

How to Be the Speaker Everyone Wants You to Be

Jannette Collins, MD, MEd, FCCP, FACR

- MEd, Fellowship in Medical Education
- PD and Dean of GME
- RSNA FDW
- Whitley Award
- RSNA Outstanding Educator

Disclosures

- I have served as a consultant for RSNA and directed an annual faculty development workshop sponsored by RSNA
- I am the Editor of *Seminars in Roentgenology*

Objectives



1. Apply adult learning principles
2. Demonstrate effective presentation skills

*I will model
behaviors*



Who
are
you?



Principles of adult learning



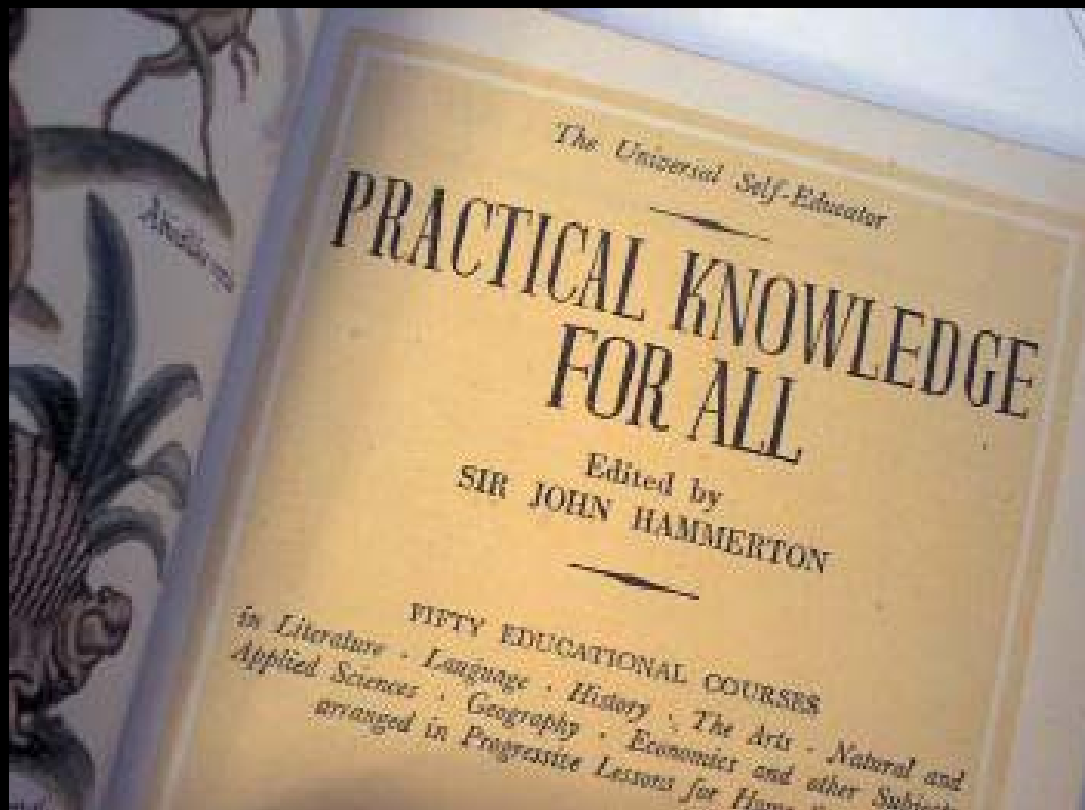
copyright 1996 phil@mit.edu

- Adults are goal-oriented



- How will this activity help me reach my goals?
- Necessitates lectures be organized with clearly defined elements

- Adults are relevancy-oriented and practical



- WIFM (what's in it for me?)
- Apply to real-life
- Allow learner to identify his/her needs

- Adults (all learners) need respect



- Share ideas and learn from each other
- Comfortable physical environment
- Follow planned schedule
- “Safe” learning environment

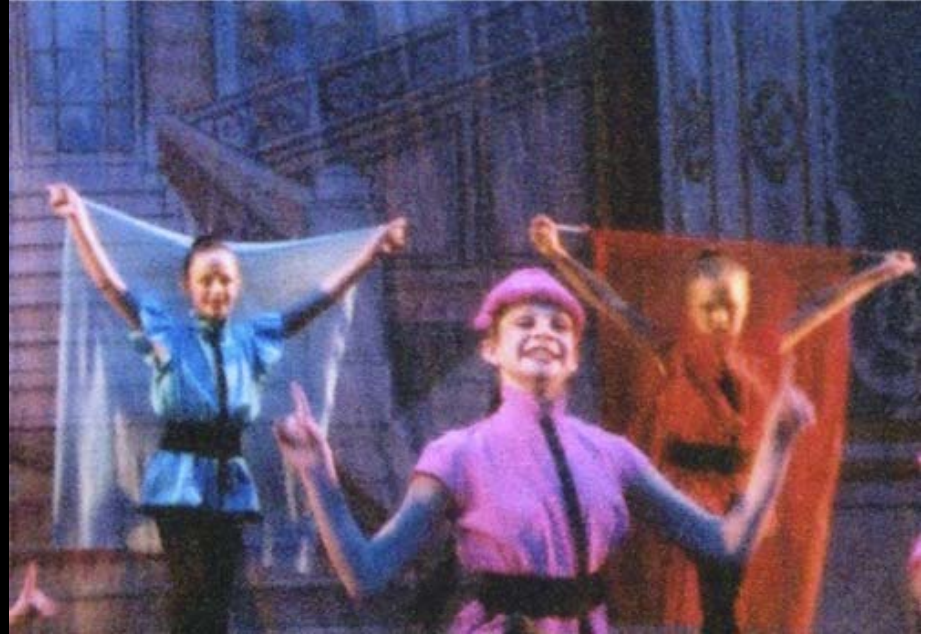
- Set degree of difficulty high enough but not too high



- Adults learn best when they are active participants in learning



Tell me and I
forget. Show
me and I
remember.
Involve me, and
I understand.
Chinese proverb



10% of what we read



20% of what we hear



30% of what we see



50% of what we see and hear



70% of what we say



90% of what we say as we do



(orally work out a problem)

PEOPLE GENERALLY REMEMBER:

- 20% of what they HEAR
- 30% of what they SEE
- 50% of what they HEAR
and SEE

What is the average adult attention span?

1. 5-7 minutes
2. 8-10 minutes
3. 15-20 minutes
4. 25-30 minutes

What is the average adult attention span?

1. 5-7 minutes
2. 8-10 minutes
3. *15-20 minutes*
4. 25-30 minutes

Stuart J, Rutherford RJD. Lancet 1978

- Because of the passive role of learners in a lecture, learner attention span is relatively short
- Use a technique to help maintain attention at 15-20 minutes

Incorporate Interaction

- Ask ?
- Brainstorming
- “Think-pair-share”
- Case-based examples
- Directed listening
- ARS

- Adults learn best with feedback



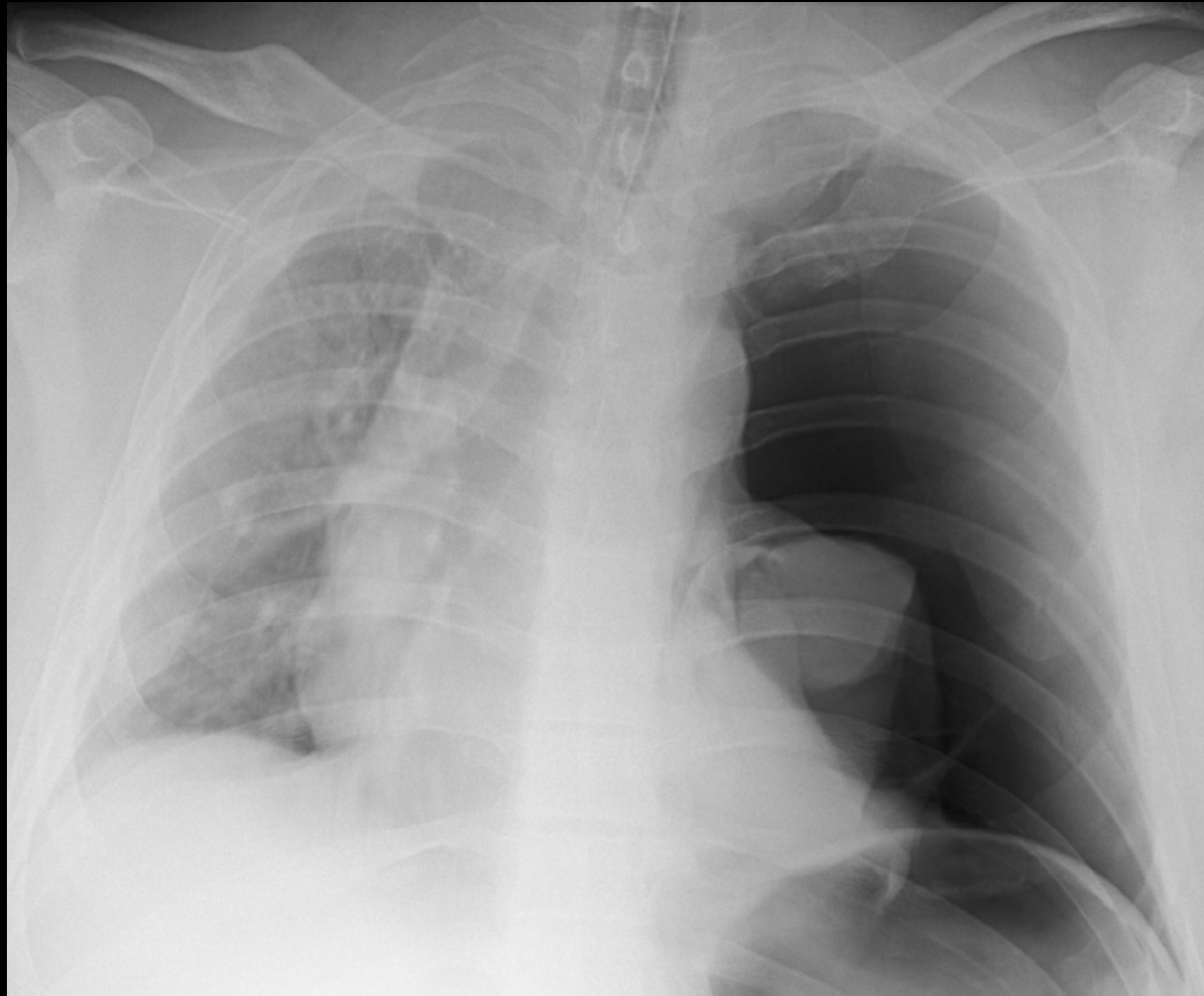
ARS

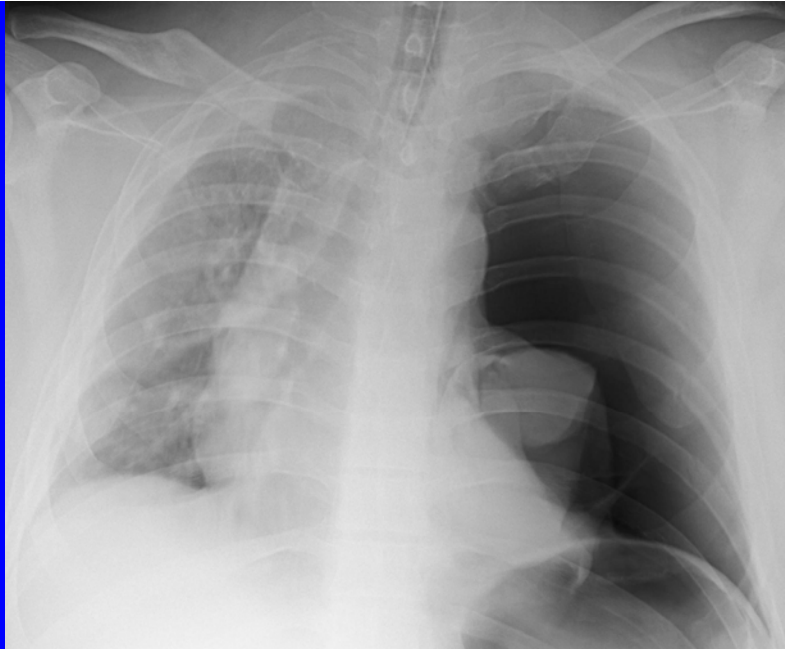
- Facilitates interaction
- Anonymous
- Instantaneous results
- Feedback to speaker and attendee
- Can be used “on the fly”
- Takes time



- T/F, Y/N, MCQ
- Make questions meaningful
- Discuss the correct and each wrong answer

40-year-old man with acute shortness of breath





What
should be
done next?

1. Recommend CT of the chest
2. Recommend D-dimer test
3. Call the referring clinician

Presentation Skills

Assumptions

- You want to see good presentations
- You want to deliver good presentations

Have you developed and
delivered a PowerPoint
presentation?

1. Yes
2. No

Think of the last lecture you
attended that inspired you.
Why did it inspire you?

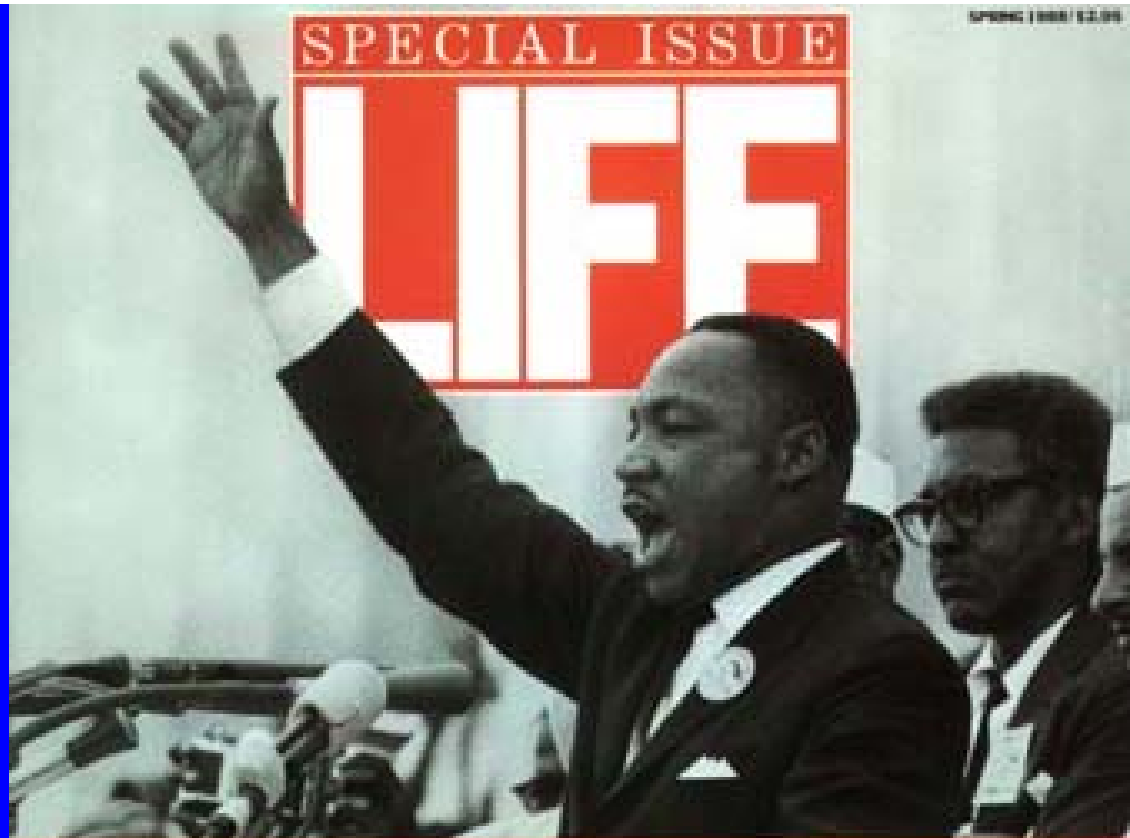
Inspire

“To arouse or
generate feeling or
thought”

