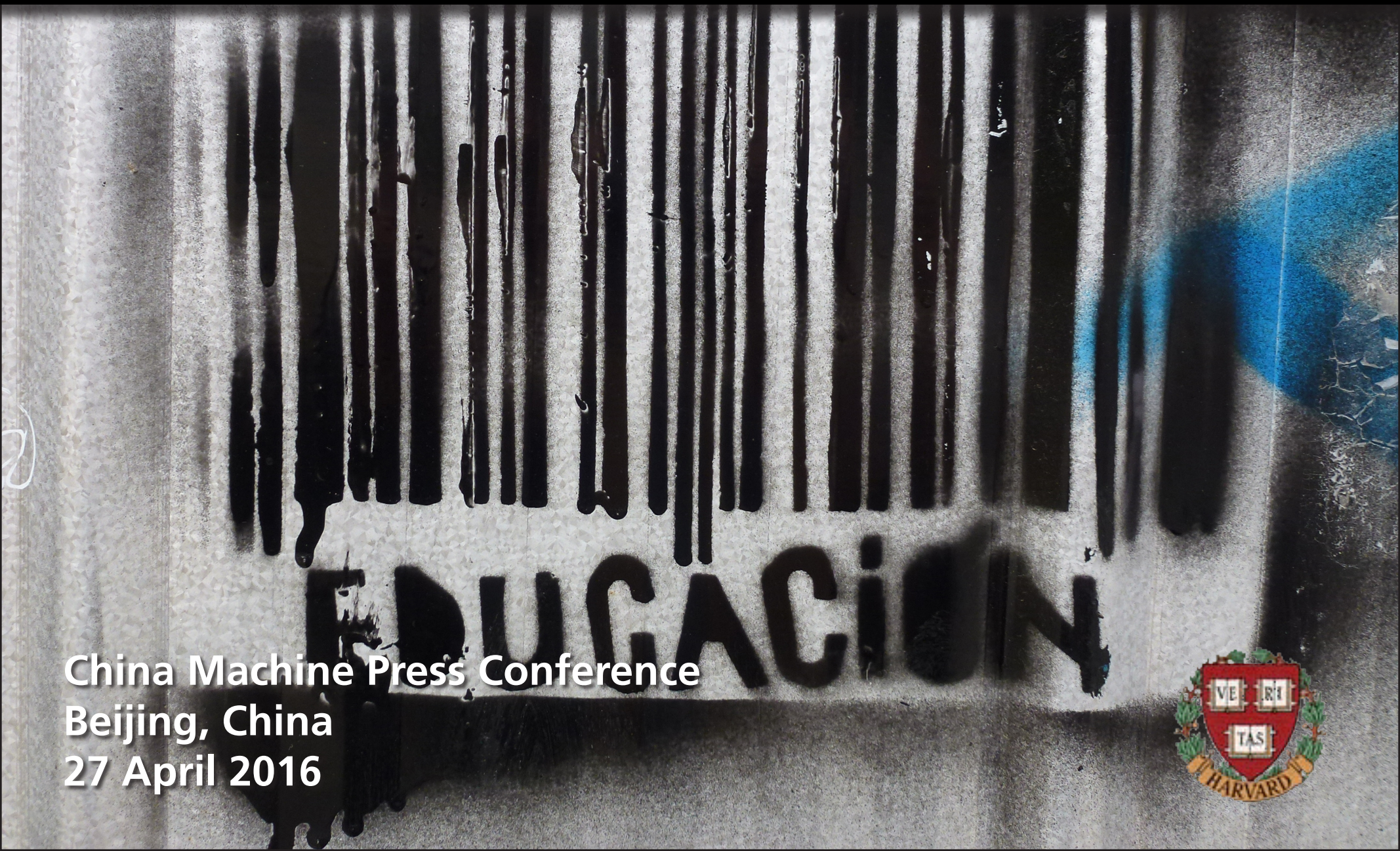


Peer Instruction



China Machine Press Conference
Beijing, China
27 April 2016



Peer Instruction



ericmazur

China Machine Press Conference
Beijing, China
27 April 2016









1 education

2 PI



1 education

2 PI

3 test



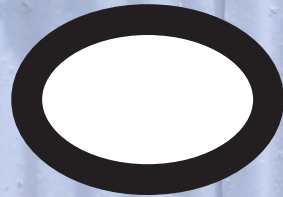
**better pay
attention!**

1 education

2 PI

3 test

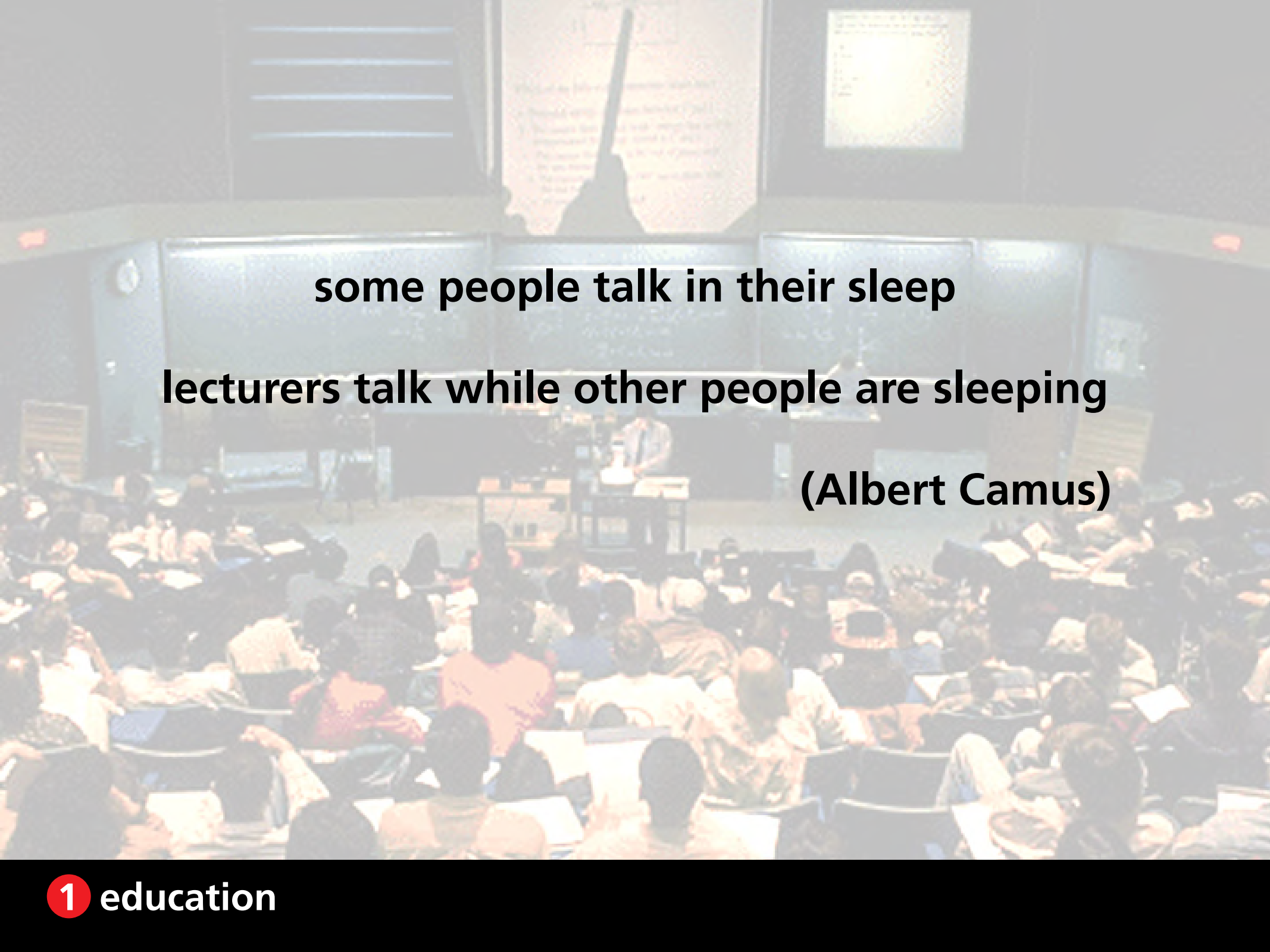
**What happens
in a lecture?**





A large lecture hall with a professor at a podium and students in the audience. The professor is standing at a podium in the center of the stage, facing the audience. The audience is seated in rows of chairs, filling the room. The room has a curved wall and a large screen at the front. The text "some people talk in their sleep" is overlaid on the image.

some people talk in their sleep

A large lecture hall with a lecturer at a podium and a large audience of students. The room is filled with people, many of whom appear to be sleeping or resting. The lecturer is standing at a podium in the center of the stage, facing the audience. The audience is seated in rows of chairs, filling the foreground and middle ground. The room has a high ceiling and large windows in the background. The overall atmosphere is one of a large-scale educational event.

some people talk in their sleep
lecturers talk while other people are sleeping
(Albert Camus)





The result?

