education is thought universal, the responsibility of the teacher is to help as many students as possible to learn.

Important points

- Rousseau- nature is teacher, no formal learning
- Froebel- kindergarten system, focus on self activity, creativeness and social cooperation
- Mahatma Gandhi- basic education, Wardha education system. Gandhi had published an article in the Harijan. Based upon this article, an all India National Education Conference was held on October 22 and 23, 1937. The conference is called Wardha Educational Conference and the president of this conference was Gandhi himself.
- Rabindranath Tagore- learning to take place in nature and from nature. Tagore argues that learning by the "method of nature" will allow children to develop their creativity and to apply what they have learnt.

Be active during Preparation

- Biggest issue Panic
- Ur fear kills ur time

How to Manage and deal with Ques.

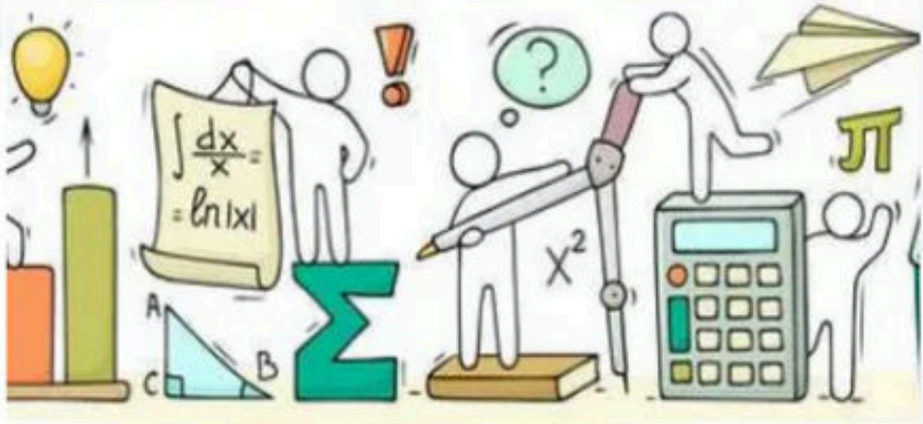
Read Ques carefully

Best to be Fast but don't skip Important

In Data Interpretation

Mathematical reasoning

- Do random Divide Daily
- Slowly read Ques
- Make equation for that part only
- Then read further, then solve
- If not able to, go backward
- Do from options



Unit-I Teaching Aptitude

- Levels of teaching (Memory,Understanding and Reflective),
- Learner's characteristics: (Academic, Social, Emotional and Cognitive),
- Methods : Teacher centred vs. Learner centred methods; Off-line vs. On-line methods (Swayam, Swayamprabha, MOOCs etc.).
- Teaching Support System: Traditional, Modern and ICT based.
- Evaluation Systems: Choice Based Credit System in Higher education, Computer based testing, Innovations in evaluation systems.

Unit-II Research Aptitude

- Types, and Characteristics,
- Positivism and Post positivist approach to research.
- Methods: Experimental, Descriptive, Historical, Qualitative and Quantitative methods.
- Steps of Research.
- Thesis and Article writing: Format and styles of referencing.
- Application of ICT in research.
- Research ethics.

Unit-III Comprehension

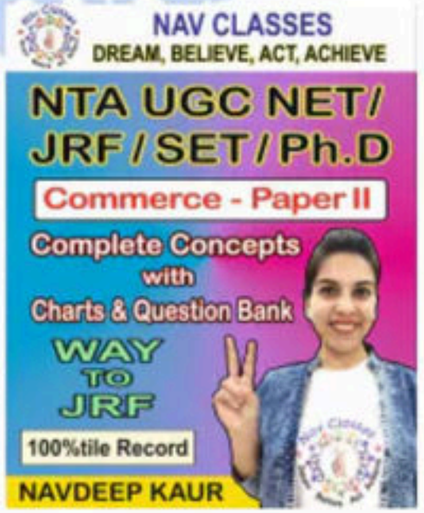
Unit-IV Communication

- Meaning, types
- Effective communication
- Inter-Cultural and group
- Classroom communication.
- Barriers to effective communication.
- Mass-Media and Society

Unit-V Mathematical Reasoning and Aptitude

- Types of reasoning.
- Number series,
- Letter series, Codes and Relationships.

- (Fraction, Time & Distance, Ratio, Proportion and Percentage, Profit and Loss, Interest and Discounting, Averages etc.).



Unit-VI Logical Reasoning

- Understanding the structure of arguments: argument forms, structure of categorical propositions, Mood and Figure, Formal and Informal fallacies,
- Uses of language, Connotations and denotations of terms, Classical square of opposition.
- Evaluating and distinguishing deductive and inductive reasoning.
- Analogies.
- Venn diagram: Simple and multiple use for establishing validity of arguments.

Indian Logic: Means of knowledge.

- Pramanas: Pratyaksha (Perception), Anumana (Inference), Upamana (Comparison), Shabda (Verbal testimony), Arthapatti (Implication) and Anupalabddhi (Non-apprehension).
- Structure and kinds of Anumana (inference), Vyapti (invariable relation), Hetvabhasas (fallacies of inference).

Unit-VII Data Interpretation

- Table-chart and Line-chart

Unit-VIII Information and Communication Technology (ICT)

- ICT: General abbreviations and terminology.
- Basics of Internet, Intranet, E-mail, Audio and Video-conferencing.
- Digital initiatives in higher education.
- ICT and Governance.
- Data representation
- Fundamentals

All Nav Learners who Participated in Conte
Plz wait you will be added automatically till
10PM, 30 August 2021.

For Others it's optional even then if you want to access You Have to pay nominal amount
Rs. 35

Test will be on 1st September 2021, 10 AM
In English & Hindi Both

Instructions: Make short Video on How u are preparing from book Navdeep Kaur's Book and Upload on Youtube (Public or Unlisted) or Drive (make link: anyone with link can see) copy paste link in form in Description.
Last Date: 22 August to fill form, **Result:** 28 August 8 AM

निर्देश: आप कैसे तैयारी कर रहे हैं, इस पर लघु वीडियो बनाएं नवदीप कौर की पुस्तक से और यूट्यूब (सार्वजनिक या असूचीबद्ध) या ड्राइव पर अपलोड करें (लिंक बनाएं: लिंक वाला कोई भी देख सकता है) विवरण में फॉर्म में कॉपी पेस्ट लिंक।