SPECIAL ISSUE

SPRING 1988 / \$2.00

LIFE



THE DREAM THEN AND NOW



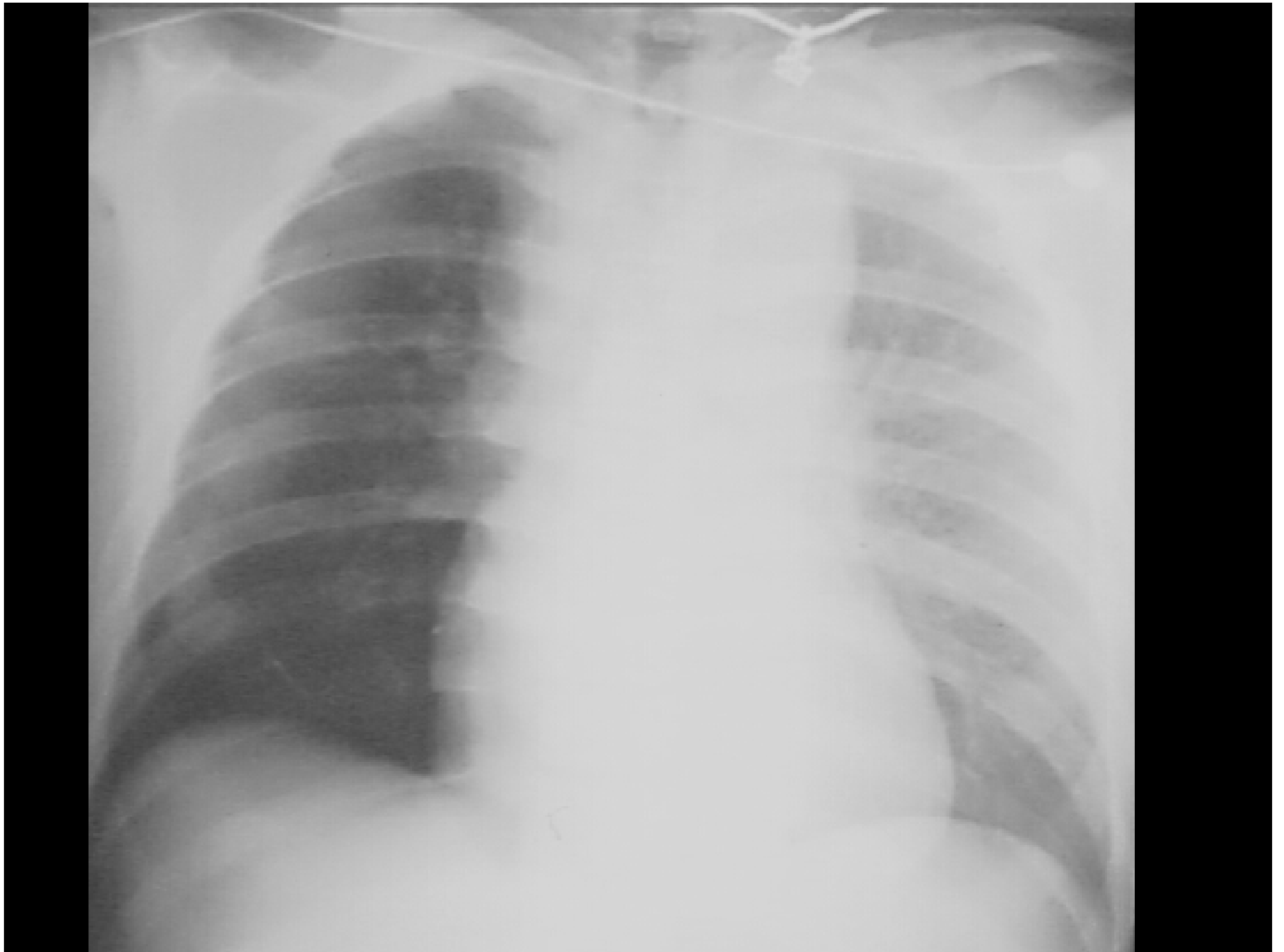
Lecture Components

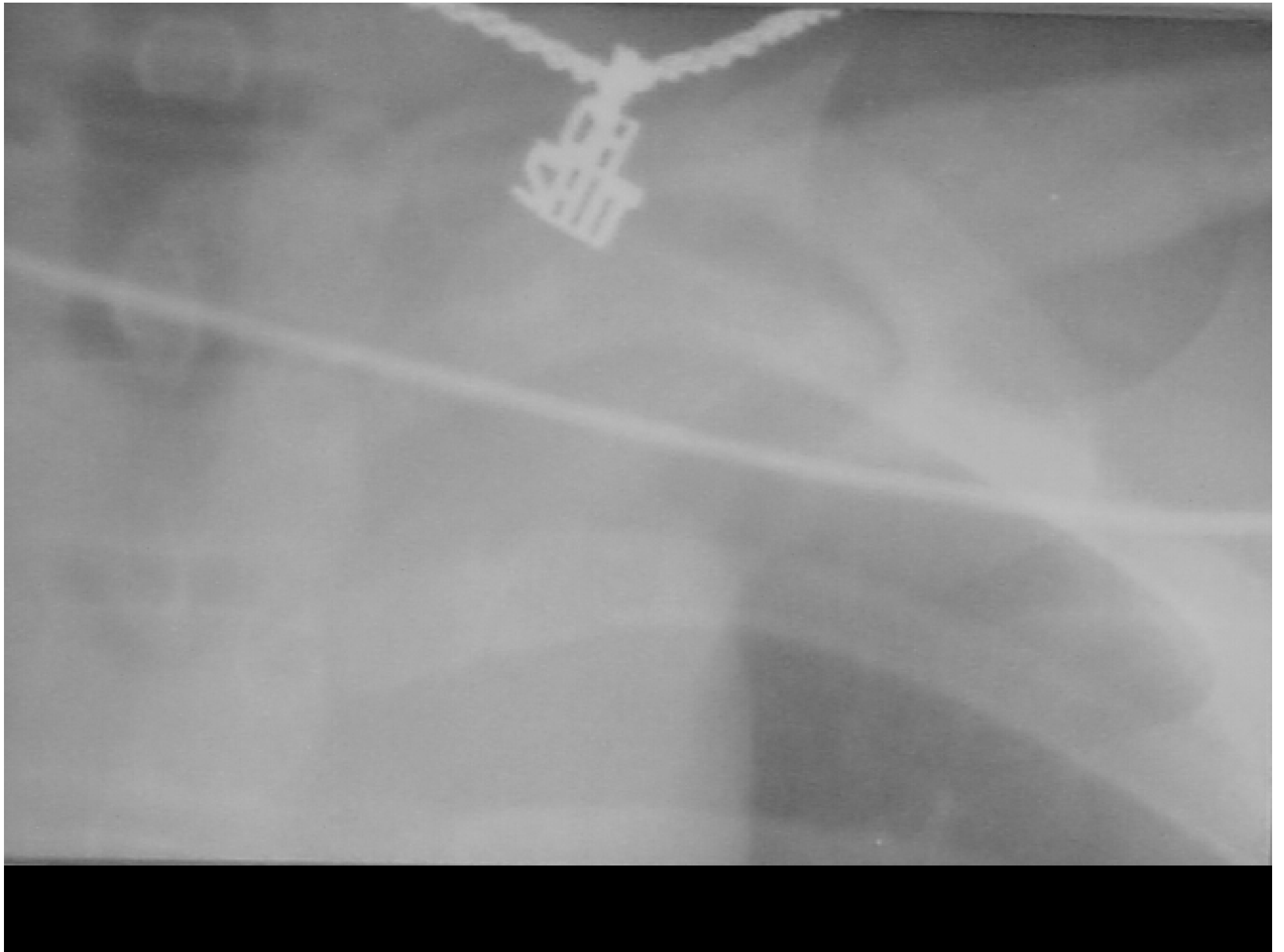
- Introduction
- Body
- Summary
- Consider pre/post test

Introduction

- Review objectives
- Ask rhetorical ?
- Ask for show of hand to ?
- Use ARS
- Quotation

- Present a case
- Videotape
- Cartoon
- Demonstration
- Role play
- Share personal experience





Body

- Better to have too little than too much!
- 2-5 key points

Summary

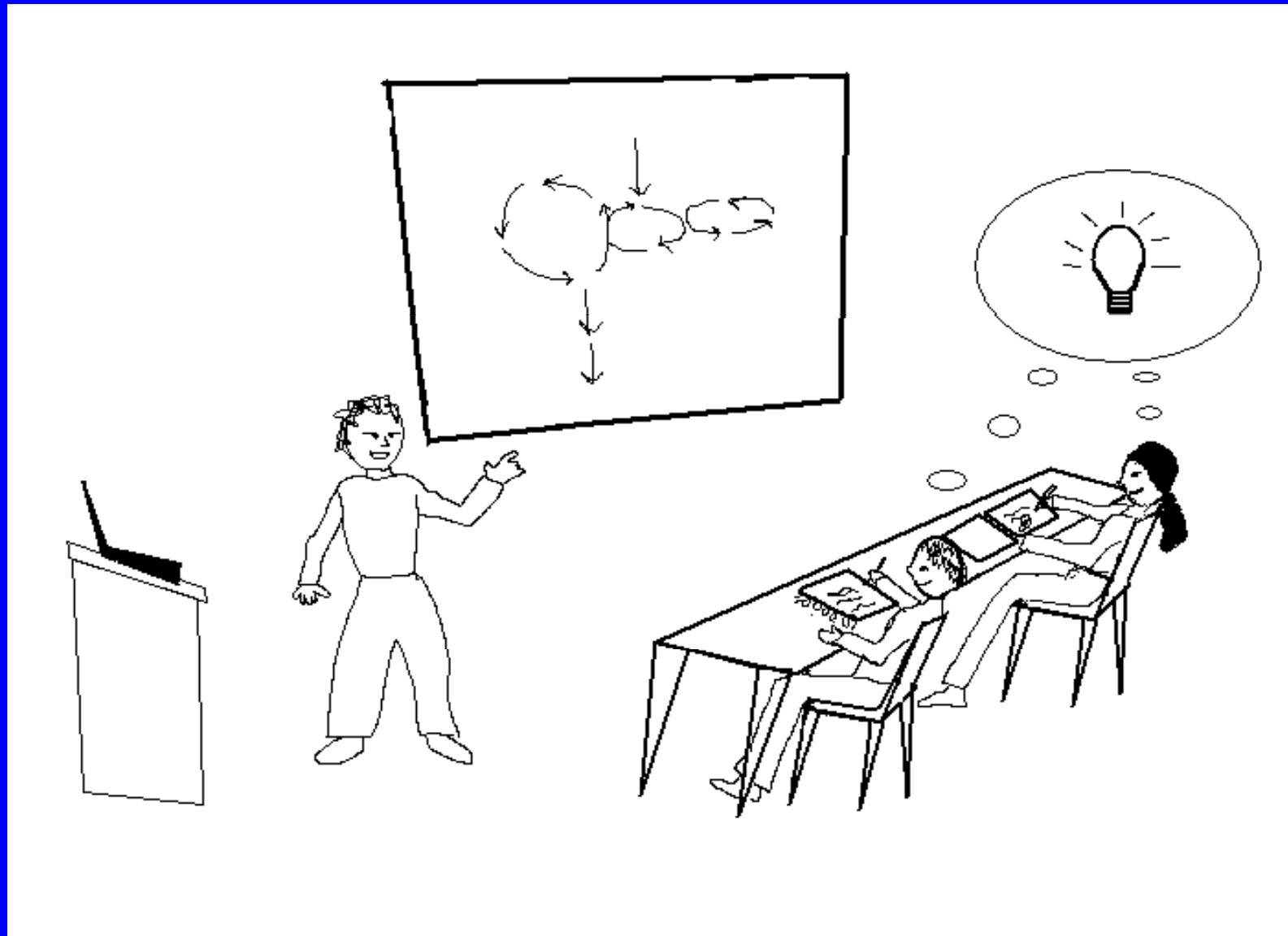
- Brief
- Address main points
- Ask learners for ?
- Ask ?

PowerPoint

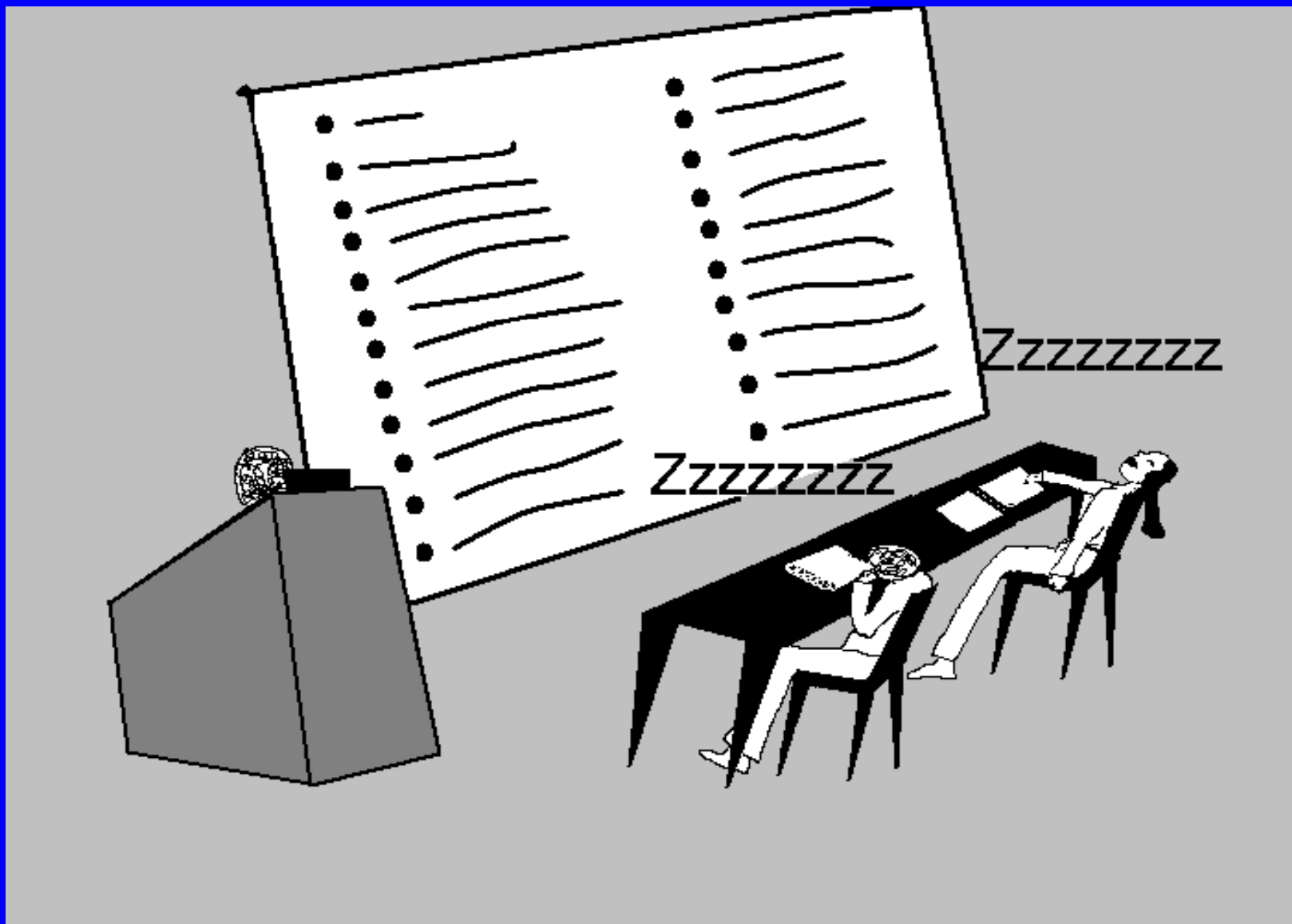
The Good, the Bad and the Ugly

Pamela Bagley and David Izzo, Biomedical Libraries

The Good

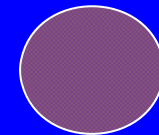


The Bad





Need I say more?