EDUCACION

Lack of learning

EDUCACION

Lack of learning

Lack of retention

not transfer but assimilation of information is key

EDUCACION



1 education

2 PI



1. transfer of information



1. transfer of information

2. assimilation of that information




1. transfer of information (in class)

2. assimilation of that information



1. transfer of information (in class)

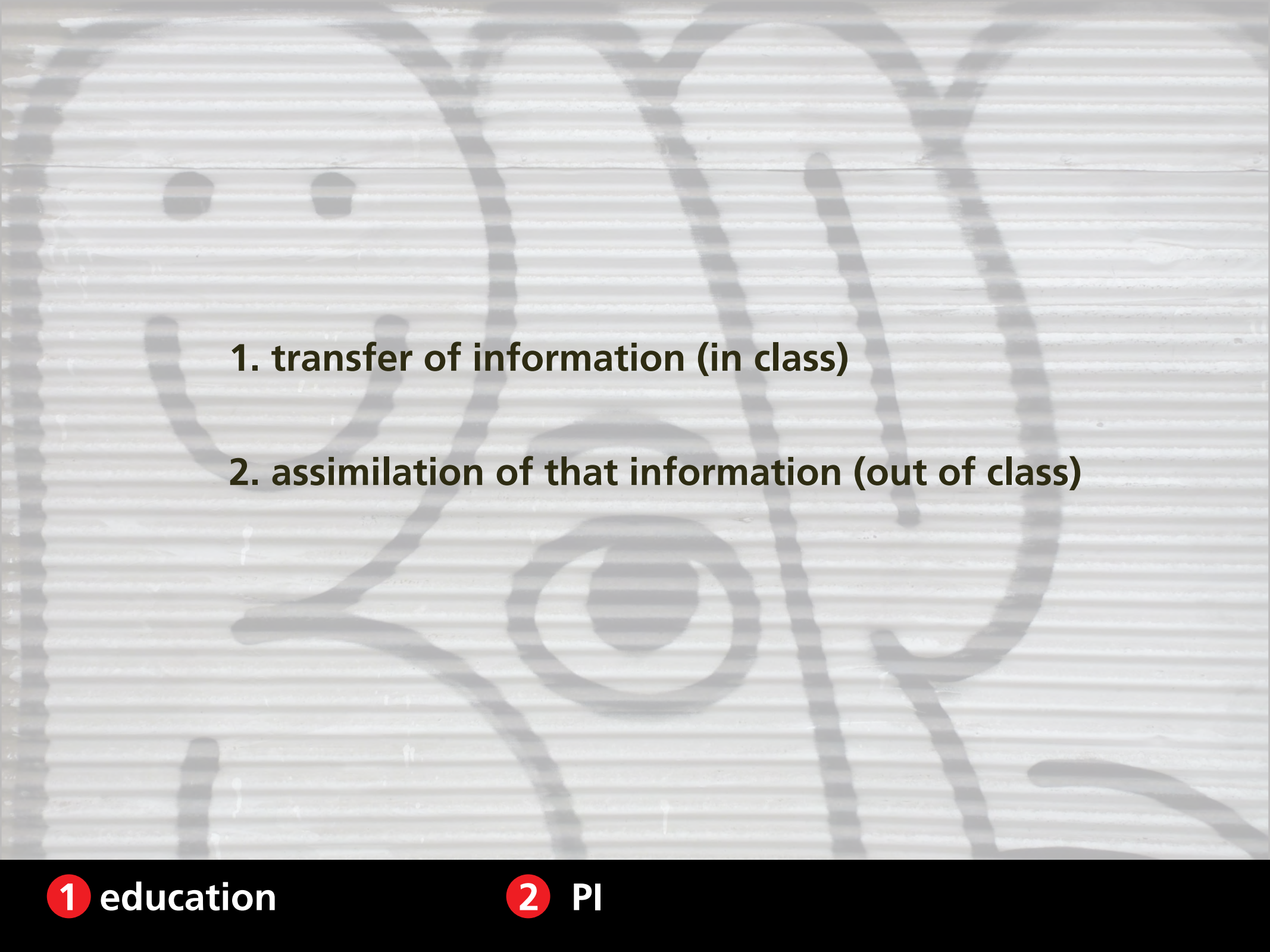
2. assimilation of that information (out of class)