Gift for all participants

Free Mock Test on Paper 1 By Navdeep Kaur

- As they doing efforts in making Video and Reviews

Top 3 will get Nav Classes Kit

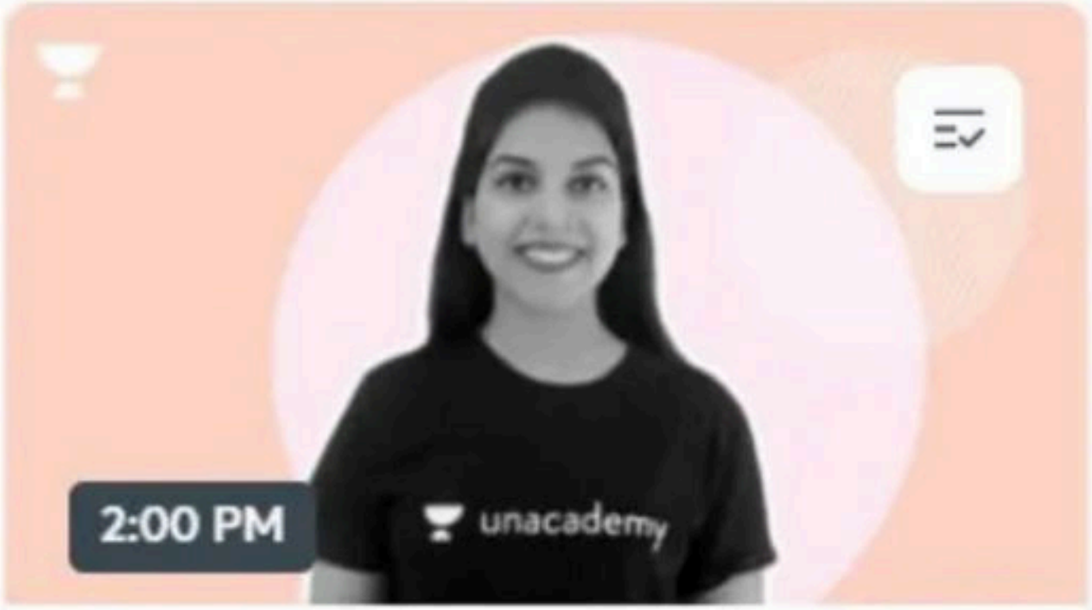
Unit-IX People, Development and Environment

- Development and environment: Millennium development and Sustainable development goals.
- Human and environment interaction: Anthropogenic activities and their impacts on environment.
- Environmental issues: Local, Regional and Global; Air pollution, Water pollution, Soil pollution, Noise pollution, Waste (solid, liquid, biomedical, hazardous, electronic), Climate change and its Socio-Economic and Political dimensions.
- Impacts of pollutants on human health.
- Natural and energy resources: Solar, Wind, Soil, Hydro, Geothermal,
- Biomass, Nuclear and Forests.

- Natural hazards and disasters: Mitigation strategies.
- Environmental Protection Act (1986), National Action Plan on Climate Change, International agreements/efforts -Montreal Protocol, Rio Summit,
- Convention on Biodiversity, Kyoto Protocol, Paris Agreement, International Solar Alliance.

Unit-X Higher Education System

- Institutions of higher learning and education in ancient India.
- Evolution of higher learning and research in Post Independence India.
- Oriental, Conventional and Non-conventional learning programmes in India.
- Professional, Technical and Skill Based education.
- Value education and environmental education.
- Policies, Governance, and Administration.



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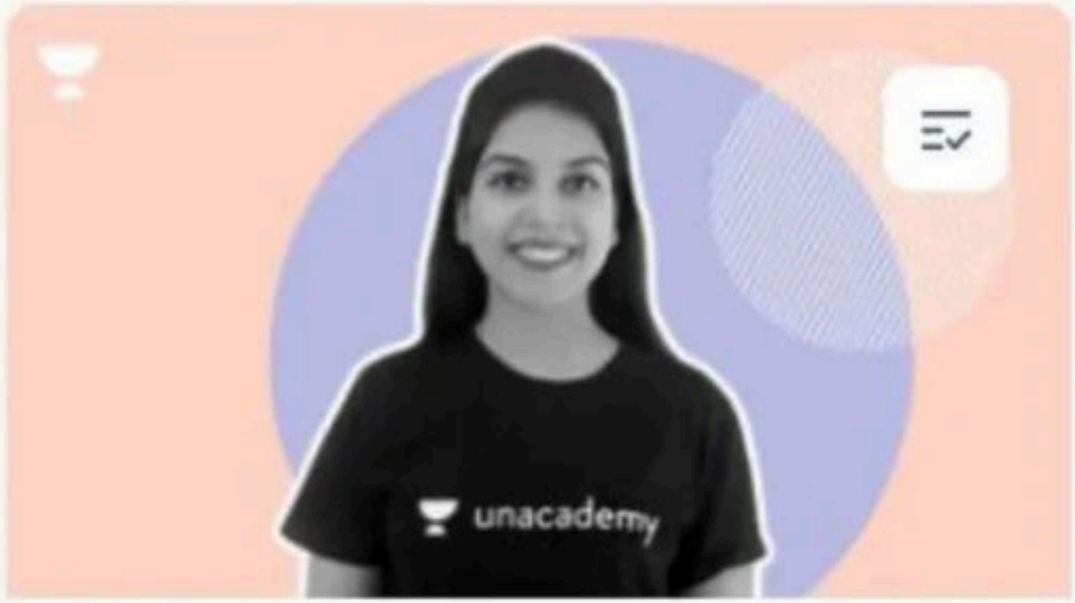

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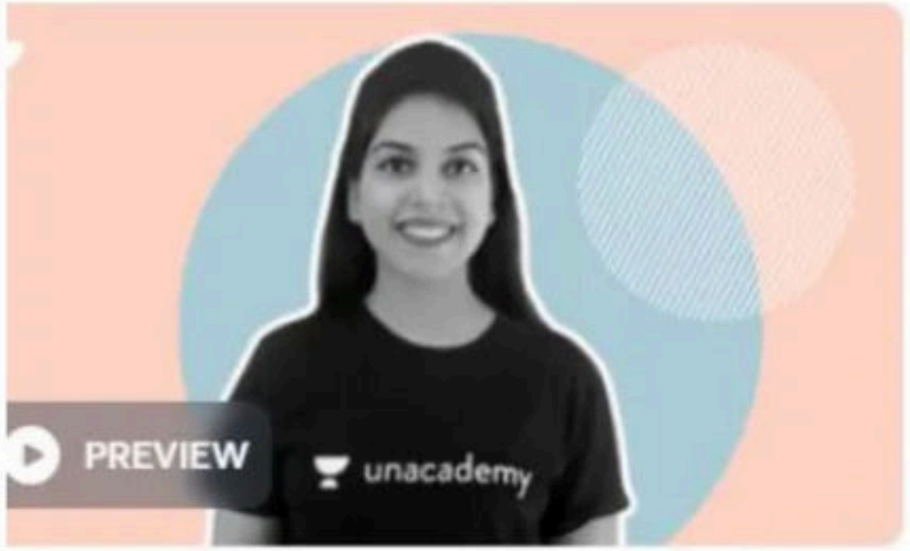

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Then

2 Hours paper 1 (As Navdeep Kaur also providing REVISION in Free Spacial classes & Nav Classes Youtube, Maha Episodes keep watching them live)

3 Hours to Paper 2 your subject (For Commerce management Maha Episodes will come during last days for Revision)

Samagra Shiksha Scheme 2.0 is a new version of the Samagra Shiksha Scheme.
- 4 Aug 2021

The scheme will be in effect from April 1, 2021 to March 31, 2026.
For this period, a budget of Rs 2.94 lakh crore has been approved.

The scheme covers 1.16 million schools, over 156 million students, and 5.7 million teachers from pre-primary to senior secondary level in government and aided schools.

The scheme provides up to Rs 500 per child per year for Teaching Learning Materials (TLM), indigenous toys and games, and play-based activities in Government Schools' pre-primary sections.

Union Education Minister Dharmendra Pradhan announced the scheme, saying it will provide access to quality education in an equitable and inclusive classroom environment.

Samagra Shiksha is a comprehensive school education programme that runs from pre-school to class 12. It was created with the overarching goal of improving school effectiveness as measured by equal access to education and equitable learning outcomes.