“Presentations largely stand or fall on the quality, relevance, and integrity of the content. If your numbers are boring, then you’ve got the wrong numbers. If your words or images are not on point, making them dance in color won’t make them relevant.”

Edward Tufte “PowerPoint is Evil”

Which font is easier to read?

1. This is Times New Roman, a commonly used serif font.

2. This is Arial, a commonly used sans serif font.

Serif = Tail



Times New



Roman

No Tail

Arial

Font Sizes (Eye Test)

12	16	20
24	28	32
36	40	44

Which do you prefer?

1. This is 20 font
2. This is 28 font
3. This is 32 font
4. This is 40 font

PowerPoint default font:

- 44 (heading)
- 32 (main text)

• **Master Slide!**

View-Master-Master Slide

I routinely use ≥ 50
for headings and
 ≥ 40 for main text.

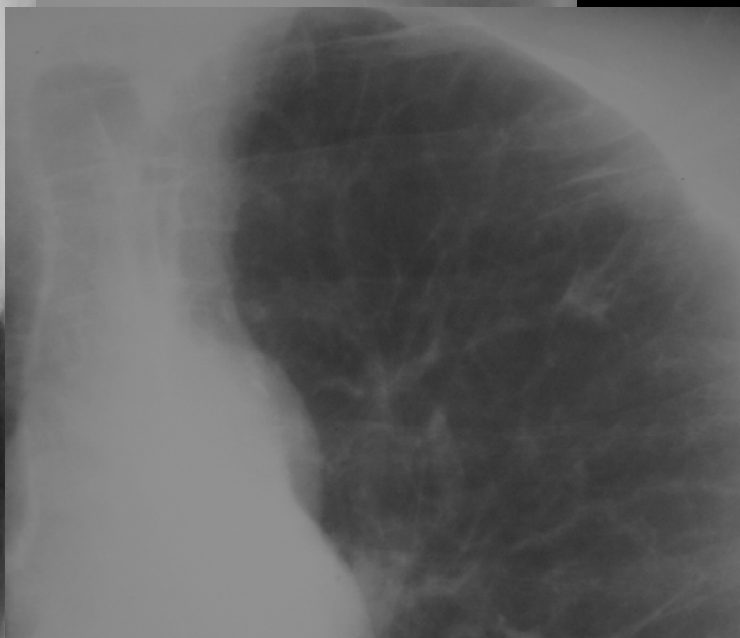
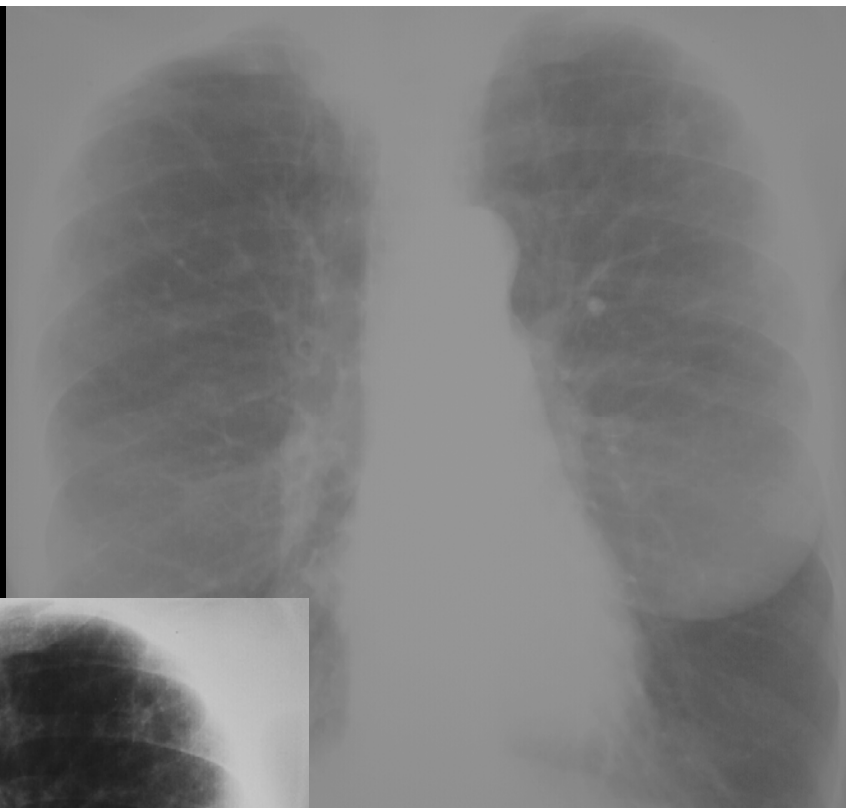
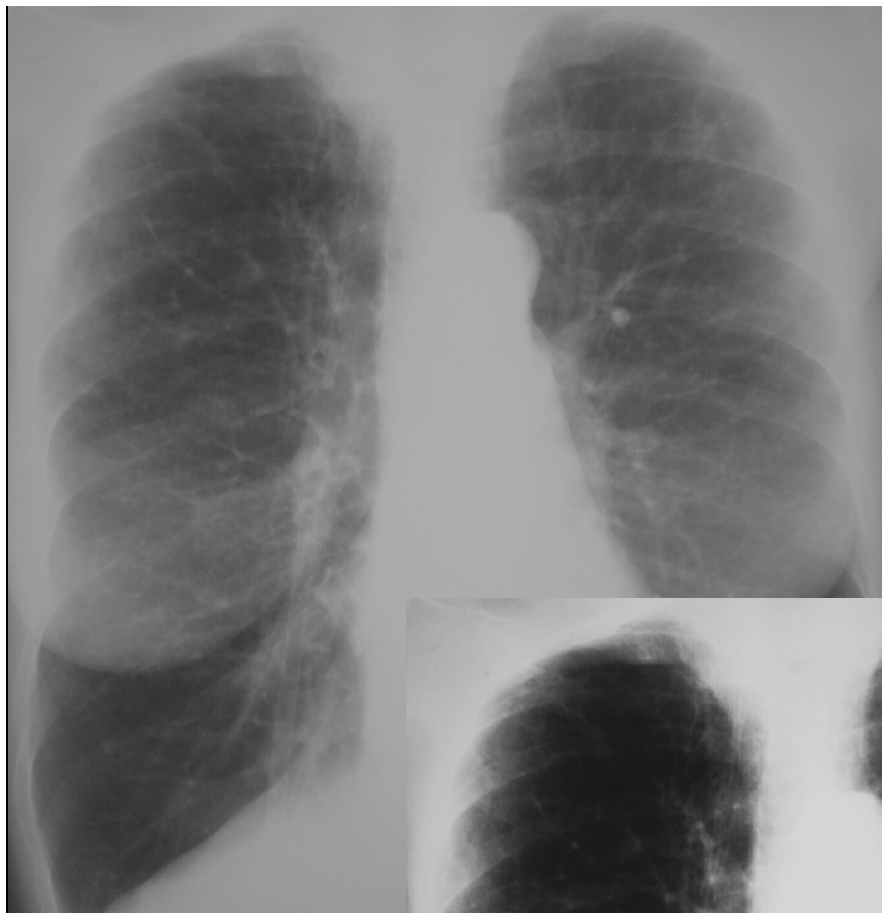
The size of this font
is 54.

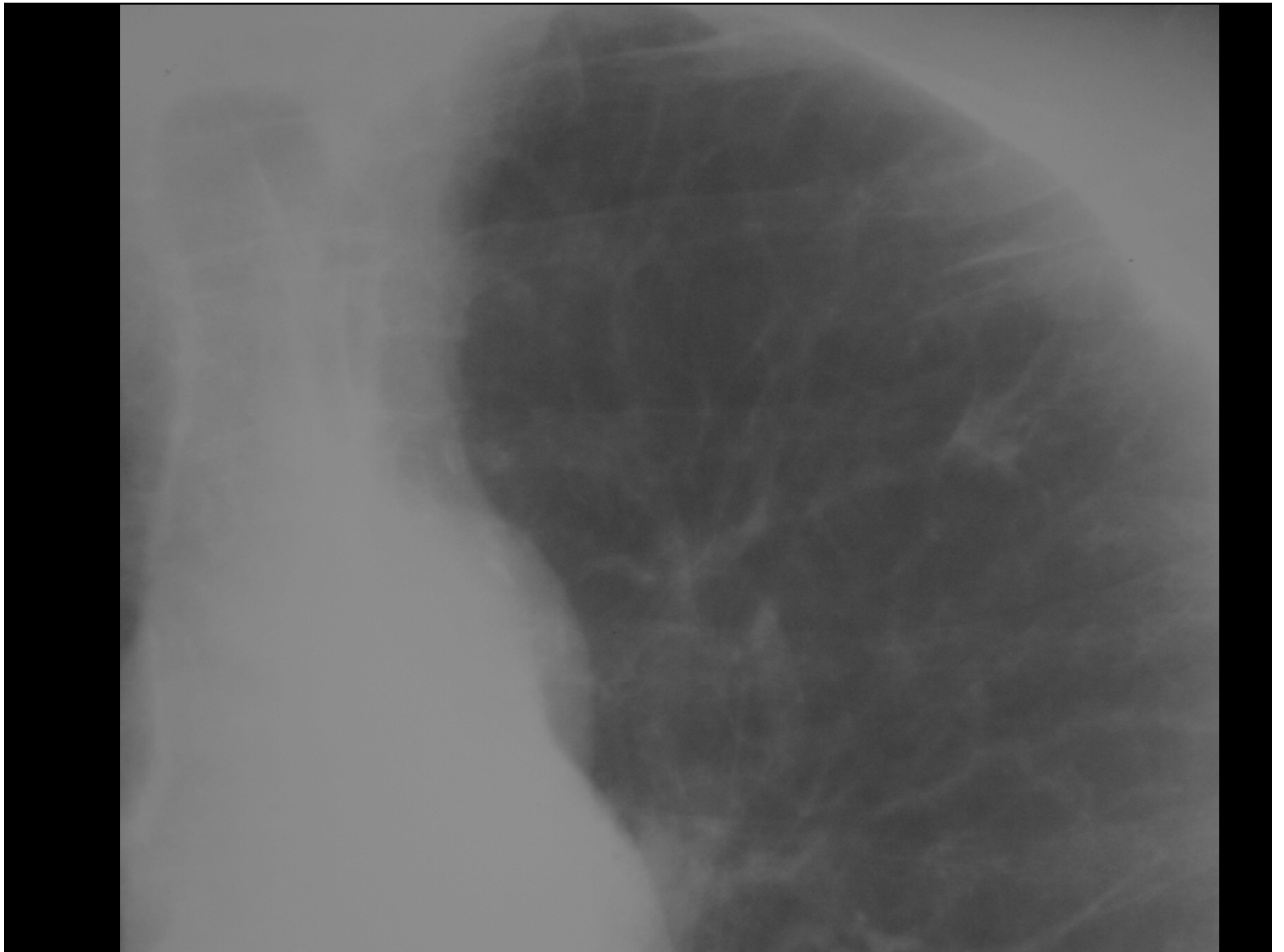
Which is easier to read?