**Should focus
on THIS!**

1. transfer of information (in class)

2. assimilation of that information (out of class)

- 
- 1. transfer of information (in class)**
 - 2. assimilation of that information (out of class)**

- 
- 1. transfer of information (out of class)**
 - 2. assimilation of that information (in class)**

Peer



1. transfer of information (out of class)

2. assimilation of that information (in class)

INSTRUCTION

question

1 education

2 PI

question



think

question



think



poll

question



think



poll



discuss

question



think



poll



discuss



repoll

question



think



poll



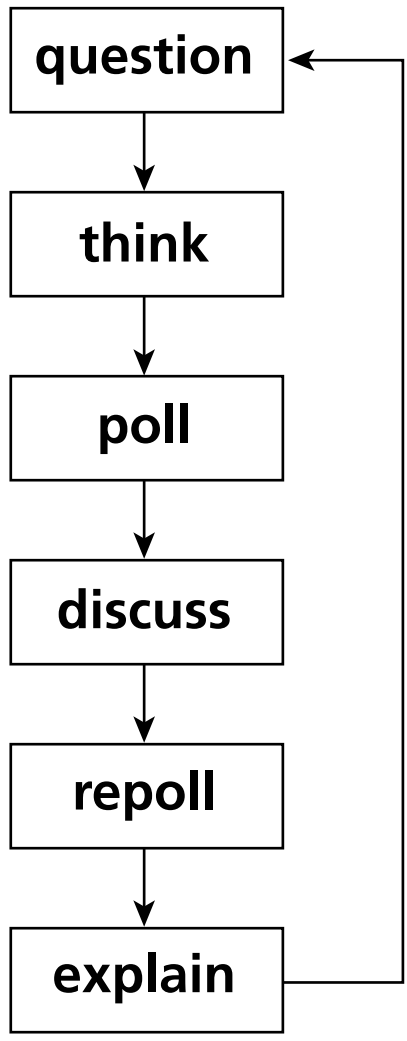
discuss

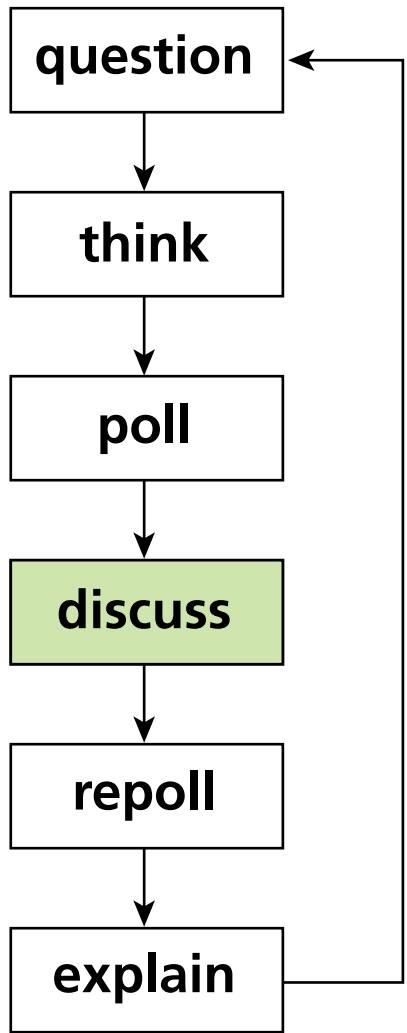


repoll



explain





1 education

2 PI

Let's try it!