It incorporates the three schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Teacher Education into one (TE).

Since the implementation of the National Education Policy (NEP) 2020 is underway, the Samagra Shiksha 2.0 scheme will also take new paths.

According to the cabinet committee on economic affairs (CCEA), all child-centric interventions will be provided directly to students over time through DBT mode (Direct Benefit Transfer) on an IT-based platform in order to improve the scheme's direct outreach.

Furthermore, the existing infrastructure of schools, ITIs, and Polytechnics will be used to ensure that the facilities are utilised optimally, not only for school-age children but also for out-of-school children.

NIPUN Bharat, a new scheme, has been launched. This is a National Mission on Foundational Literacy and Numeracy that aims to ensure that every child achieves the desired learning competencies in reading, writing, and numeracy by the end of third grade and no later than fifth grade.

Teaching Learning Materials (TLM) of up to Rs 500 per child per year,
Rs 150 per teacher for teacher manuals and resources, and
Rs 10-20 lakh per district for assessment are available.

For out-of-school children aged 16 to 19, the scheme will provide Rs 2,000 per child for SC, ST, and disabled children.
This is in order for them to complete their secondary/senior secondary levels via NIOS/SOS.

The Major interventions proposed under the scheme are includes:

– Universal Access to Education including Infrastructure Development and Retention
– Foundational Literacy and Numeracy
– Gender and Equity
– Quality and Innovation
– Financial support for Teachers' Salary
– Digital initiatives
– Vocational Education
– Sports and Physical Education
– Strengthening of Teacher Education and Training

Major Objectives of the scheme:

1. Implementing the recommendations of the National Education Policy 2020
2. Implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009
3. Early Childhood Care and Education
4. Emphasis on Foundational Literacy and Numeracy
5. Emphasis on activity-based Curriculum and Pedagogy to impart 21st-century skills to the students
6. Bridging Social and Gender Gaps in School Education
7. Strengthening and up-gradation of State Councils for Educational Research and Training (SCERTs)/State Institutes of Education and District Institutes for Education and Training (DIET) as the nodal agency for teacher training
8. Ensuring a safe, secure and conducive learning environment and maintenance of standards in schooling provisions

समग्र शिक्षा योजना 2.0 समग्र शिक्षा योजना का एक नया संस्करण है।

यह योजना 1 अप्रैल, 2021 से 31 मार्च, 2026 तक प्रभावी रहेगी। इस अवधि के लिए 2.94 लाख करोड़ रुपये के बजट को मंजूरी दी गई है।

इस योजना में 1.16 मिलियन स्कूल, 156 मिलियन से अधिक छात्र, और 5.7 मिलियन शिक्षक पूर्व-प्राथमिक से वरिष्ठ माध्यमिक स्तर के सरकारी और सहायता प्राप्त स्कूलों में शामिल हैं।

यह योजना सरकारी स्कूलों के पूर्व-प्राथमिक वर्गों में शिक्षण शिक्षण सामग्री (टीएलएम), स्वदेशी खिलौने और खेल, और खेल-आधारित गतिविधियों के लिए प्रति वर्ष 500 रुपये तक प्रदान करती है।

केंद्रीय शिक्षा मंत्री धर्मेंद्र प्रधान ने इस योजना की घोषणा करते हुए कहा कि यह एक समान और समावेशी कक्षा के माहौल में गुणवत्तापूर्ण शिक्षा तक पहुंच प्रदान करेगी।

समग्र शिक्षा एक व्यापक स्कूली शिक्षा कार्यक्रम है जो पूर्व-विद्यालय से कक्षा 12 तक चलता है। इसे शिक्षा की समान पहुंच और समान सीखने के परिणामों द्वारा मापा गया स्कूल प्रभावशीलता में सुधार के व्यापक लक्ष्य के साथ बनाया गया था।

इसमें सर्व शिक्षा अभियान (एसएसए), राष्ट्रीय माध्यमिक शिक्षा अभियान (आरएमएसए), और शिक्षक शिक्षा की तीन योजनाओं को एक (टीई) में शामिल किया गया है।

चूंकि राष्ट्रीय शिक्षा नीति (एनईपी) 2020 का कार्यान्वयन चल रहा है, समग्र शिक्षा 2.0 योजना भी नए रास्ते अपनाएगी।

आर्थिक मामलों की कैबिनेट कमेटी (सीसीईए) के अनुसार, योजना की सीधी पहुंच में सुधार के लिए आईटी आधारित प्लेटफॉर्म पर डीबीटी मोड के माध्यम से समय के साथ सभी बाल-केंद्रित हस्तक्षेप सीधे छात्रों को प्रदान किए जाएंगे।

इसके अलावा, स्कूलों, आईटीआई और पॉलिटेक्निक के मौजूदा बुनियादी ढांचे का उपयोग यह सुनिश्चित करने के लिए किया जाएगा कि न केवल स्कूली उम्र के बच्चों के लिए बल्कि स्कूल से बाहर के बच्चों के लिए भी सुविधाओं का बेहतर उपयोग किया जाए।

NIPUN भारत, एक नई योजना शुरू की गई है। यह मूलभूत साक्षरता और संख्यात्मकता पर एक राष्ट्रीय मिशन है जिसका उद्देश्य यह सुनिश्चित करना है कि प्रत्येक बच्चा तीसरी कक्षा के अंत तक और बाद में पांचवीं कक्षा के बाद पढ़ने, लिखने और अंकगणित में वांछित सीखने की क्षमता हासिल कर ले।

प्रति बच्चा प्रति वर्ष 500 रुपये तक का टीएलएम, शिक्षक नियमावली और संसाधनों के लिए प्रति शिक्षक 150 रुपये और मूल्यांकन के लिए 10-20 लाख रुपये प्रति जिला उपलब्ध है।

16 से 19 वर्ष की आयु के स्कूल से बाहर के बच्चों के लिए, योजना एससी, एसटी और विकलांग बच्चों के लिए प्रति बच्चा 2,000 रुपये प्रदान करेगी। यह उनके लिए एनआईओएस/एसओएस के माध्यम से अपने माध्यमिक/वरिष्ठ माध्यमिक स्तर को पूरा करने के लिए है।

योजना के तहत प्रस्तावित प्रमुख हस्तक्षेपों में शामिल हैं:
- बुनियादी ढांचे के विकास और प्रतिधारण सहित शिक्षा के लिए सार्वभौमिक पहुंच
- मूलभूत साक्षरता और संख्यात्मकता
- लिंग और समानता
- गुणवत्ता और नवाचार
- शिक्षकों के वेतन के लिए वित्तीय सहायता
- डिजिटल पहल
- व्यावसायिक शिक्षा
- खेल और शारीरिक शिक्षा
- शिक्षक शिक्षा और प्रशिक्षण का सुदृढ़ीकरण

योजना के प्रमुख उद्देश्य:
इस योजना का उद्देश्य सभी को स्कूली शिक्षा तक सार्वभौमिक पहुंच प्रदान करना है, जिसमें राज्यों और केंद्र शासित प्रदेशों को सहायता प्रदान करने के कुछ प्रमुख उद्देश्य शामिल हैं:

1. राष्ट्रीय शिक्षा नीति 2020 की सिफारिशों को लागू करना
2. बच्चों के मुफ्त और अनिवार्य शिक्षा के अधिकार (आरटीई) अधिनियम, 2009 का कार्यान्वयन
3. बचपन की देखभाल और शिक्षा
4. आधारभूत साक्षरता और संख्यात्मकता पर जोर
5. छात्रों को 21वीं सदी के कौशल प्रदान करने के लिए गतिविधि आधारित पाठ्यचर्या और शिक्षाशास्त्र पर जोर
6. स्कूली शिक्षा में सामाजिक और लैंगिक अंतर को पाटना
7. शिक्षक प्रशिक्षण के लिए नोडल एजेंसी के रूप में राज्य शैक्षिक अनुसंधान और प्रशिक्षण परिषद (एससीईआरटी) / राज्य शिक्षा संस्थान और जिला शिक्षा और प्रशिक्षण संस्थान (डीआईईटी) का सुदृढ़ीकरण और उन्नयन
8. एक सुरक्षित, सुरक्षित और अनुकूल शिक्षण वातावरण सुनिश्चित करना और स्कूली शिक्षा के प्रावधानों में मानकों का रखरखाव करना

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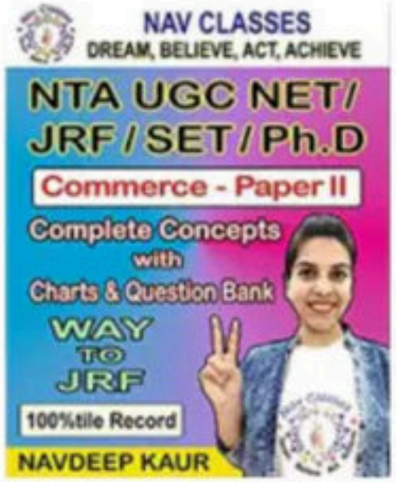

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e-RUPI is a **cashless and contactless** instrument for **digital payment** developed by **National Payments Corporation of India**

Connects sponsors of the services with beneficiaries & service providers in a **digital manner without any physical interface**

Assures timely payment **without involvement of any intermediary**.

It can also be used for **delivering services** meant for **providing drugs & nutritional support under Mother & Child welfare schemes, TB eradication programmes**, etc

e-RUPI Digital Payment Launched by PM Modi

India's own Digital currency

Initiative	e-RUPI Digital Payment
Launched By	Government Of India
Beneficiary	Citizens Of India or anyone having it can redeem Example: Can be used for fertilizer subsidies, Ayushman Bharat, Pradhan Mantri Jan Arogya Yojana etc
Objective	To Provide Cashless And Contactless Instrument For Making Digital Payments
Official Website	https://www.npci.org.in/ National Payments Corporation of India
Year	2021

Everything Nav Learner Need to Know About e-RUPI

- ➔ e-RUPI is a cashless and contactless digital payment instrument. It is a QR code or SMS string-based e-Voucher that is delivered to the beneficiaries' mobile phones.
- ➔ Users of this one-time payment mechanism will be able to redeem the voucher at the service provider without the need for a card, digital payments app, or internet banking access.
- ➔ It was created in collaboration with the Department of Financial Services, the Ministry of Health and Family Welfare, and the National Health Authority on the National Payments Corporation of India's UPI platform.
- ➔ e-RUPI connects service sponsors with beneficiaries and service providers in a digital manner, with no physical interface. It also ensures that payment is made to the service provider only after the transaction is completed. Because it is pre-paid, it ensures timely payment to the service provider without the involvement of a third party.
- ➔ It is expected to be a game-changing initiative aimed at ensuring the delivery of leak-proof welfare services.
- ➔ Not only the government, but any general organisation or organisation that wants to help someone in their treatment, education, or any other work will be able to do so using e-RUPI rather than cash.

नव लर्नर को e-RUPI के बारे में जानने की जरूरत है सब कुछ

- ➔ e-RUPI एक कैशलेस और कॉन्टैक्टलेस डिजिटल पेमेंट इंस्ट्रूमेंट है। यह एक क्यूआर कोड या एसएमएस स्ट्रिंग-आधारित ई-वाउचर है जो लाभार्थियों के मोबाइल फोन पर दिया जाता है।
- ➔ इस एकमुश्त भुगतान प्रणाली के उपयोगकर्ता कार्ड, डिजिटल भुगतान ऐप या इंटरनेट बैंकिंग एक्सेस की आवश्यकता के बिना सेवा प्रदाता के वाउचर को भुनाने में सक्षम होंगे।
- ➔ इसे भारतीय राष्ट्रीय भुगतान निगम के UPI प्लेटफॉर्म पर वित्तीय सेवा विभाग, स्वास्थ्य और परिवार कल्याण मंत्रालय और राष्ट्रीय स्वास्थ्य प्राधिकरण के सहयोग से बनाया गया था।
- ➔ ई-आरयूपीआई बिना किसी भौतिक इंटरफेस के डिजिटल तरीके से सेवा प्रायोजकों को लाभार्थियों और सेवा प्रदाताओं से जोड़ता है। यह यह भी सुनिश्चित करता है कि लेन-देन पूरा होने के बाद ही सेवा प्रदाता को भुगतान किया जाए। क्योंकि यह प्री-पेड है, यह किसी तीसरे पक्ष की भागीदारी के बिना सेवा प्रदाता को समय पर भुगतान सुनिश्चित करता है।
- ➔ लीक-प्रूफ कल्याण सेवाओं की डिलीवरी सुनिश्चित करने के उद्देश्य से यह एक गेम-चेंजिंग पहल होने की उम्मीद है।
- ➔ न केवल सरकार, बल्कि कोई भी सामान्य संगठन या संगठन जो किसी के इलाज, शिक्षा या किसी अन्य काम में मदद करना चाहता है, वह नकद के बजाय ई-आरयूपीआई का उपयोग करके ऐसा कर सकेगा।

The following are the consumer benefits of e-RUPI:

Contactless: The beneficiary does not need to carry a printout of the voucher.

Simple redemption: A two-step redemption procedure

Safe and secure: Because the beneficiary is not required to share personal information during redemption, privacy is maintained.

There is no need for a digital or bank presence: The consumer who redeems the voucher does not need to have a digital payment app or a bank account.

ई-आरयूपीआई के उपभोक्ता लाभ निम्नलिखित हैं:

- ➔ संपर्क रहित: लाभार्थी को वाउचर का प्रिंटआउट ले जाने की आवश्यकता नहीं है।
- ➔ सरल मोचन: एक दो-चरणीय मोचन प्रक्रिया
- ➔ सुरक्षित और सुरक्षित: चूंकि मोचन के दौरान लाभार्थी को व्यक्तिगत जानकारी साझा करने की आवश्यकता नहीं होती है, इसलिए गोपनीयता बनाए रखी जाती है।
- ➔ डिजिटल या बैंक उपस्थिति की कोई आवश्यकता नहीं है: वाउचर को भुनाने वाले उपभोक्ता के पास डिजिटल भुगतान ऐप या बैंक खाता होने की आवश्यकता नहीं है।

The terms 'pyrolysis and plasma gasification' are mentioned in which of the following contexts?

(a) Rare earth element extraction
(b) Techniques for extracting natural gas
(c) Automobiles that run on hydrogen fuel
(d) Waste-to-energy (WTE) systems

निम्नलिखित में से किसके संदर्भ में पद हैं
'पायरोलिसिस और प्लाज्मा गैसीकरण' का उल्लेख है?