1. ALL CAPITAL LETTERS
2. A mixture of capital and lower case letters

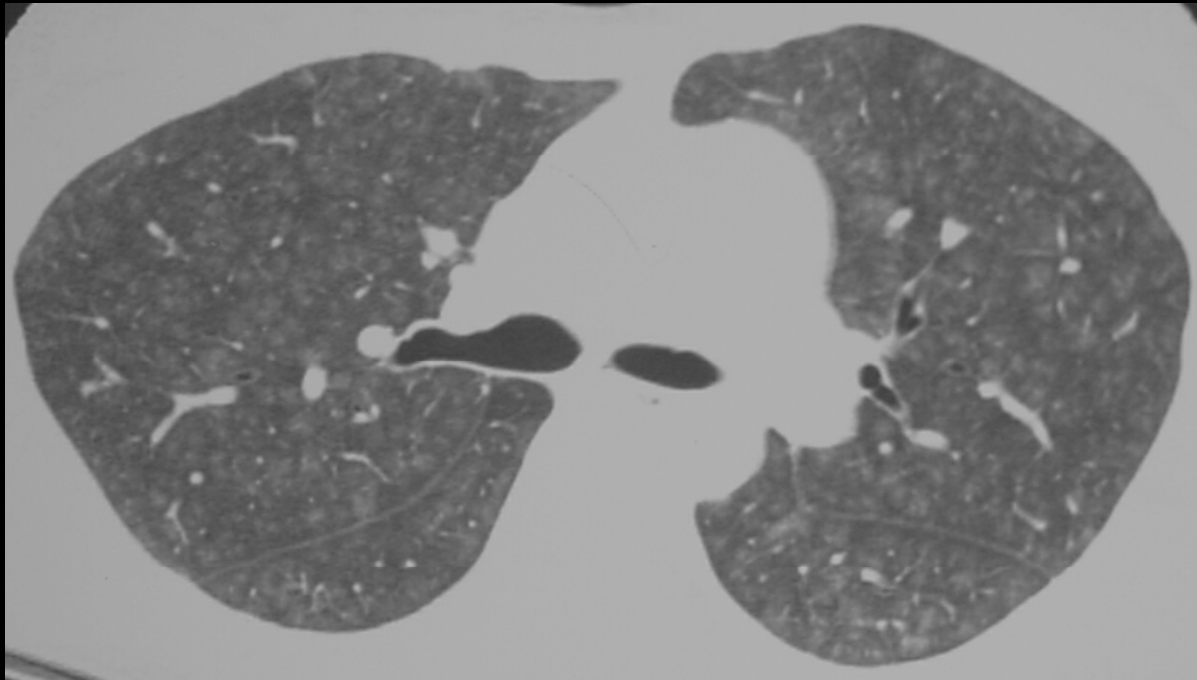
Images

- Make them big
- Delete poor quality images
- Optimize contrast
- Crop

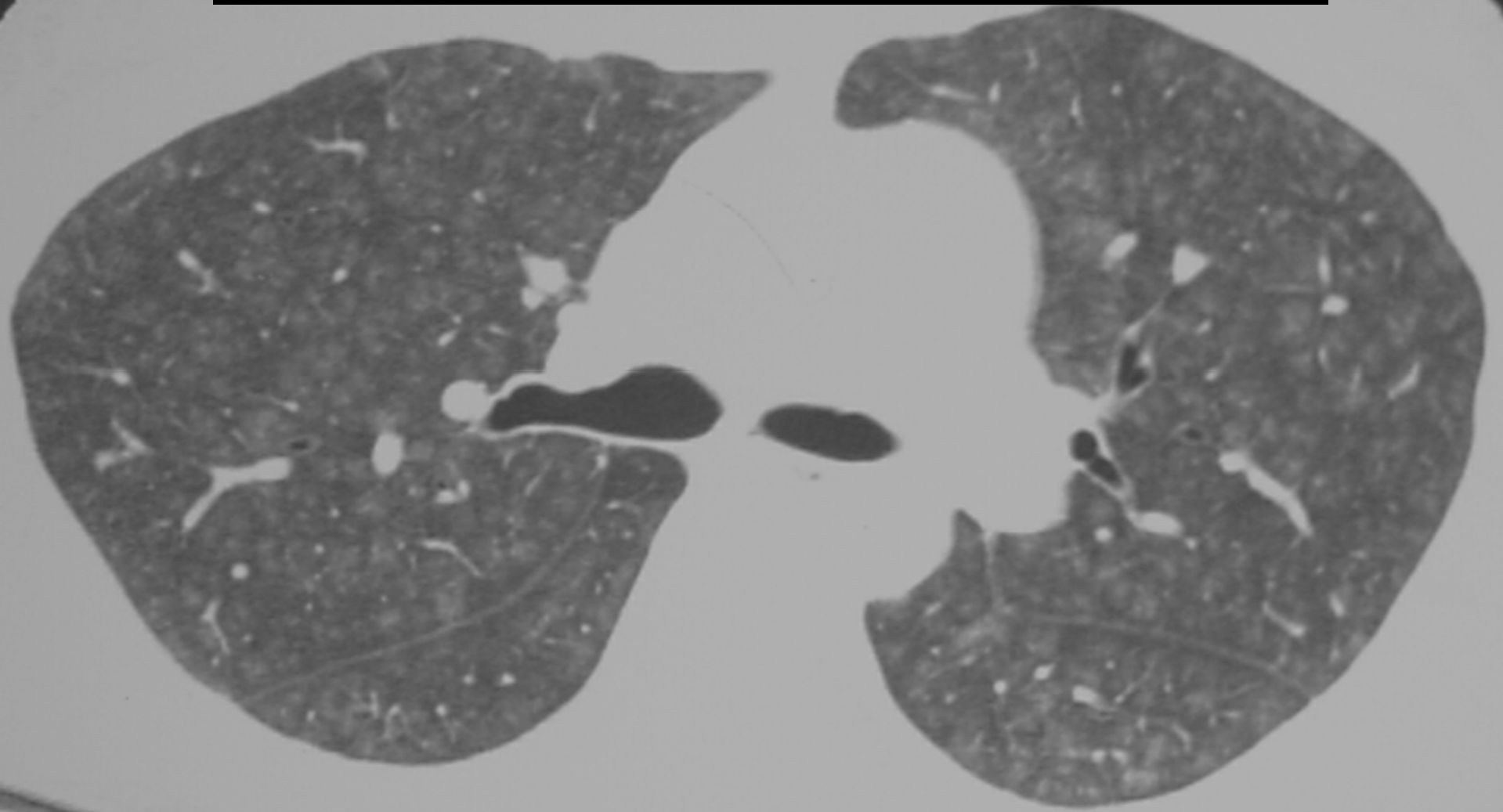




Hypersensitivity pneumonitis



Hypersensitivity pneumonitis





KISS

Keep

It

Simple

Example of a Bad Kiss

- There is too much text on this slide, which makes it too busy
- The font is only 36, which makes it hard to read
- The lines extend too far inferiorly on the slide, which make them hard to read
- The animation effects are annoying

- Keep slides simple
- Rule of 6
- Avoid distracting animation

PEOPLE GENERALLY REMEMBER:

- 20% of what they HEAR
- 30% of what they SEE
- 50% of what they HEAR
and SEE

Use Spell Check

Pneumonic for **cavitary** nodules

- **C**ancer
- **A**utoimmune diseases
- **V**ascular (septic emboli)
- **I**nfection (TB, fungal)
- **T**rauma (pneumatocele)
- **Y**oung (congenital)

Mnemonic

(NOT

pneumonic)

- Appropriate color schemes

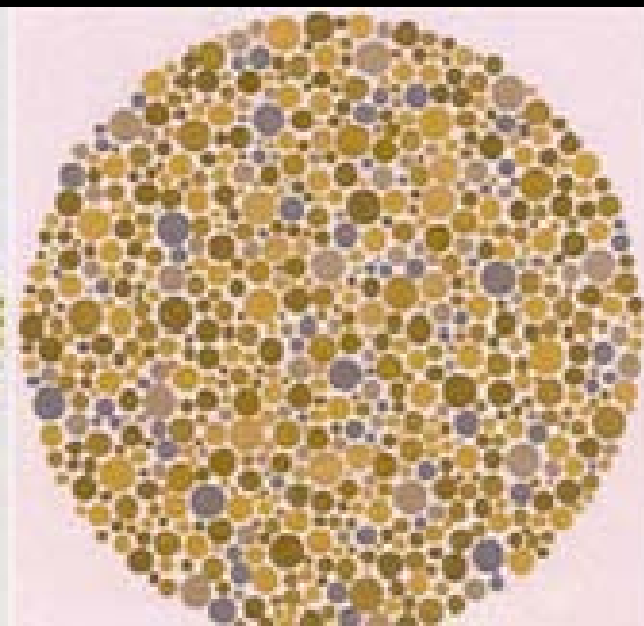
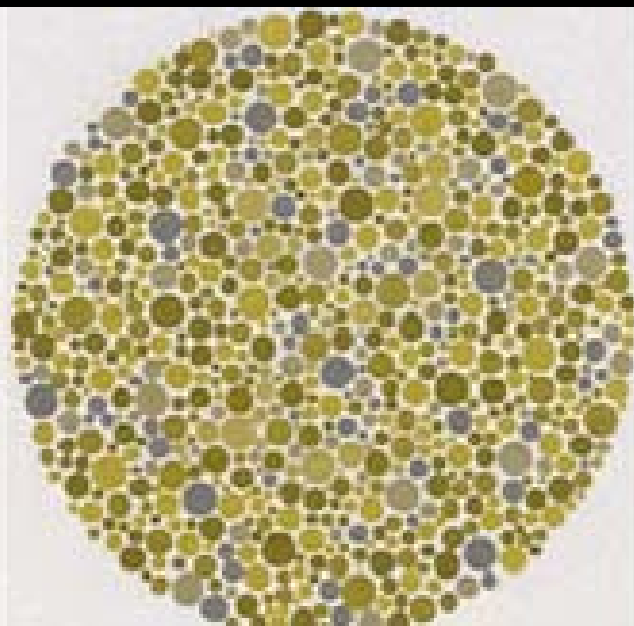
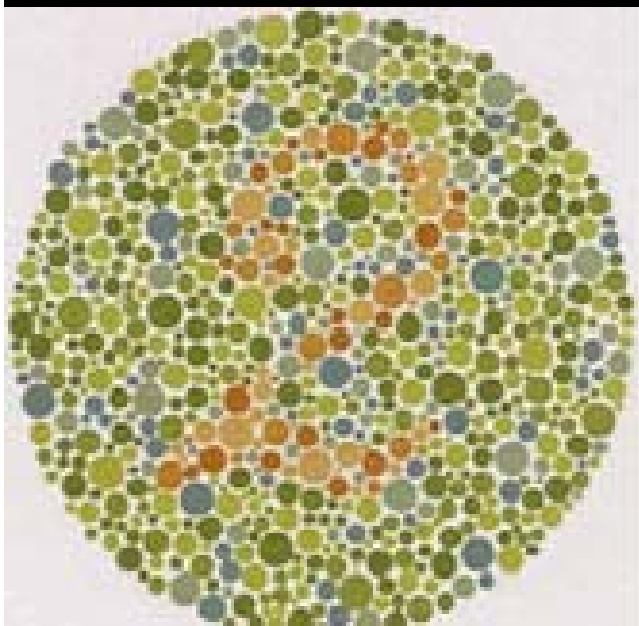
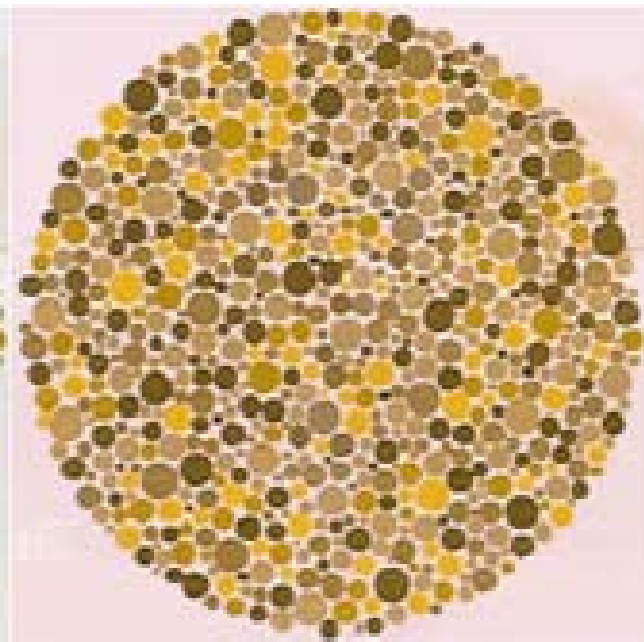
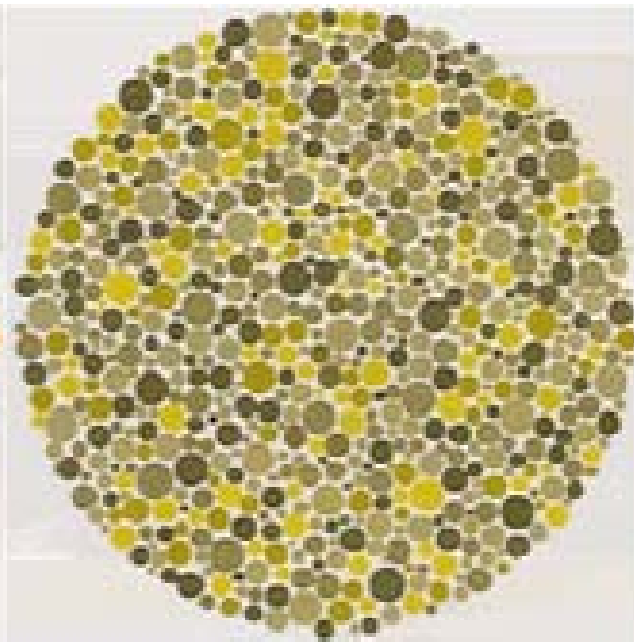
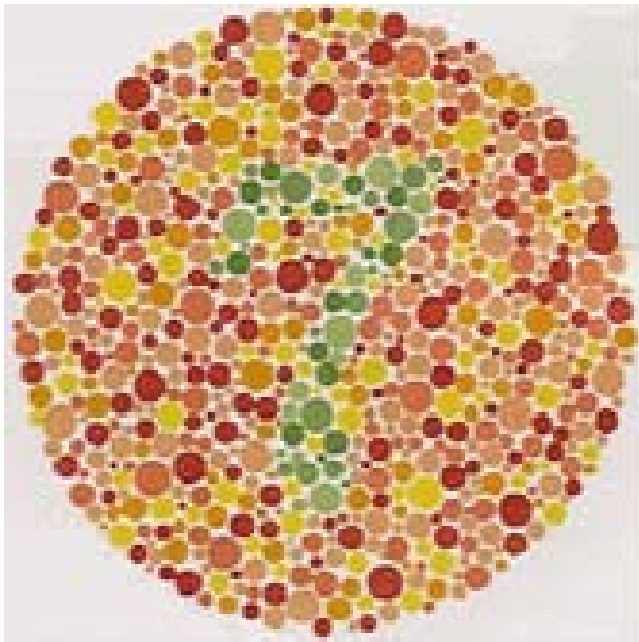
(Avoid red and green)

Bad Color Scheme

A colorblind person
may not see the
text

Colorblindness

- 8-12% European males; .5% females
- Cannot distinguish colors
- Red/green most common
- Traffic lights, sunburn, raw meat, slides



Giving a Presentation

- Emphasize 2-5 key points
- Rehearse
- Incorporate interaction
- Be entertaining

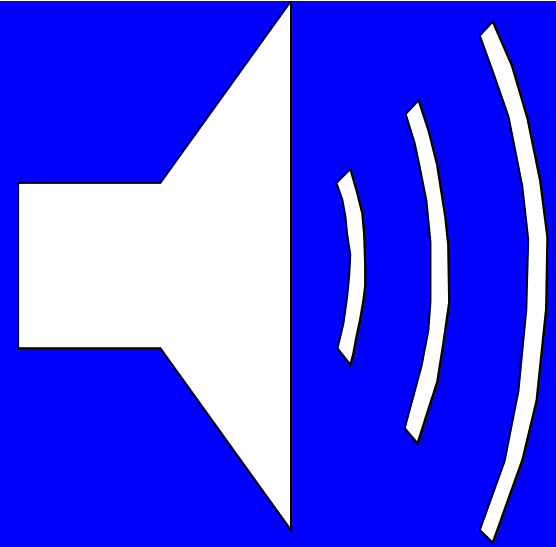
- Rehearse!
- Be completely familiar with the content and organization of the slides