QUESTION

think

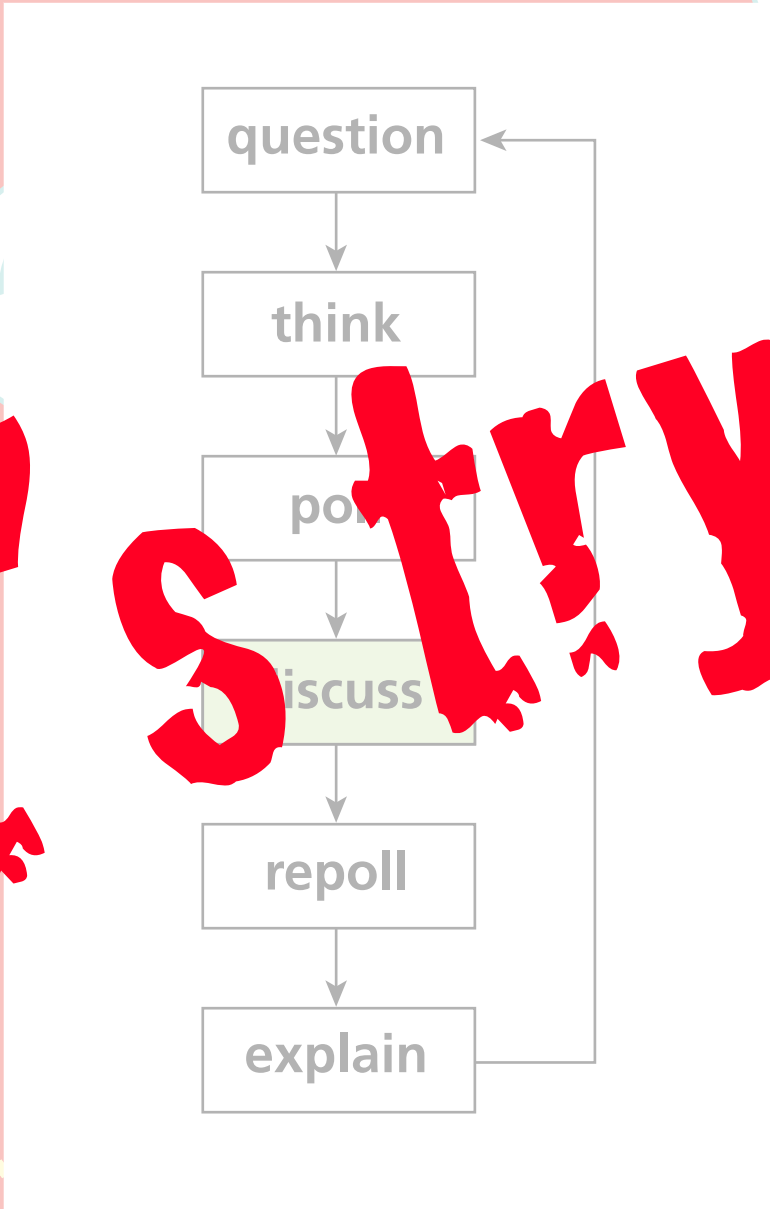
poll

discuss

repoll

explain

ACTION



1 education

2 PI

Archimedes' Principle

1 education

2 PI

3 test

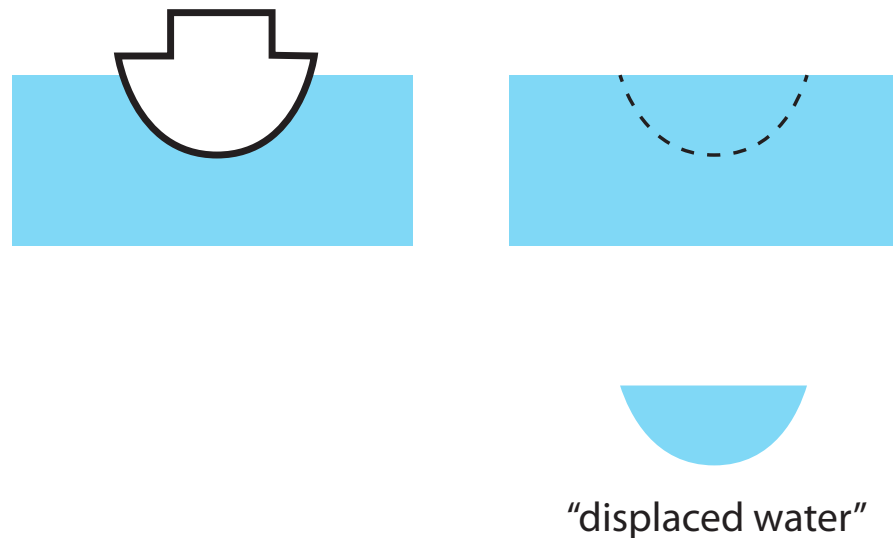
An object submerged either fully or partially in a fluid experiences an upward buoyant force the magnitude of which is equal to the magnitude of the force of gravity exerted on the fluid displaced by the object.