(ए) दुर्लभ पृथ्वी तत्वों का निष्कर्षण
(बी) प्राकृतिक गैस निष्कर्षण प्रौद्योगिकियां
(सी) हाइड्रोजन ईंधन आधारित ऑटोमोबाइल
(डी) अपशिष्ट से ऊर्जा प्रौद्योगिकियां

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(डी) अपशिष्ट से ऊर्जा प्रौद्योगिकियां

PAG is a waste-treatment method that uses a mix of electricity and high temperatures to convert municipal waste (garbage or trash) into useable by-products without the use of combustion (burning).

Which of the following claims concerning methane hydrate deposits is true?

1. The release of methane gas from these deposits could be triggered by global warming.
2. In the Arctic Tundra and beneath the seafloor, large deposits of'methane hydrate' can be found.
3. After a decade or two, methane in the atmosphere oxidises to carbon dioxide.

Using the code provided below, select the correct answer.

(a) 1 and 2 only
(b) 2 and 3 only
(c)1 and 3 only
(d) 1, 2 and 3

मीथेन हाइड्रेट जमा के संबंध में निम्नलिखित में से कौन सा दावा सही है?

1. इन जमाओं से मीथेन गैस का उत्सर्जन ग्लोबल वार्मिंग के कारण हो सकता है।
2. आर्कटिक टुंड्रा और समुद्र तल के नीचे 'मीथेन हाइड्रेट' के बड़े भंडार पाए जा सकते हैं।
3. एक या दो दशक के बाद, वातावरण में मीथेन कार्बन डाइऑक्साइड में ऑक्सीकृत हो जाती है।

नीचे दिए गए कूट का प्रयोग कर सही उत्तर का चयन करें।

(ए) केवल 1 और 2
(बी) केवल 2 और 3
(सी) केवल १ और ३
(डी) 1, 2 और 3

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मीथेन हाइड्रेट जमा के संबंध में निम्नलिखित में से कौन सा दावा सही है?
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नीचे दिए गए कूट का प्रयोग कर सही उत्तर का चयन करें।
(ए) केवल 1 और 2
(बी) केवल 2 और 3
(सी) केवल १ और ३
(डी) 1, 2 और 3

Only certain physical, chemical, and geological conditions allow methane hydrates to form. The optimal conditions are high water pressures and cold temperatures. Methane Hydrate deposits can be hundreds of metres thick and can be found in two places: beneath Arctic permafrost and beneath the ocean floor. As a result of global warming, the temperature has risen, destabilising the methane hydrates and allowing methane to escape. Methane has a short lifetime in the atmosphere; within a decade or two, a molecule of methane is oxidised to water and carbon dioxide, primarily by interaction with another trace gas, the hydroxyl radical OH-.

केवल कुछ भौतिक, रासायनिक और भूवैज्ञानिक स्थितियां ही मीथेन हाइड्रेट्स को बनने देती हैं। इष्टतम स्थितियां उच्च पानी के दबाव और ठंडे तापमान हैं। मीथेन हाइड्रेट जमा सैकड़ों मीटर मोटी हो सकती है और इसे दो स्थानों पर पाया जा सकता है: आर्कटिक पर्माफ्रॉस्ट के नीचे और समुद्र तल के नीचे। ग्लोबल वार्मिंग के परिणामस्वरूप, तापमान बढ़ गया है, मीथेन हाइड्रेट्स को अस्थिर कर रहा है और मीथेन को बाहर निकलने की इजाजत दे रहा है। वातावरण में मीथेन का जीवनकाल छोटा होता है; एक या दो दशक के भीतर, मीथेन का एक अणु पानी और कार्बन डाइऑक्साइड में ऑक्सीकृत हो जाता है, मुख्य रूप से एक अन्य ट्रेस गैस, हाइड्रॉक्सिल रेडिकल OH- के साथ बातचीत करके।

Consider the following propositions:

1. The Ramsar Convention requires the Indian government to safeguard and conserve all wetlands within its borders.
2. The Wetlands (Conservation and Management) Rules, 2010, were drafted by the Indian government in response to the Ramsar Convention's recommendations.
3. The Wetlands (Conservation and Management) Rules, 2010 also cover the authority's determination of the wetlands' drainage area or catchment areas.

Which of the following assertions is/are correct?

(a) 1 and 2 only
(b) 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

निम्नलिखित प्रस्तावों पर विचार करें:

1. रामसर कन्वेंशन के लिए भारत सरकार को अपनी सीमाओं के भीतर सभी आर्द्रभूमियों की सुरक्षा और संरक्षण की आवश्यकता है।
2. आर्द्रभूमि (संरक्षण और प्रबंधन) नियम, 2010, रामसर कन्वेंशन की सिफारिशों के जवाब में भारत सरकार द्वारा तैयार किए गए थे।
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निम्नलिखित में से कौन सा/से कथन सही है/हैं?

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The Ramsar Convention is an intergovernmental convention that establishes a framework for national and international action to conserve and wisely utilise wetlands and their resources. The Contracting Parties agree to work toward the wise use of all their wetlands under the Convention's three pillars: designate suitable wetlands for the Ramsar List and ensure their effective management; and cooperate internationally on transboundary wetlands, shared wetland systems, and shared species. As a result, it does not refer to all wetlands on a country's territory. The convention took effect in India on February 1, 1982.

रामसर कन्वेंशन एक अंतर सरकारी सम्मेलन है जो आर्द्रभूमि और उनके संसाधनों के संरक्षण और बुद्धिमानी से उपयोग करने के लिए राष्ट्रीय और अंतर्राष्ट्रीय कार्रवाई के लिए एक रूपरेखा स्थापित करता है। अनुबंध करने वाले पक्ष कन्वेंशन के तीन स्तंभों के तहत अपने सभी आर्द्रभूमि के बुद्धिमान उपयोग की दिशा में काम करने के लिए सहमत हैं: रामसर सूची के लिए उपयुक्त आर्द्रभूमि नामित करें और उनका प्रभावी प्रबंधन सुनिश्चित करें; और ट्रांसबाउंड्री वेटलैंड्स, साझा वेटलैंड सिस्टम और साझा प्रजातियों पर अंतरराष्ट्रीय स्तर पर सहयोग करते हैं। नतीजतन, यह किसी देश के क्षेत्र में सभी आर्द्रभूमियों को संदर्भित नहीं करता है। यह सम्मेलन 1 फरवरी, 1982 को भारत में प्रभावी हुआ।

In our country, there has recently been a growing awareness of the relevance of Himalayan nettle (Girardinia diversifolia) because it has been discovered to be a sustainable source of nutrition.

(a) anti-malarial drug
(b) textile fibre
(c) biodiesel
(d) pulp of paper industry

हमारे देश में, हाल ही में हिमालयन बिछुआ (गिरार्डिनिया डायवर्सिफोलिया) की प्रासंगिकता के बारे में जागरूकता बढ़ी है क्योंकि इसे पोषण का एक स्थायी स्रोत के रूप में खोजा गया है।

(ए) मलेरिया-रोधी दवा
(बी) कपड़ा फाइबर
(सी) बायोडीजल
(डी) कागज उद्योग का लुगदी

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The Himalayan Nettle, or Girardinia diversifolia, is a fiber-producing plant found in the Himalayan mountain range. This plant is most commonly found in alpine and mountainous areas above 3000 metres above sea level. Himalayan Nettle grows profusely in the forest, along riverbanks, and in damp environments.