Speak in a conversational tone

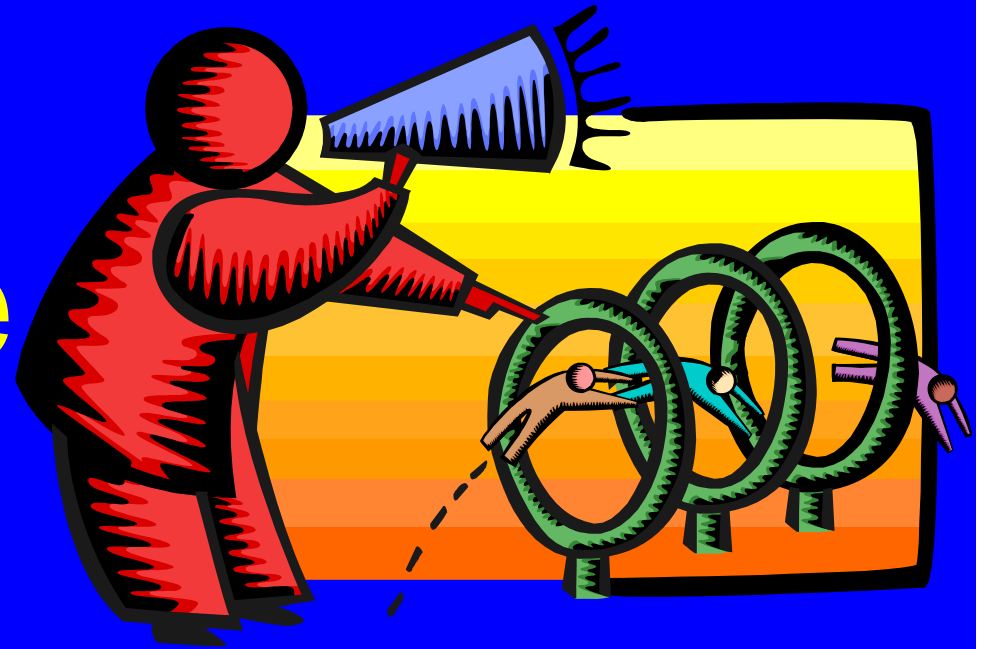


Speak slowly and
incorporate
pauses

Speak loudly
enough that
everyone in the
audience can hear



Speak
directly into
the
microphone



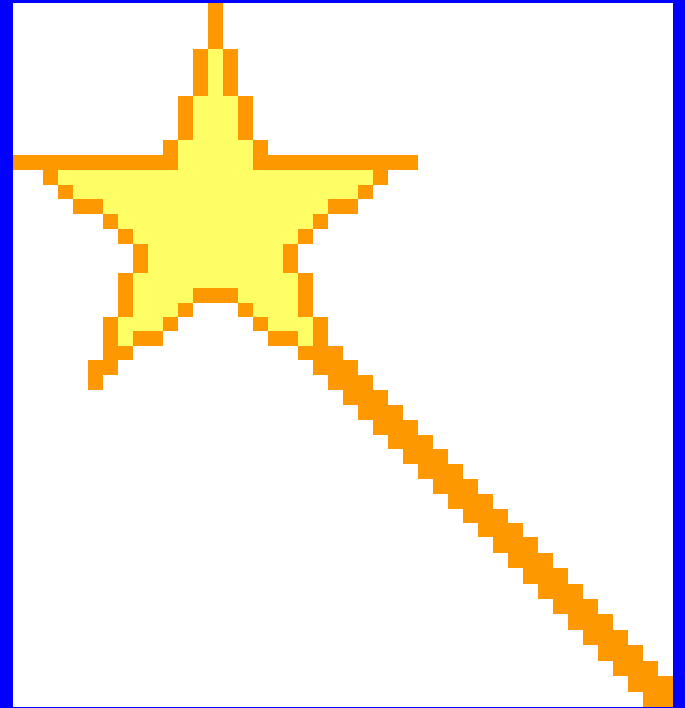
What is the average adult attention span?

1. 5-7 minutes
2. 8-10 minutes
3. 15-20 minutes
4. 25-30 minutes

Incorporate Interaction

- Ask ?
- Brainstorming
- “Think-pair-share”
- Case-based examples
- ARS

Don't use the
pointer as a
wand.



People will pay
more to be
entertained than
educated.

Johnny Carson

Dr. Fox

Quotations

“Computers will never be popular.”

*Thomas Watson, former
Chairman of IBM*

“Why would anyone want a
computer at home?”

*Ken Olson, founder and former
president of Digital Equipment
Corp.*

Who said the following?

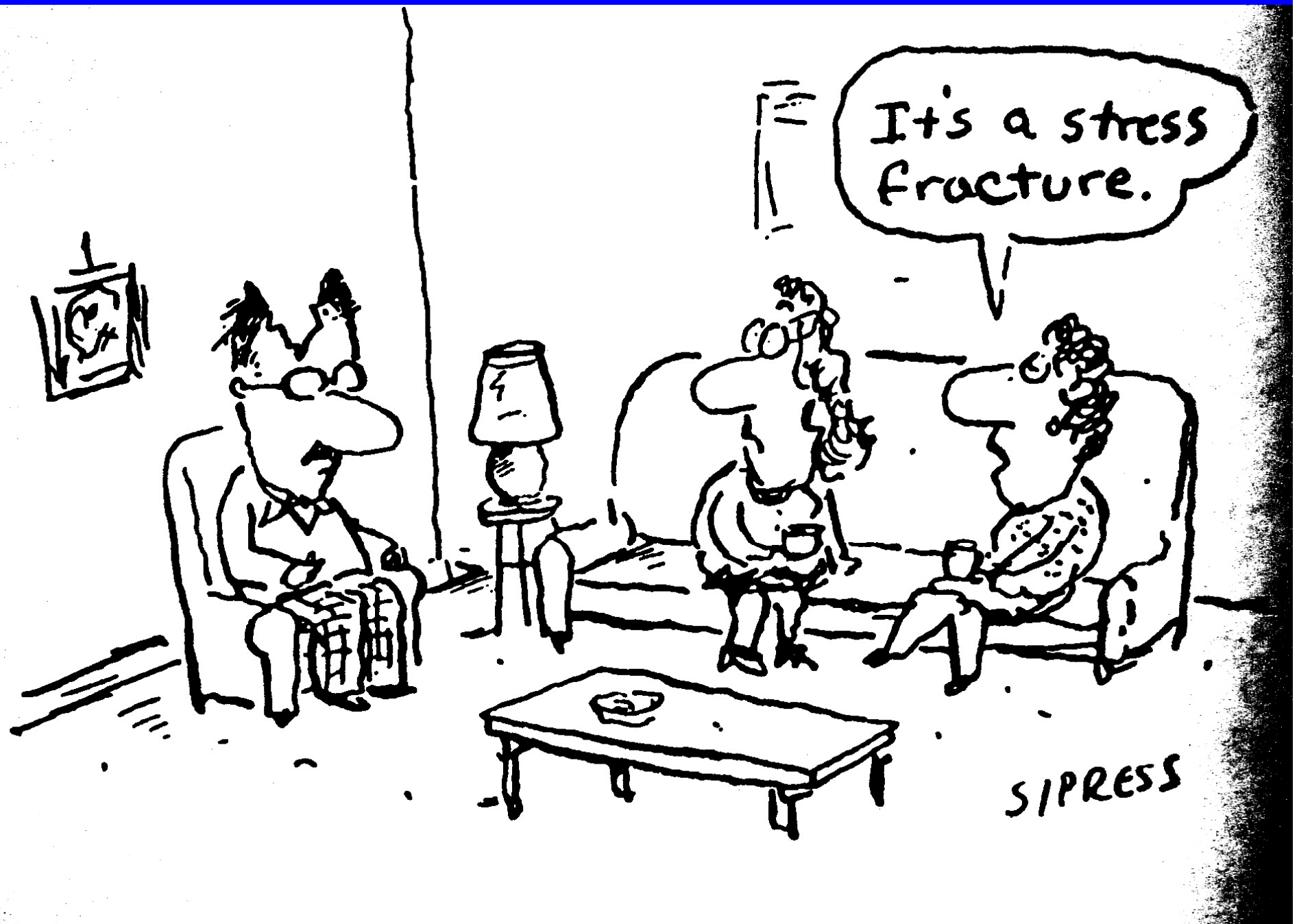
“640K of memory will be enough
for everyone.”

The Quotations Page – Your Source for Famous Quotations:

www.quotationspage.com

Review of Common Fractures

Jannette Collins, MD, MEd,
FCCP



Body Movements

- Appropriate gestures
- Eye contact with audience

PEOPLE GENERALLY REMEMBER:

_____ % of what they HEAR

_____ % of what they SEE

_____ % of what they HEAR
and SEE

PEOPLE GENERALLY REMEMBER:

- 20% of what they HEAR
- 30% of what they SEE
- 50% of what they HEAR
and SEE

Key Points

- Base content on objectives and learner needs
- Limit content
- Make lectures interactive
- Make lectures entertaining



End

Case-based Presentations

1. Define a case
2. Define a CBP
3. Describe the key elements of a CBP
4. Apply case-based approach to large group teaching

A case is...

...a problem with a known solution that involves radiologic imaging.

A CBP involves...

...showing numerous cases that complement each other and address a common theme.

Key Elements of CBP

- Asking questions with ARS (audience participation)
- Serial presentation of history/images

Sushi Analogy



- Who has eaten sushi?
- What is sushi? (one word or phrase)

What is Sushi?

- Uncooked food
- Japanese food
- Seafood
- These are labels that we use to index information

Labeling is how
we add new
experiences to
our memory and
compare them to
prior experiences.



We label images...

- LUL collapse
- Sclerotic lesion
- Spiculated mass

Case-Based Teaching to Large Groups

- Follow learning objectives
- Show cases relevant to practice
- Show several examples
- Show different diagnoses that look alike

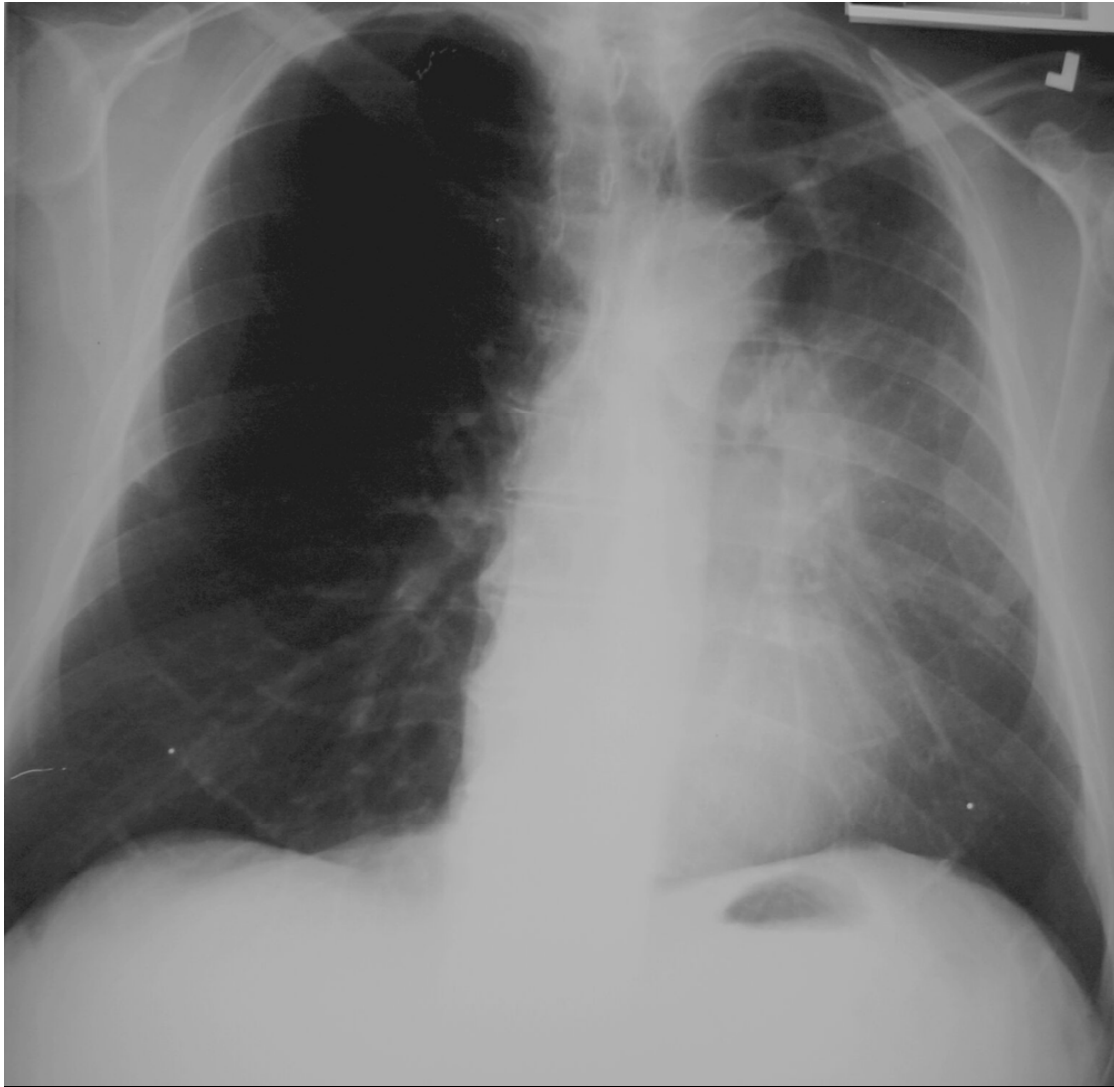
Objectives

1. Recognize the findings of LUL collapse on a CXR
2. Describe the differences between the appearance of LUL collapse and similar appearing but different diagnoses
3. Recognize LUL collapse as a sign of lung cancer