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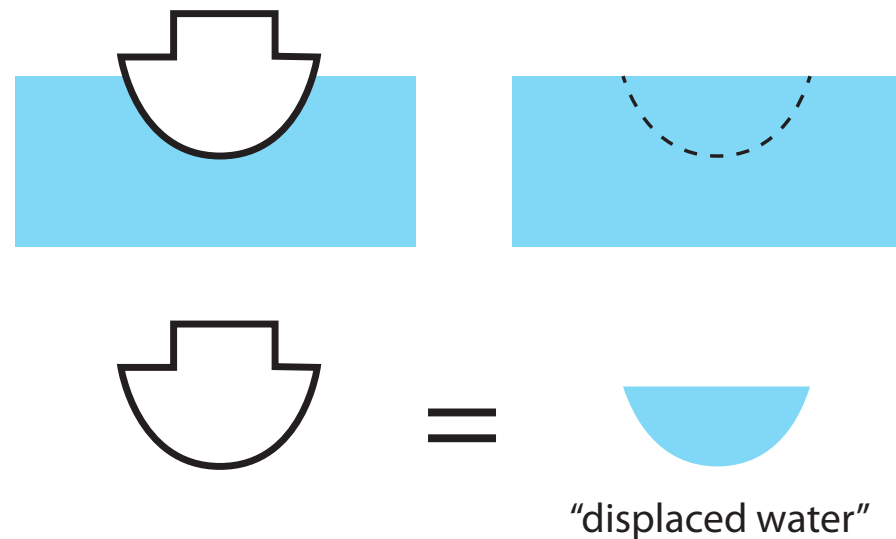
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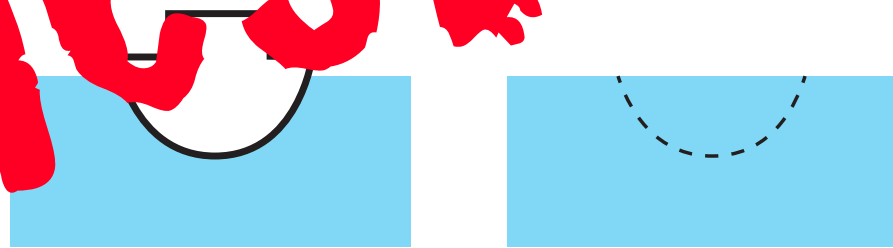


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questions!

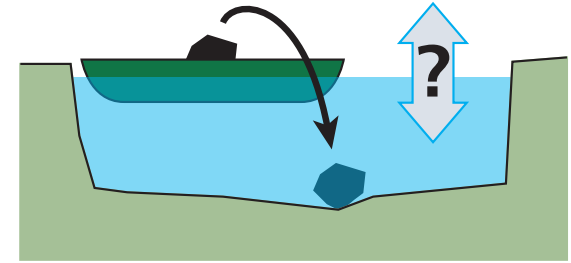


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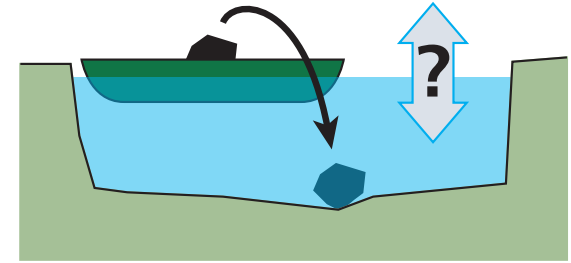


"displaced water"

A boat carrying a large boulder is floating on a small pond. The boulder is thrown overboard and sinks to the bottom of the pond.



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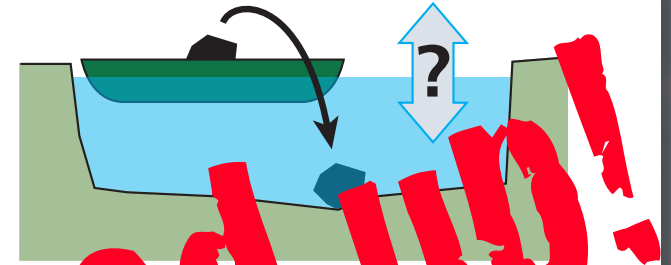


After the boulder sinks to the bottom of the pond, the level of the water in the pond is

- 1. higher than**
- 2. the same as**
- 3. lower than**

it was when the boulder was in the boat.