For individuals living in the Himalayan mountain area, this fiber-producing plant has become a good source of income. As a result, this plant has a commercial value. The Government of India is funding research and development for Himalayan Indian Nettle. This fibre is recyclable and biodegradable. As a result of these characteristics, this fibre is environmentally beneficial. The Government of India is pushing its textile and commercial uses in order to increase output.

For their livelihood, several Himalayan people produce fabric from Himalayan Nettle. Because this fabric and the products made from it are in high demand both locally and internationally.

Consider the following propositions: The Environment Protection Act of 1986 gives the Indian government the authority to protect the environment.

1. State the demand for public participation in the environmental protection process, as well as the approach and method for obtaining it.
2. establish criteria for the emission or discharge of contaminants into the environment from various sources.

Which of the following assertions is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

निम्नलिखित प्रस्तावों पर विचार करें: 1986 का पर्यावरण संरक्षण अधिनियम भारत सरकार को पर्यावरण की रक्षा करने का अधिकार देता है।

1. पर्यावरण संरक्षण प्रक्रिया में जनभागीदारी की मांग के साथ-साथ इसे प्राप्त करने का तरीका और तरीका बताएं।
2. विभिन्न स्रोतों से पर्यावरण में प्रदूषकों के उत्सर्जन या निर्वहन के लिए मानदंड स्थापित करें।

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2. विभिन्न स्रोतों से पर्यावरण में प्रदूषकों के उत्सर्जन या निर्वहन के लिए मानदंड स्थापित करें।

Environment Protection Act of 1986 is to allow citizens to participate in decision-making, which helps society achieve its aim of sustainable and environmentally sound growth. Participation of the public in environmental decision-making, particularly in EIA, has several advantages in these procedures. The decision-making process, up to and including the final decision, becomes more transparent and genuine as a result of public participation. This legislation gives the Union government the authority to take all necessary steps to prevent and regulate pollution, as well as to set up effective equipment to safeguard and improve the environment's quality. It also establishes criteria for the emission or discharge of contaminants into the environment from various sources. As a result, both assertions are true.

1986 का पर्यावरण संरक्षण अधिनियम नागरिकों को निर्णय लेने में भाग लेने की अनुमति देता है, जो समाज को स्थायी और पर्यावरणीय रूप से ध्वनि विकास के अपने लक्ष्य को प्राप्त करने में मदद करता है। पर्यावरणीय निर्णय लेने में जनता की भागीदारी, विशेष रूप से ईआईए में, इन प्रक्रियाओं में कई फायदे हैं। निर्णय लेने की प्रक्रिया, अंतिम निर्णय तक और सार्वजनिक भागीदारी के परिणामस्वरूप अधिक पारदर्शी और वास्तविक हो जाती है। यह कानून केंद्र सरकार को प्रदूषण को रोकने और नियंत्रित करने के लिए सभी आवश्यक कदम उठाने के साथ-साथ पर्यावरण की गुणवत्ता की सुरक्षा और सुधार के लिए प्रभावी उपकरण स्थापित करने का अधिकार देता है। यह विभिन्न स्रोतों से पर्यावरण में प्रदूषकों के उत्सर्जन या निर्वहन के लिए मानदंड भी स्थापित करता है। परिणामस्वरूप, दोनों कथन सत्य हैं।

The BioCarbon Fund Initiative for Sustainable Forest Landscapes is overseen by which of following

(a) World Bank
(b) International Monetary Fund
(c) United Nations Environment Programme
(d) Asian Development Bank

सतत वन परिदृश्य के लिए बायोकार्बन फंड पहल की देखरेख निम्नलिखित में से किसके द्वारा की जाती है

(ए) विश्व बैंक
(बी) अंतर्राष्ट्रीय मुद्रा कोष
(सी) संयुक्त राष्ट्र पर्यावरण कार्यक्रम
(डी) एशियाई विकास बैंक

The BioCarbon Fund Initiative for Sustainable Forest Landscapes is overseen by which of following

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सतत वन परिदृश्य के लिए बायोकार्बन फंड पहल की देखरेख निम्नलिखित में से किसके द्वारा की जाती है

(ए) विश्व बैंक

(बी) अंतर्राष्ट्रीय मुद्रा कोष

(सी) संयुक्त राष्ट्र पर्यावरण कार्यक्रम

(डी) एशियाई विकास बैंक

The BioCarbon Fund ISFL is a global initiative managed by the World Bank and sponsored by donor nations.

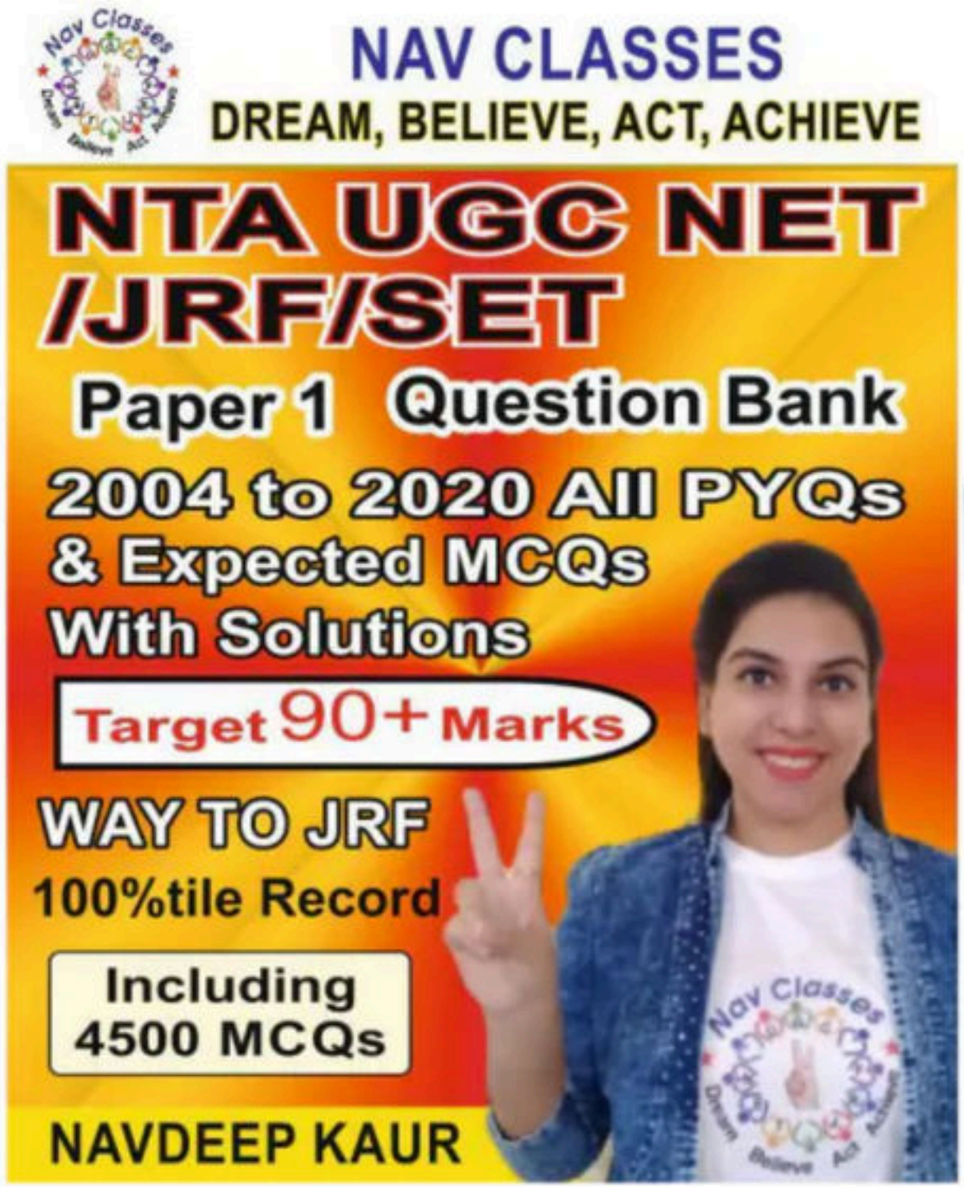
The BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) is a multilateral facility that promotes and rewards better land management, such as REDD+ (Reduced Emissions from Deforestation and Forest Degradation), climate smart agriculture, and smarter land use planning and policies, in order to reduce greenhouse gas emissions and increase sequestration. The ISFL will test techniques and share lessons learned by piloting programmes and interventions at a jurisdictional level.