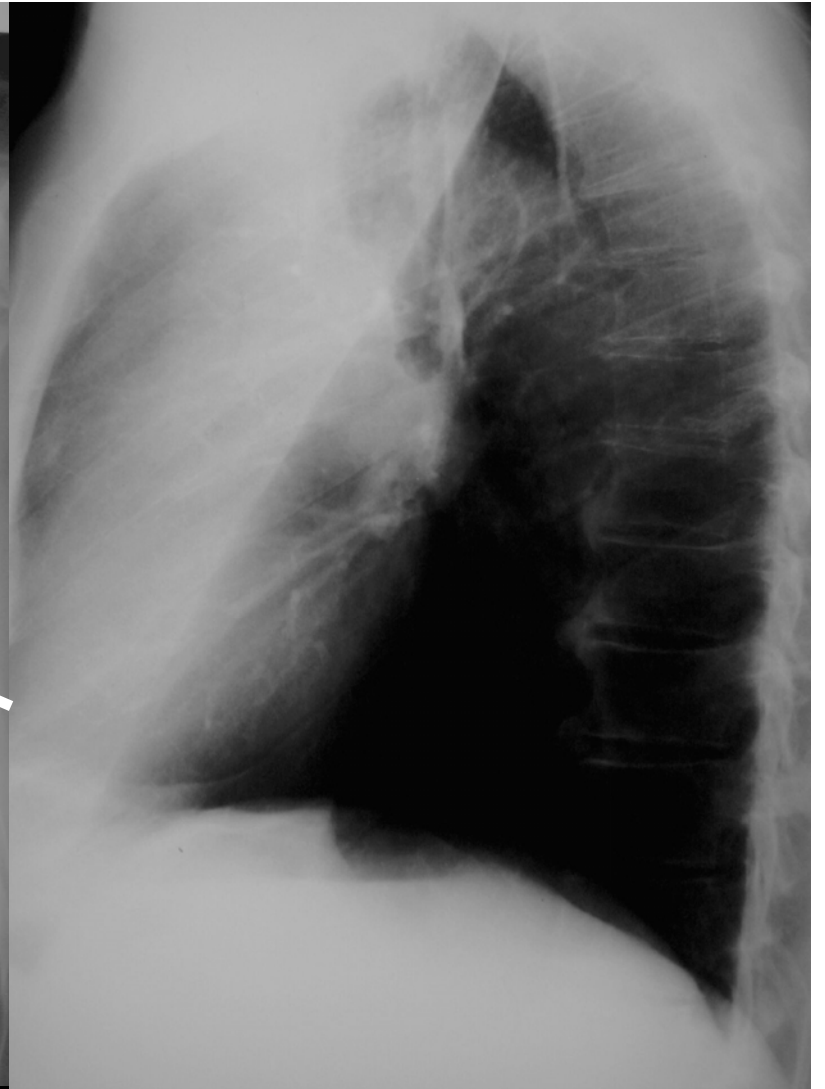
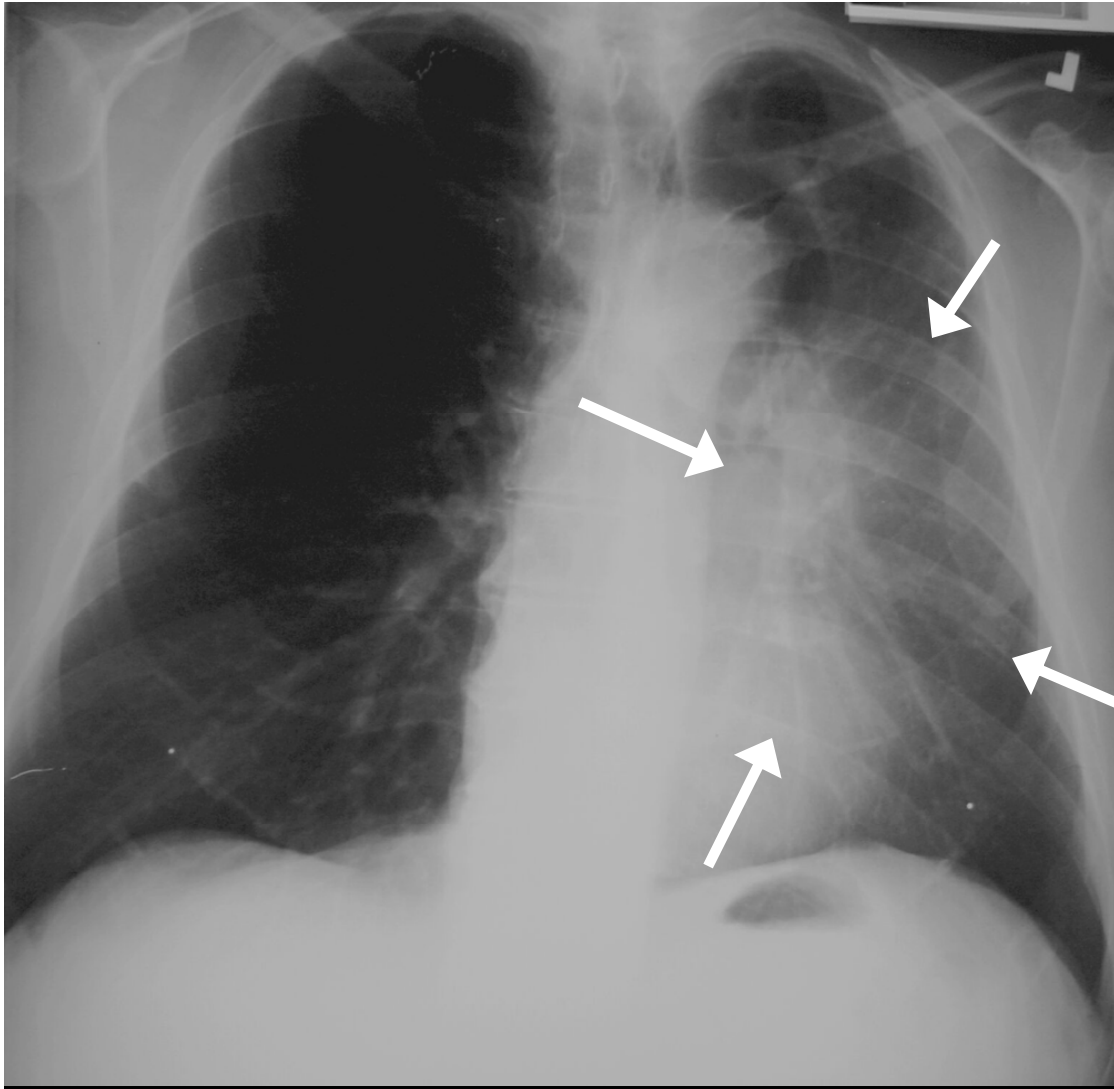
Create Questions Based on Objectives

Objective #1

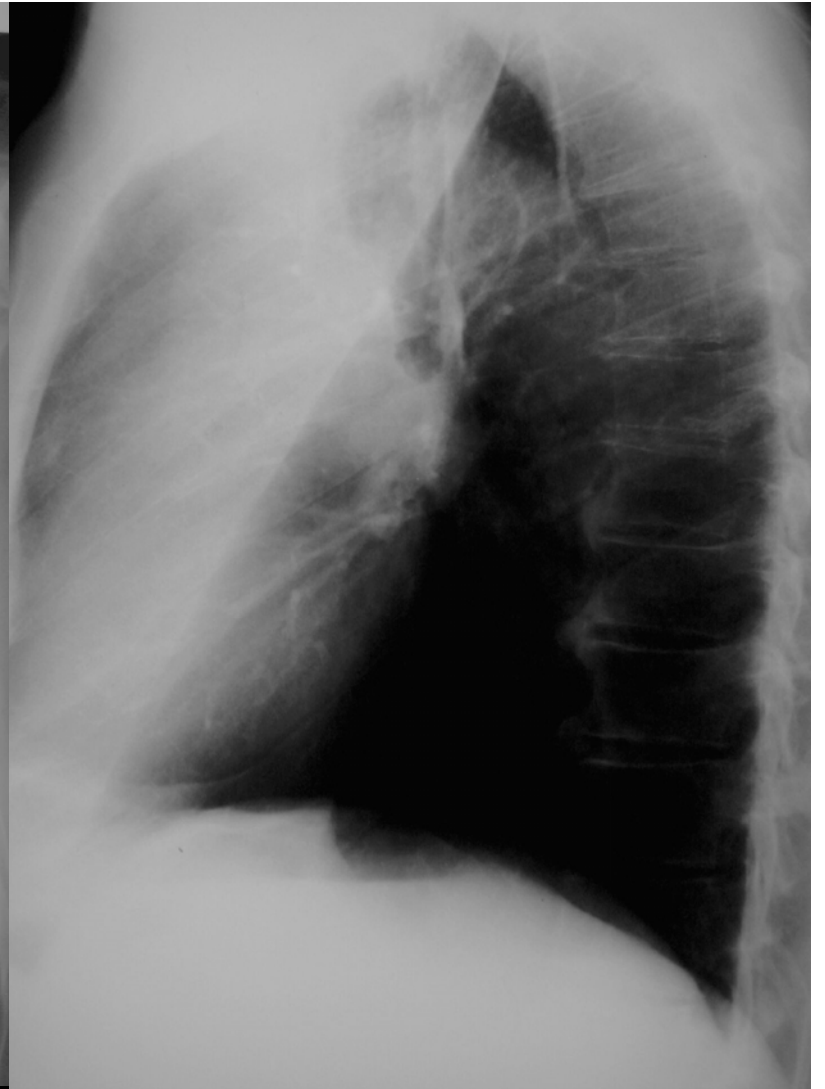
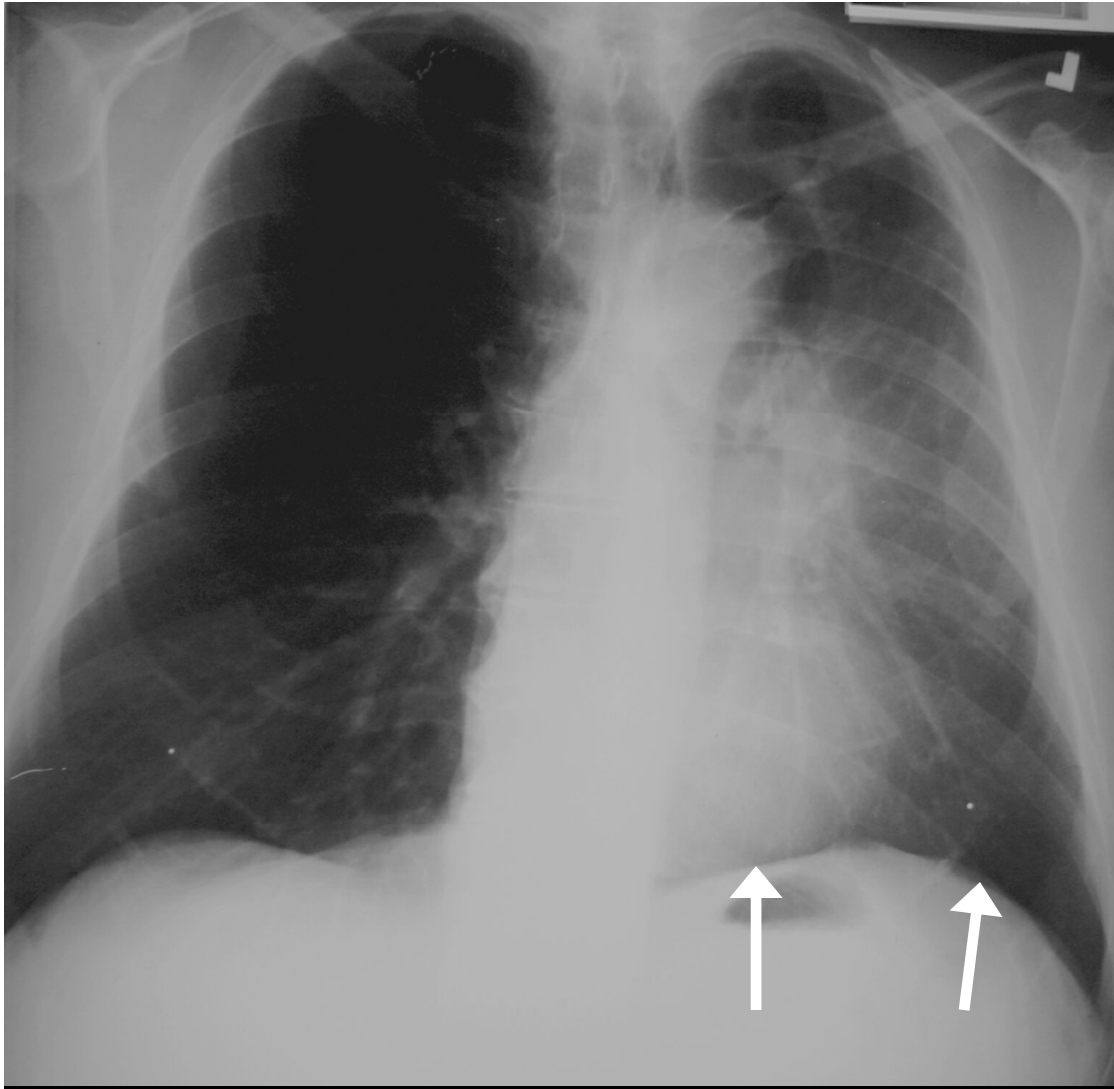
- Recognize the findings of LUL collapse on a CXR



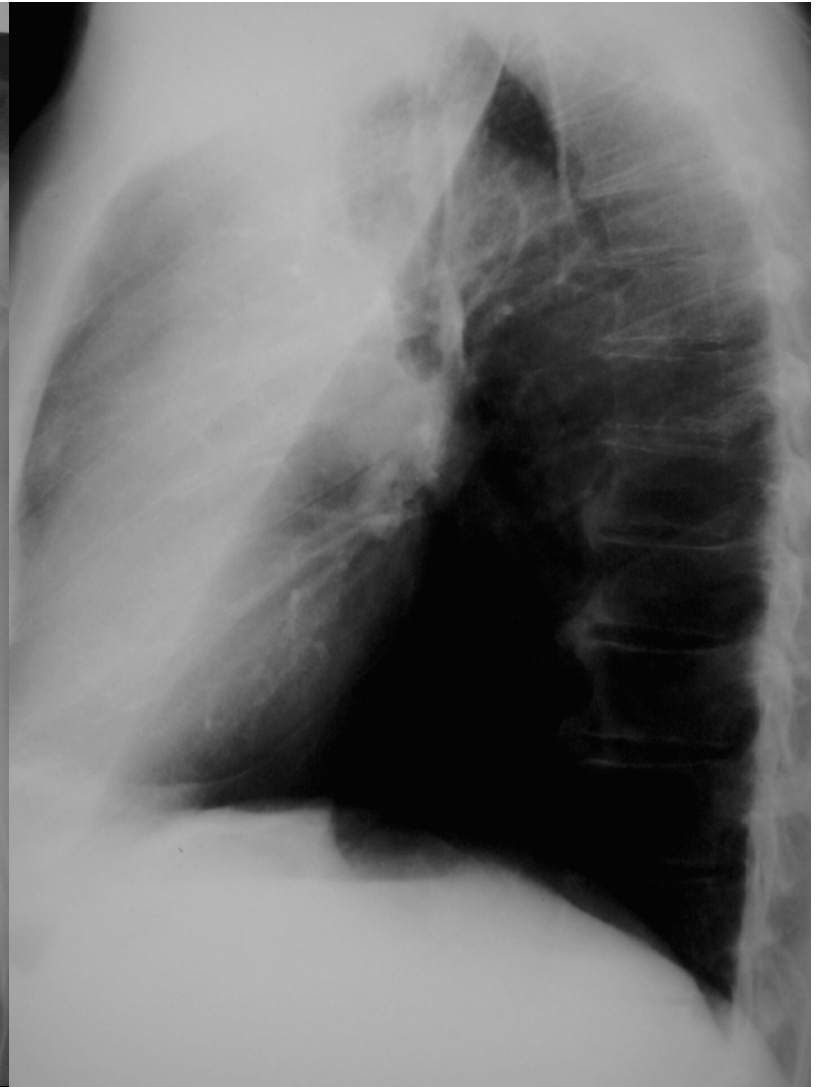
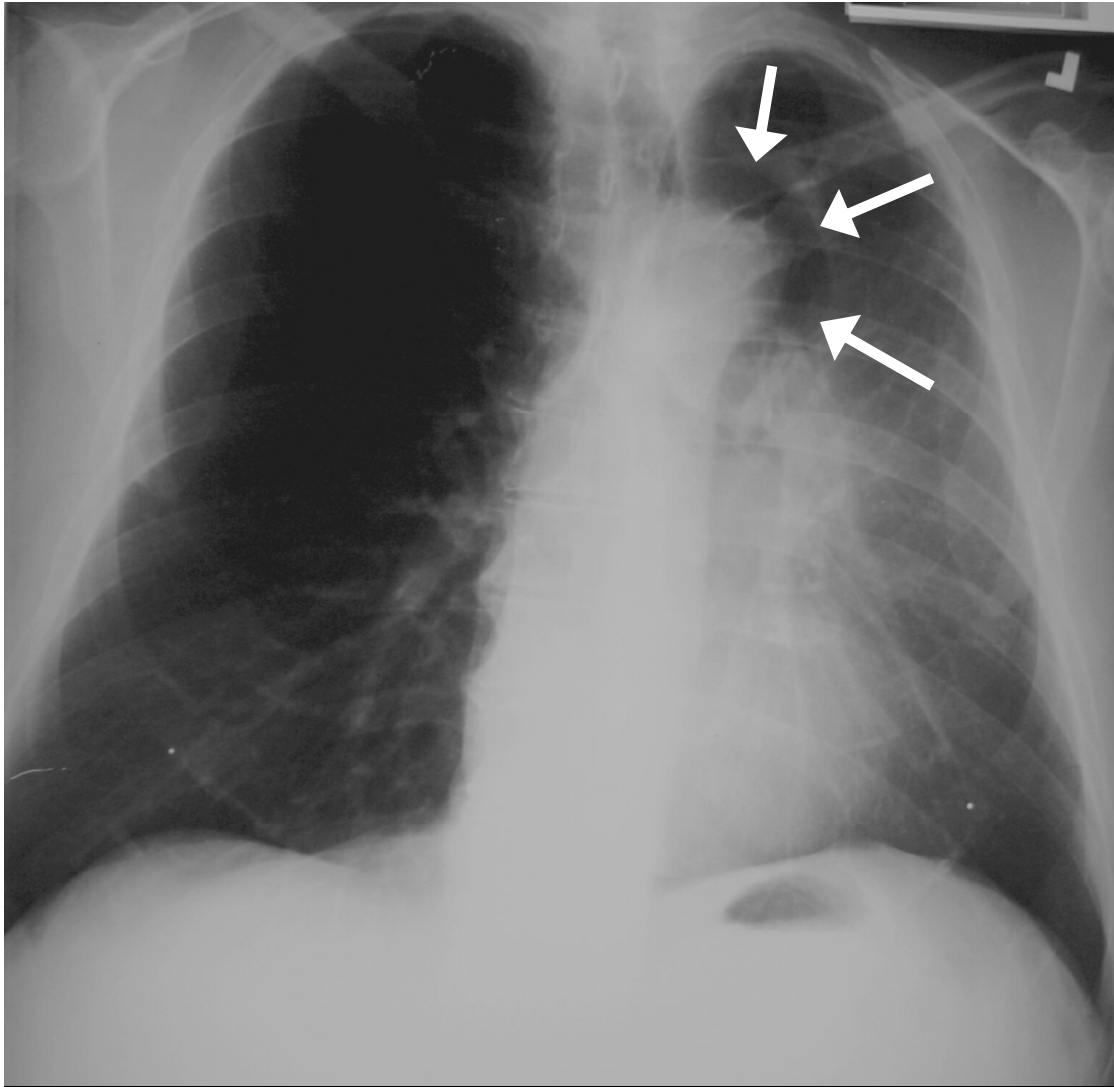
Describe the findings