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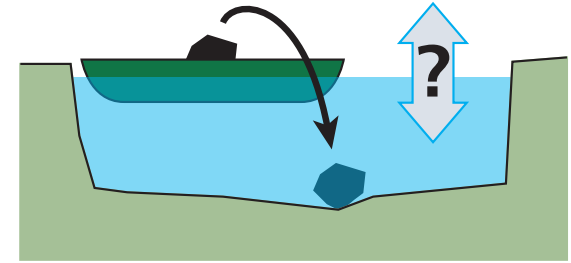


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Before I tell you the answer...

1 education

2 PI

3 test

Before I tell you the answer, let's analyze what happened.

1 education

2 PI

3 test

Before I tell you the answer, let's analyze what happened.

You...

Before I tell you the answer, let's analyze what happened.

You...

1. made a commitment

Before I tell you the answer, let's analyze what happened.

You...

- 1. made a commitment**
- 2. externalized your answer**

Before I tell you the answer, let's analyze what happened.

You...

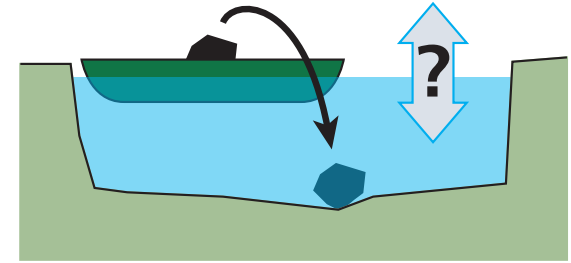
- 1. made a commitment**
- 2. externalized your answer**
- 3. moved from the answer/fact to reasoning**

Before I tell you the answer, let's analyze what happened.

You...

- 1. made a commitment**
- 2. externalized your answer**
- 3. moved from the answer/fact to reasoning**
- 4. became emotionally invested in the learning process**

A boat carrying a large boulder is floating on a small pond. The boulder is thrown overboard and sinks to the bottom of the pond.

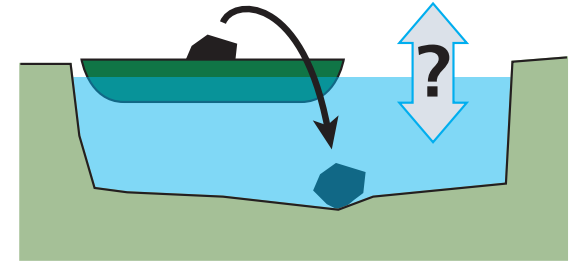


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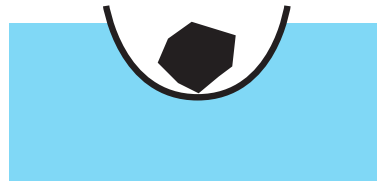
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remember: amount of displaced water