In 2013, the BioCarbon Fund launched the Initiative for Sustainable Forest Landscapes. Germany, Norway, Switzerland, the United Kingdom (Department for Business, Energy and Industrial Strategy and Department for Environment, Food and Rural Affairs), and the United States all support the Initiative. It sponsors initiatives in Colombia, Ethiopia, Indonesia, Mexico, and Zambia with $355 million in fund money.

बायोकार्बन फंड आईएसएफएल विश्व बैंक द्वारा प्रबंधित और दाता देशों द्वारा प्रायोजित एक वैश्विक पहल है।

बायोकार्बन फंड इनिशिएटिव फॉर सस्टेनेबल फॉरेस्ट लैंडस्केप्स (ISFL) एक बहुपक्षीय सुविधा है जो बेहतर भूमि प्रबंधन को बढ़ावा देती है और पुरस्कृत करती है, जैसे REDD+ (वनों की कटाई और वन क्षरण से कम उत्सर्जन), जलवायु स्मार्ट कृषि, और स्मार्ट भूमि उपयोग योजना और नीतियां, क्रम में ग्रीनहाउस गैस उत्सर्जन को कम करने और जब्ती बढ़ाने के लिए। ISFL तकनीकों का परीक्षण करेगा और एक अधिकार क्षेत्र के स्तर पर पायलटिंग कार्यक्रमों और हस्तक्षेपों से सीखे गए पाठों को साझा करेगा।

2013 में, बायोकार्बन फंड ने सतत वन परिदृश्य के लिए पहल शुरू की। जर्मनी, नॉर्वे, स्विट्ज़रलैंड, यूनाइटेड किंगडम (व्यापार, ऊर्जा और औद्योगिक रणनीति विभाग और पर्यावरण, खाद्य और ग्रामीण मामलों के विभाग), और संयुक्त राज्य अमेरिका सभी पहल का समर्थन करते हैं। यह कोलंबिया, इथियोपिया, इंडोनेशिया, मैक्सिको और जाम्बिया में 355 मिलियन डॉलर के फंड मनी के साथ पहल करता है।



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NTA UGC NET/ SET/ JRF/ Ph.D

Commerce - Paper II

Complete Concepts with Charts & Question Bank

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amazon

Make it realistic

Write down Your Goal JRF with 5 Point Reason

> Why
> For whom
> How Important
> Why only this most admirable
> How much effort You can do to get JRF

Make it realistic

Write down Your Goal JRF with 5 Point Reason

> Why
> For whom
> How Important
> Why only this most admirable
> How much effort You can do to get JRF

Why laziness comes

> Just bcz …
> Am i Preparing in correct Way
> What Habit i have to Change

When i will start focusing and be mature to get JRF

Hey Let's Start For JRF Now !!

NTA UGC NET - Way to JRF 2021

Target: 100 Percentile AIR- 1

NTA UGC NET JRF

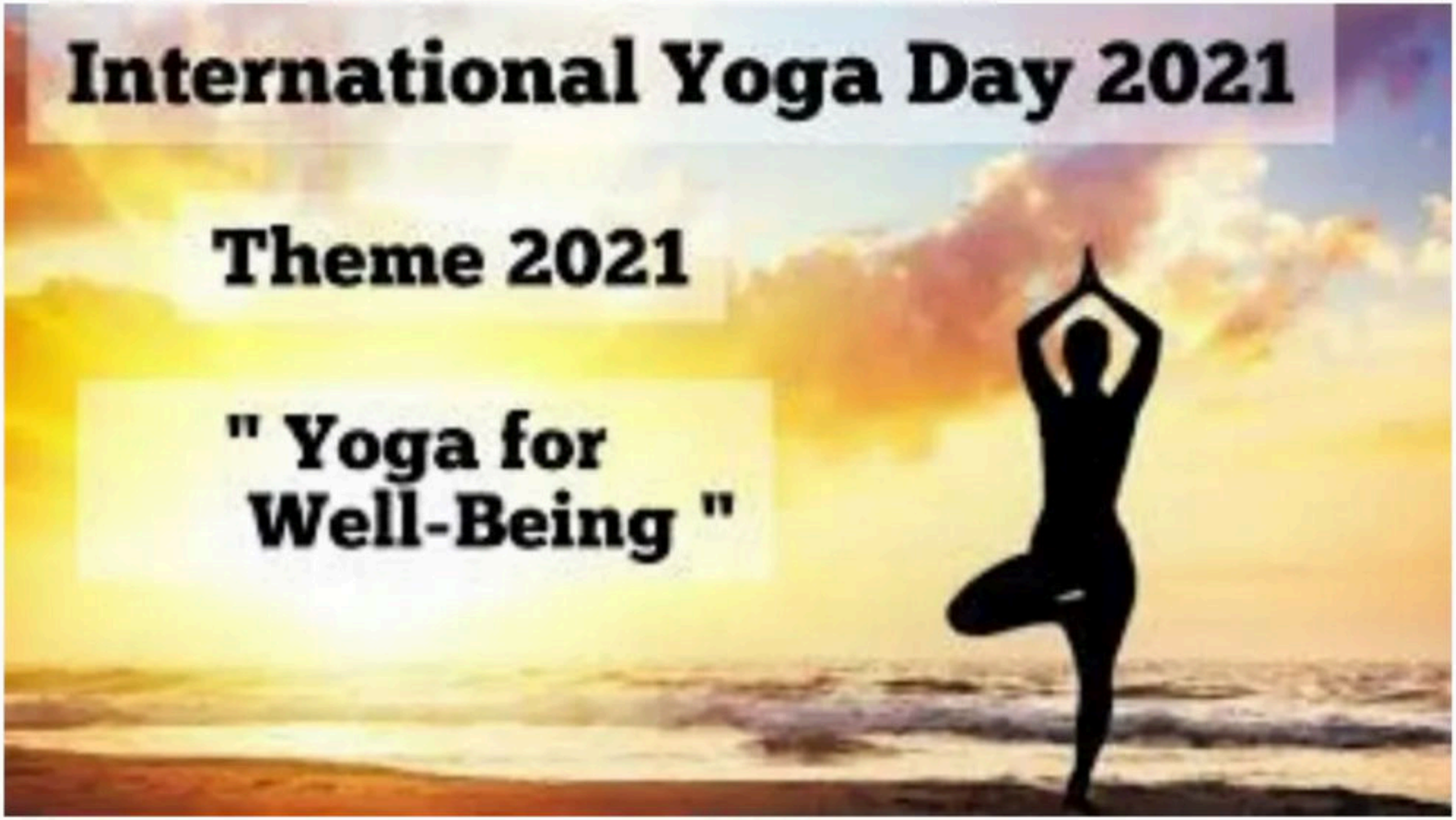
COMMERCE 17 October 2020

1st Shift PYQ with Official

Answer Keys, Explanation

JRF is Mine

इस बार JRF लेकर ही रहेंगे


International Yoga Day 2021
Theme 2021
" Yoga for
Well-Being "

सक्सेस की सबसे
बड़ी खास बात यह है कि
वह मेहनत करने वालों पर
फिदा हो जाती है!!