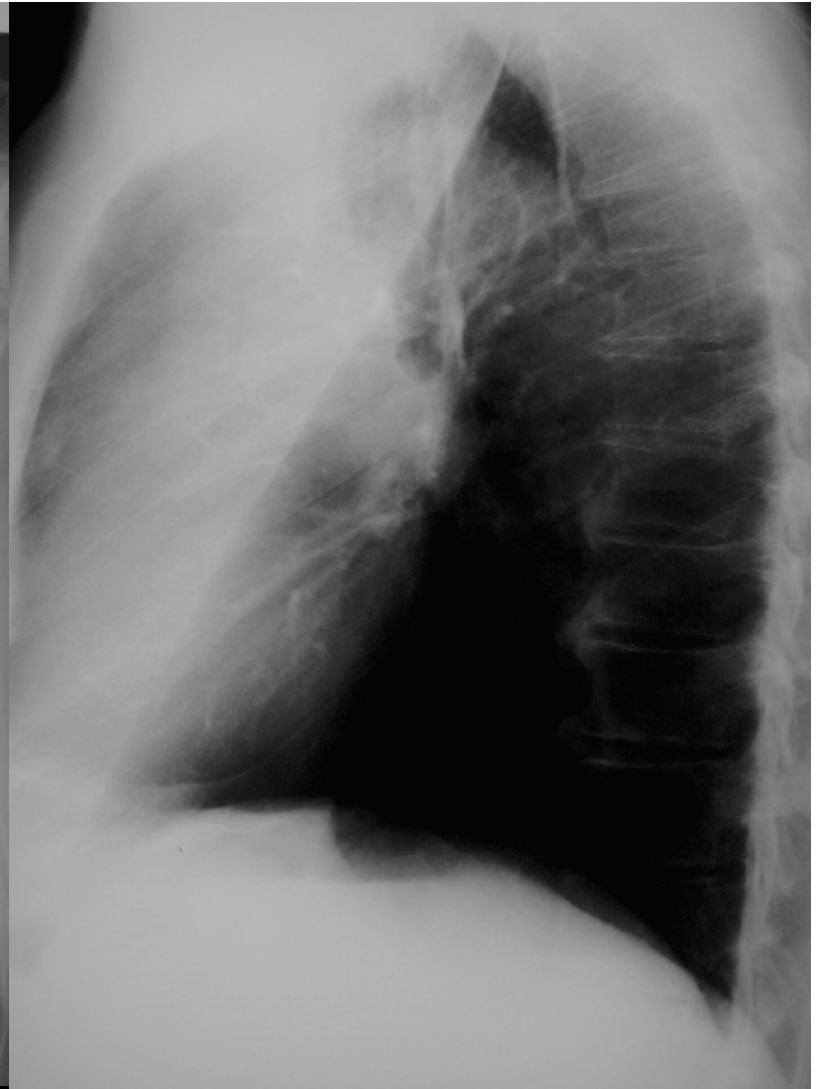
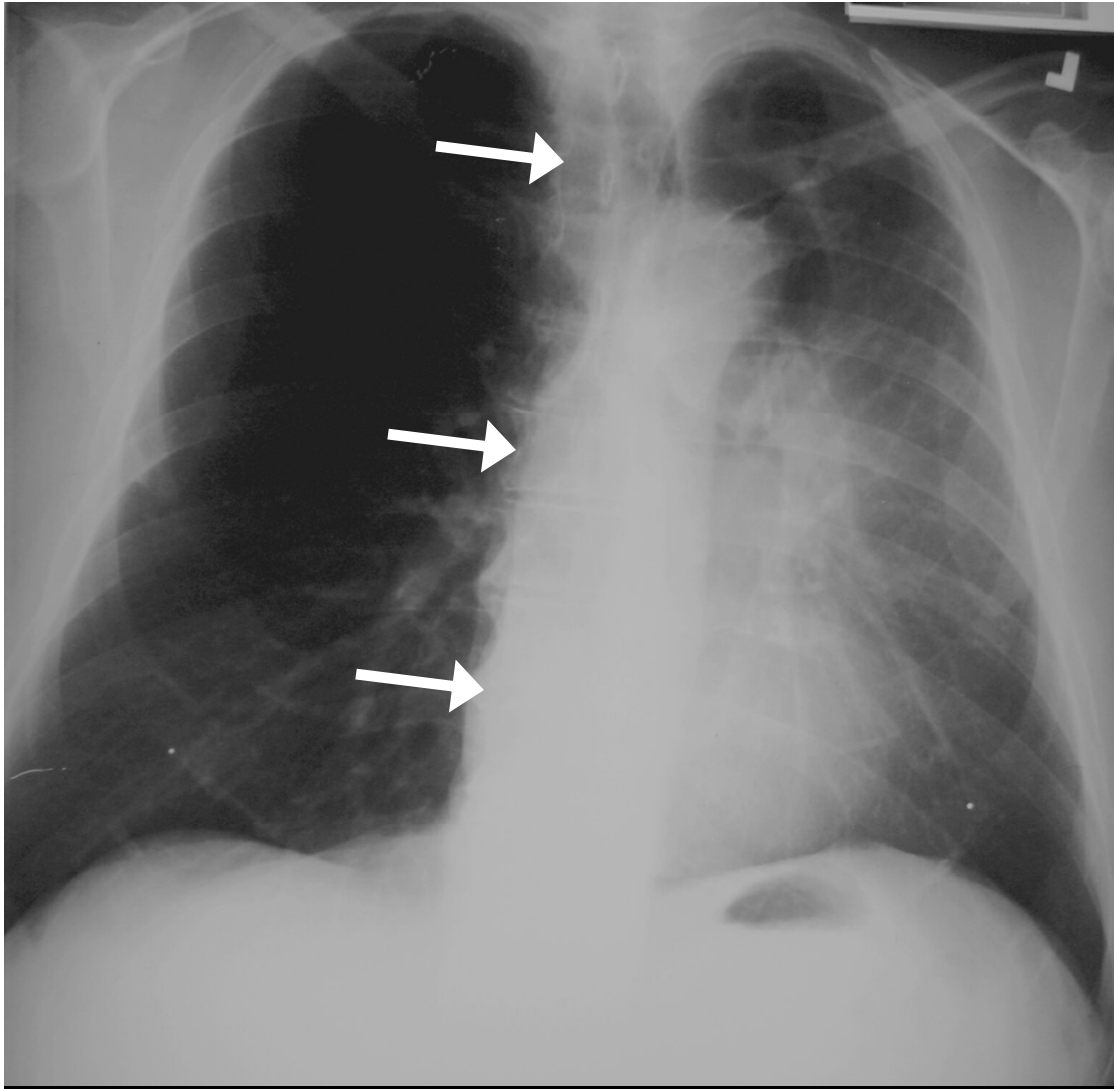
Abnormal opacity left lung



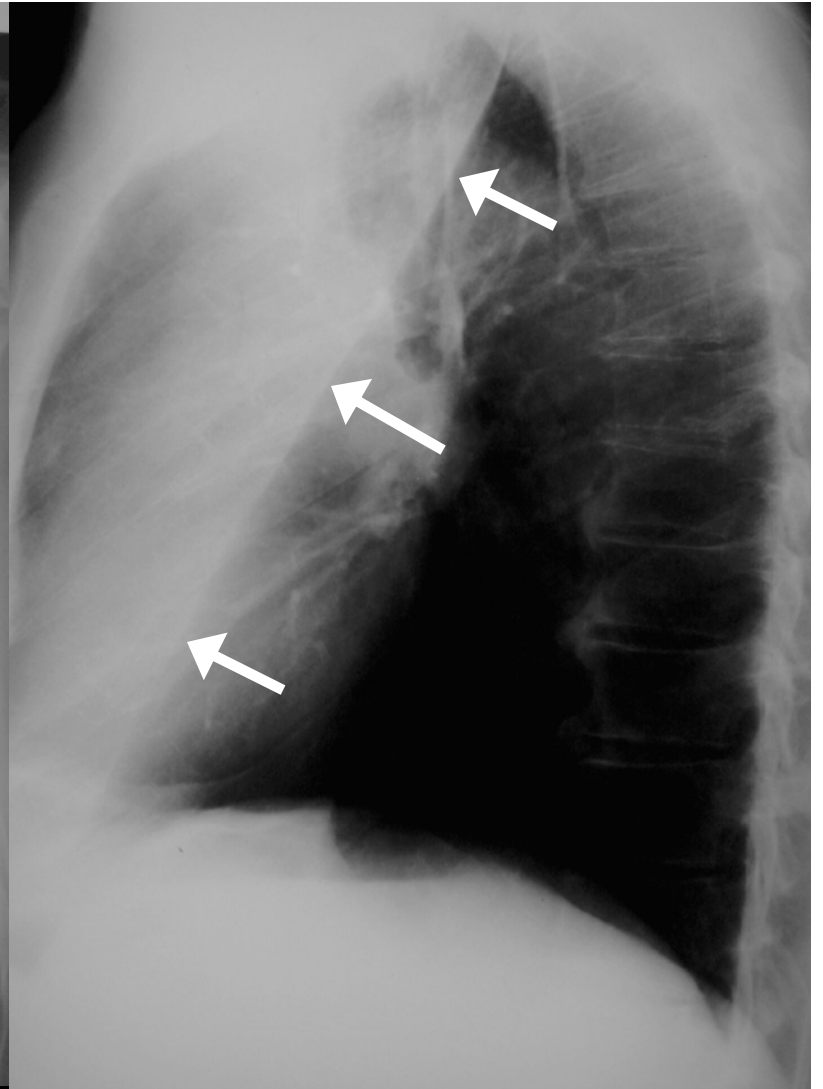
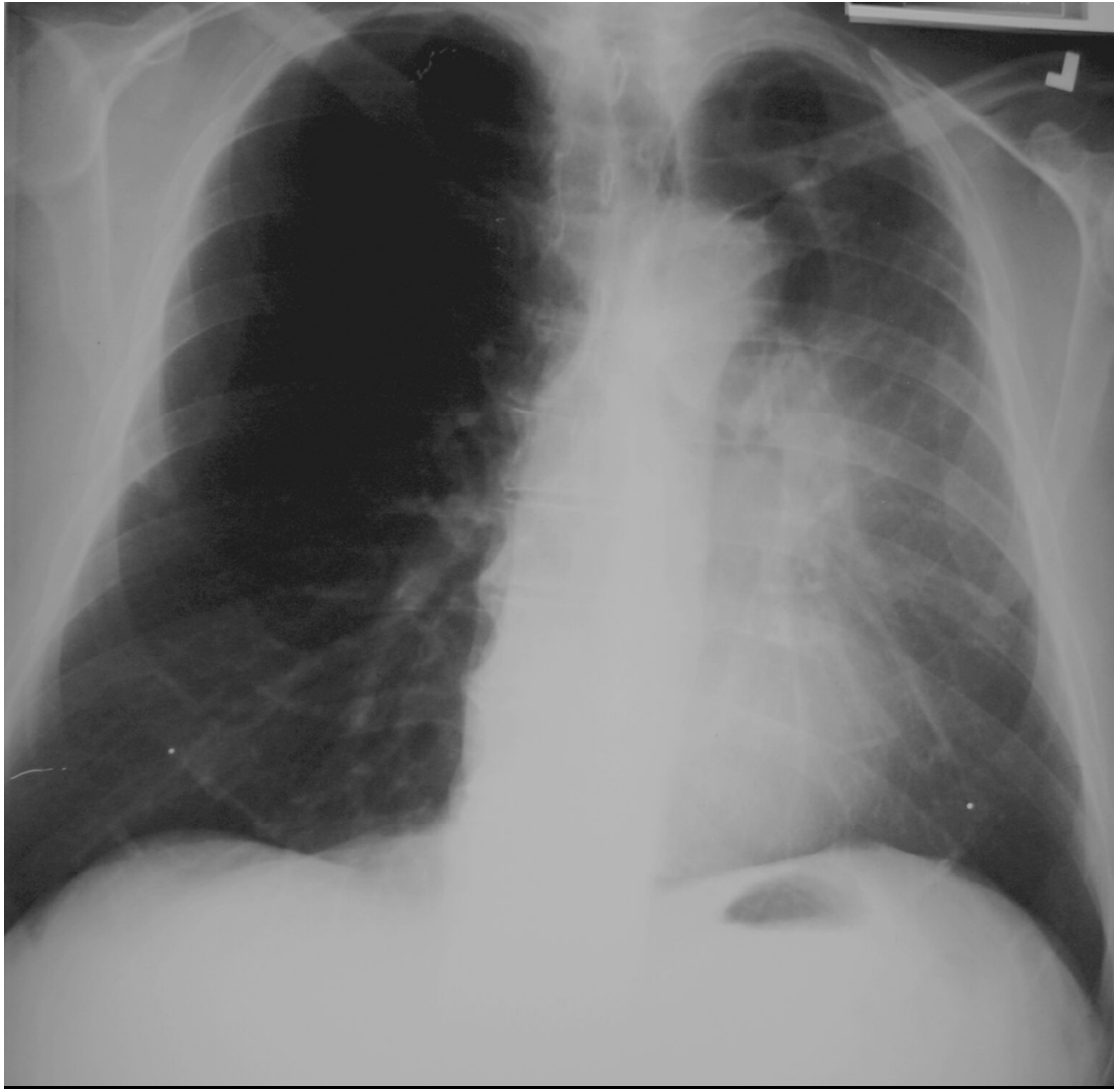
↑ left diaphragm