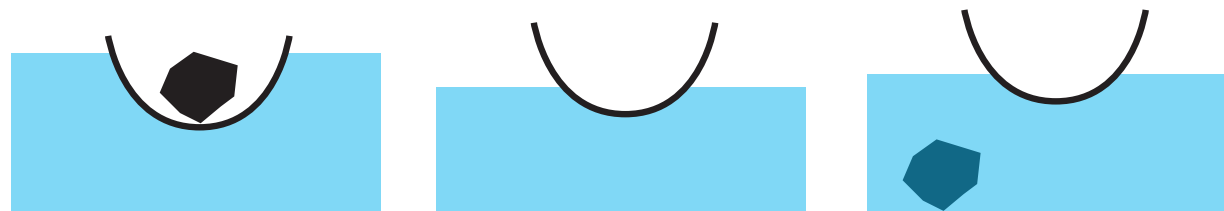
remember: amount of displaced water



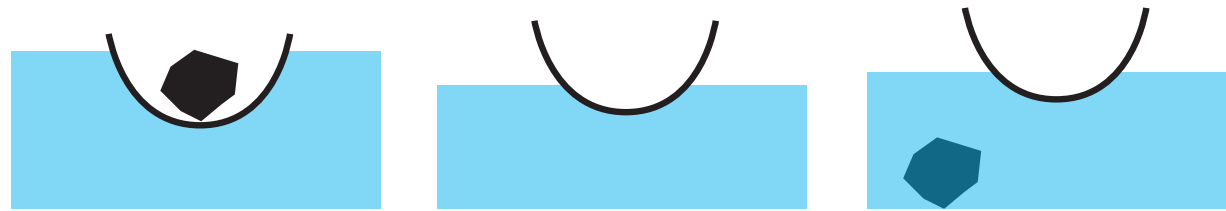
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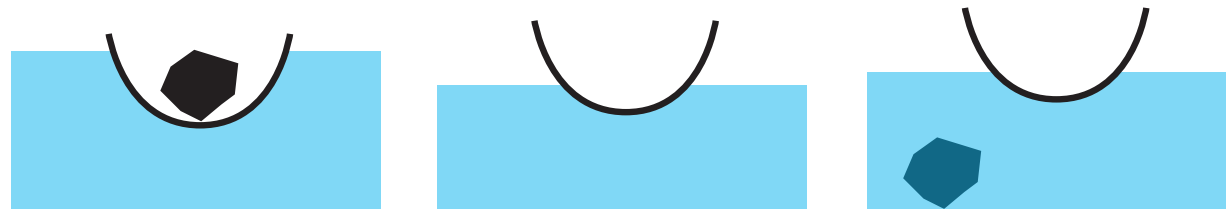


remember: amount of displaced water



displaced
water

remember: amount of displaced water

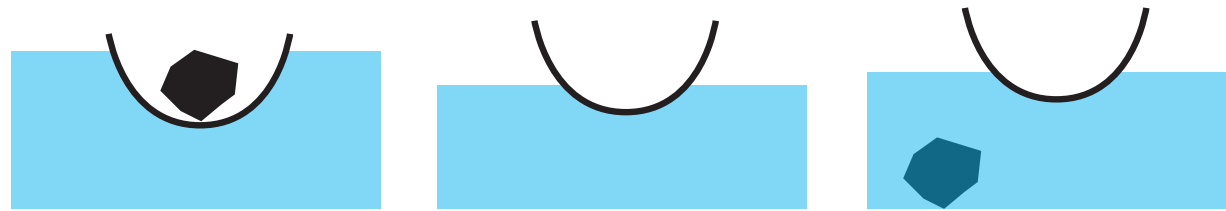


displaced
water



= weight
of rock

remember: amount of displaced water



displaced
water



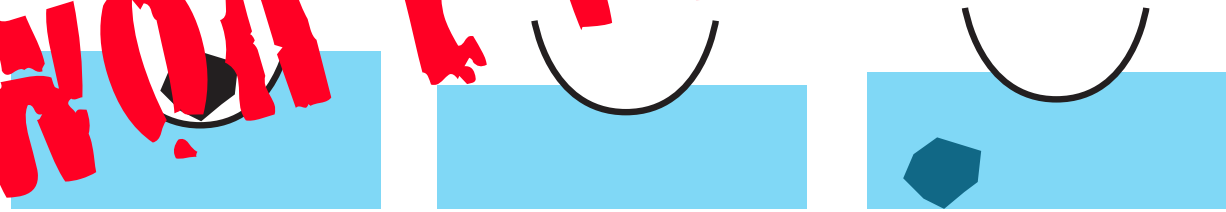
= weight
of rock



= volume
of rock

remember: amount of displaced water

you won't forget this



displaced
water



= weight
of rock



= volume
of rock

Peer

back to PI

INSTRUCTION

1 education

2 PI

3 test

Peer
Greater learning gains

INSTRUCTION

1 education

2 PI

3 test

Peer
Greater learning gains

Better retention

INSTRUCTION

1 education

2 PI

3 test



1 education

2 PI

3 test

in a lecture, students...

1 education

2 PI

3 test

in a lecture, students...

1. don't pay utmost attention

in a lecture, students...

1. don't pay utmost attention

2. think they know it

in a lecture, students...

- 1. don't pay utmost attention**
- 2. think they know it**
- 3. are not confronted with misconceptions**

in a lecture, students...

1. don't pay utmost attention

2. think they know it

3. are not confronted with misconceptions

false
sense of security



1 education

2 PI

3 test



an illusion. . .

1 education

2 PI

3 test



Education is not just about:

- **transferring information**
- **getting students to do what we do**

1 education

2 PI

3 test



Education is not just about:

- **transferring information**
- **getting students to do what we do**

active participation a must!



Join now!

PeerInstruction.net

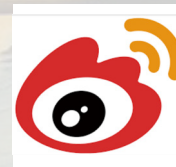
Funding:

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