शिक्षा वो शेरनी का दूध है जो इसे **पियेगा वो** शेर की तरह **दहाड़ेगा**- Dr. B.R. Ambedkar

A computer cannot boot if it does not have which of the following?

[A] Compiler
[B] Loader
[C] Operating System
[D] Assembler

एक कंप्यूटर बूट नहीं कर सकता यदि उसमें निम्न में से क्या नहीं है?

[ए] संकलक
[बी] लोडर
[सी] ऑपरेटिंग सिस्टम
[डी] असेंबलर

An operating system is the most important software that runs on a computer. It manages the computer's memory and processes, as well as all of its software and hardware.

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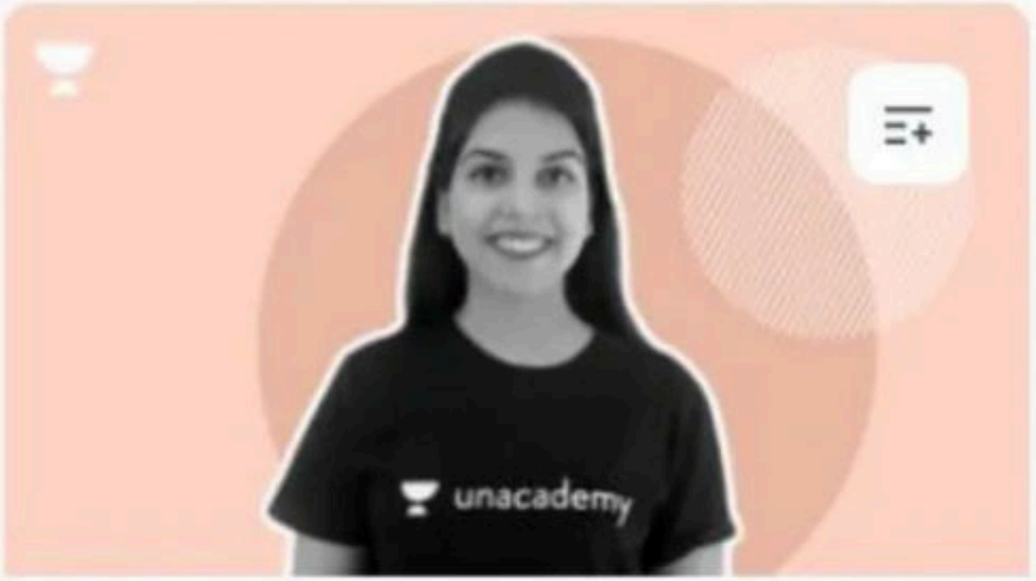
Clear Roadmap For Preparation

Help Establish Command Over Core Subjects

Code: NAVCLASSES

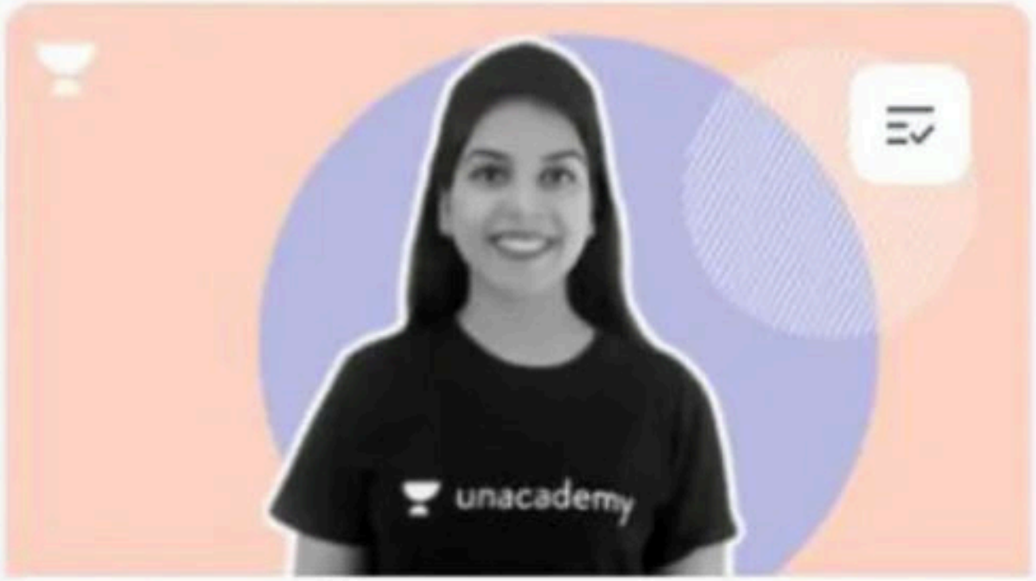


HINDI GENERAL PAPER ON TEACHING

Rank Booster Course on Paper 1 through MCQs

Starts on May 26, 2021 • 5 le

Navdeep Kaur



HINDI COMMERCE

Course on Commerce (Unit I, II, III & V)

Starts on May 12, 2021 • 33 lessons

Navdeep Kaur

Code: NAVCLASSES

Unacademy - Accelerate Scholarship Test

Schedule

Feb 21 - May 30 • 14 tests

MAY 9	Scholarship Mock 10 | Computer Science	Test 11 • 4:00 PM
MAY 16	Scholarship Mock 11 | Sociology	Test 12 • 4:00 PM
MAY 23	Scholarship Mock 12 | Commerce	Test 13 • 4:00 PM
MAY 30	Scholarship Mock 13 | Paper 1	Test 14 • 4:00 PM

Code: NAVCLASSES

Advance Expected MCQs Course on Paper 1- Way to JRF

Discussion Forum

Week 1

Mar 29 - Apr 4 • 1 lesson, 2 quizes

APR 2 — Expected MCQs Quiz on Teaching Aptitude
Quiz 1 • 7:30 PM — Create quiz

APR 3 — Analysis of Expected MCQs Quiz on Teaching Aptitude
Lesson 1 • 5:00 PM

APR 4 — Expected MCQs Quiz on Research Aptitude
Quiz 2 • 7:30 PM — Create quiz

unacademy

Course on Commerce Paper II through MCQs (Way to JRF)

Discussion Forum

Week 1

Apr 5 - 11 • 1 lesson

APR 10 — Expected MCQs Quiz on Unit I BE & IB

Lesson 1 • 2:00 PM

Week 2

Apr 12 - 18 • 1 lesson

APR 16 — Expected MCQs Quiz on Unit II Accounting

Lesson 2 • 2:00 PM