Luftsichel sign



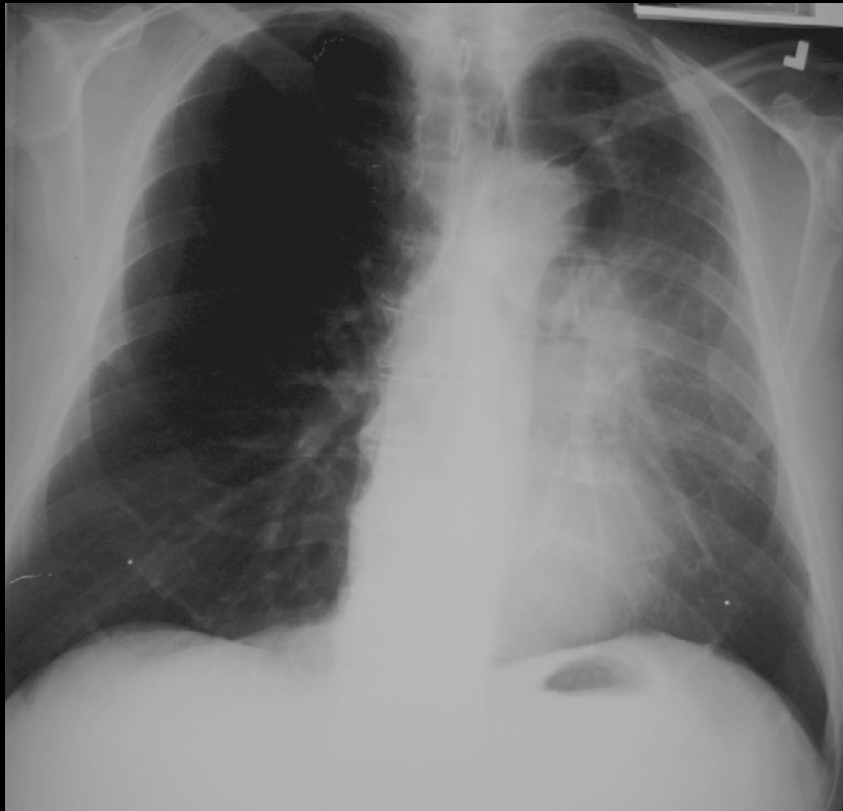
Mediastinal shift to left



**Anterior displacement of major
fissure/retrosternal opacity**

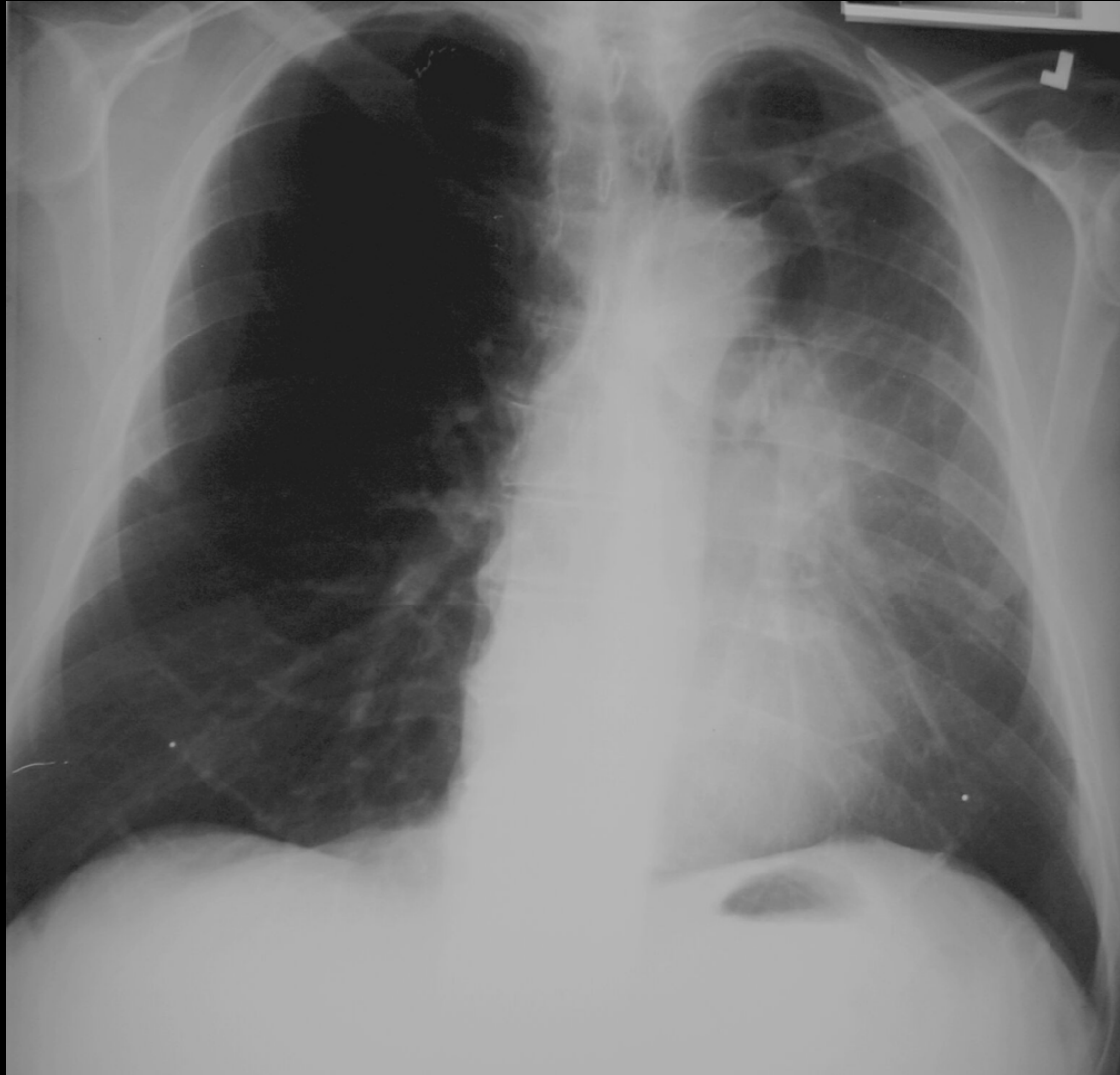
Anticipate Failure

- Abnormal opacity left lung



- Abnormal opacity left lung
 - left upper lobe pneumonia
 - left pleural effusion

- Mediastinal shift to left



- Mediastinal shift to left
 - Right pneumothorax

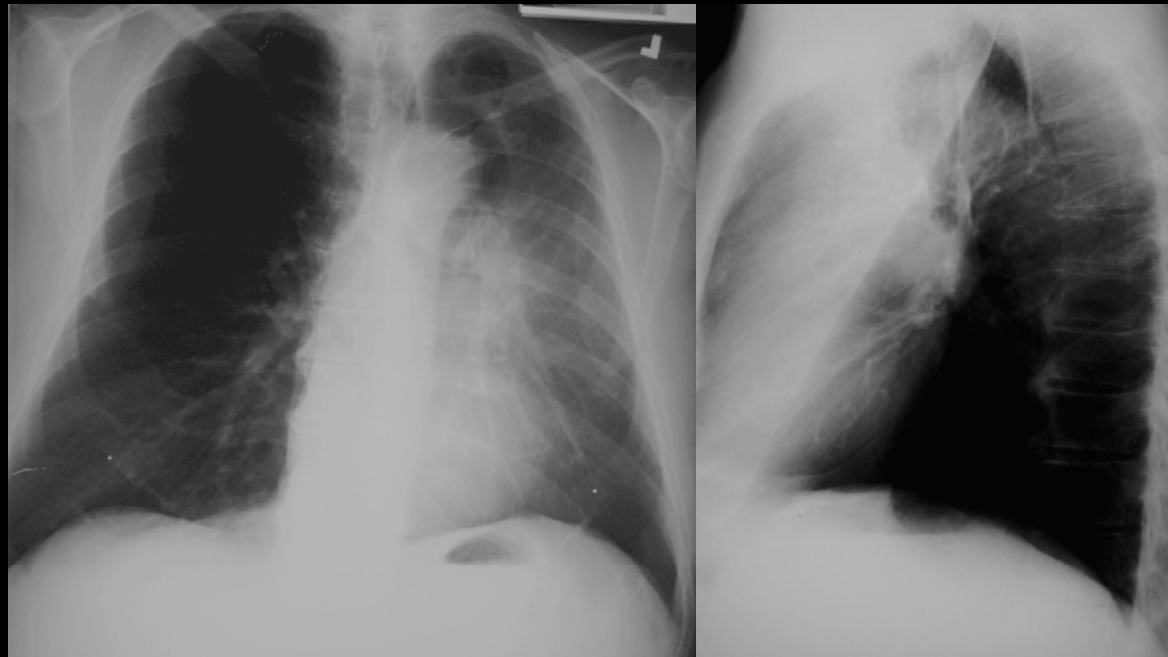
- Anterior displacement of major fissure/retrosternal opacity



- Anterior displacement of major fissure/retrosternal opacity
 - Anterior mediastinal mass

Create foils for the following question:

Which of the following findings is NOT shown on the CXR?



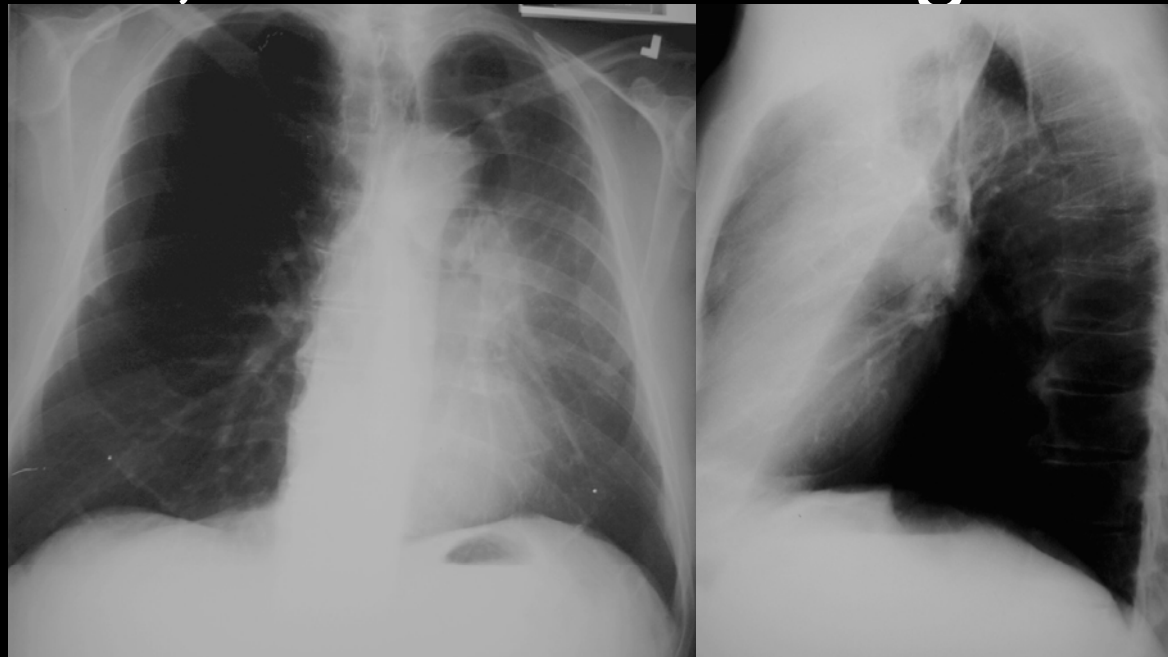
1. Abnormal opacity in left lung
2. Mediastinal shift to left
3. Left medial pneumothorax
4. Anterior displacement of major fissure

Objective #2

Describe the differences between the appearance of LUL collapse and similar appearing but different diagnoses.

Create foils for the following question:

Given the findings on the CXR below, what is the diagnosis?



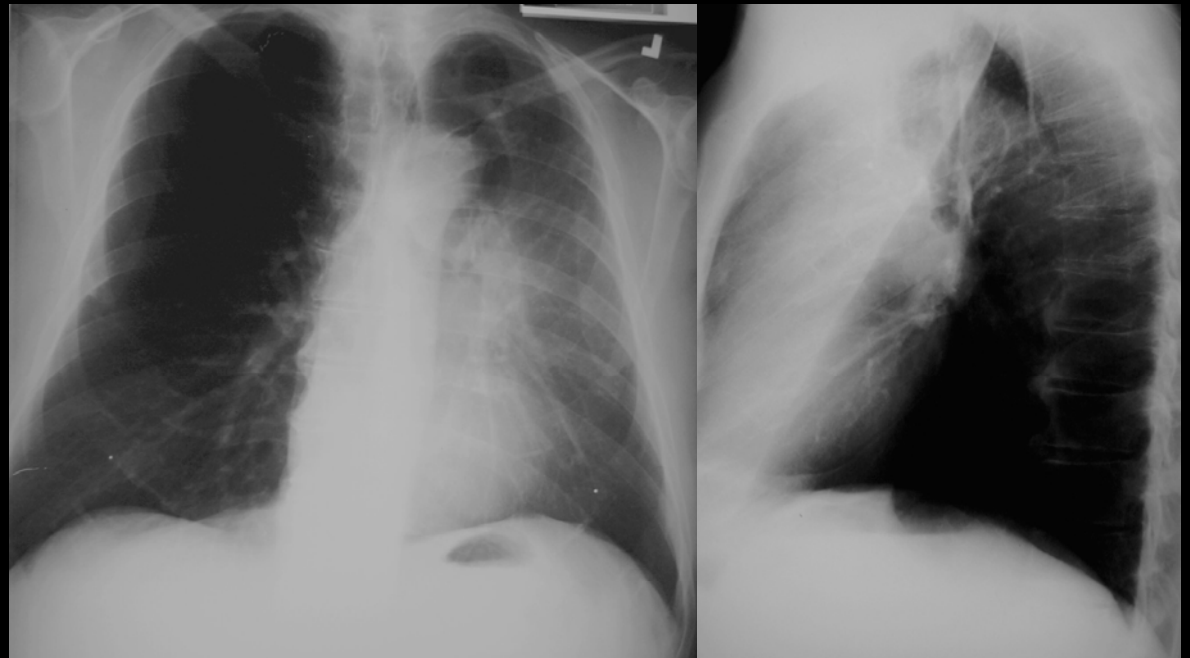
1. LUL collapse
2. Left pleural effusion
3. Anterior mediastinal mass
4. LUL airspace disease

Objective #3

Recognize LUL collapse as a
sign of lung cancer

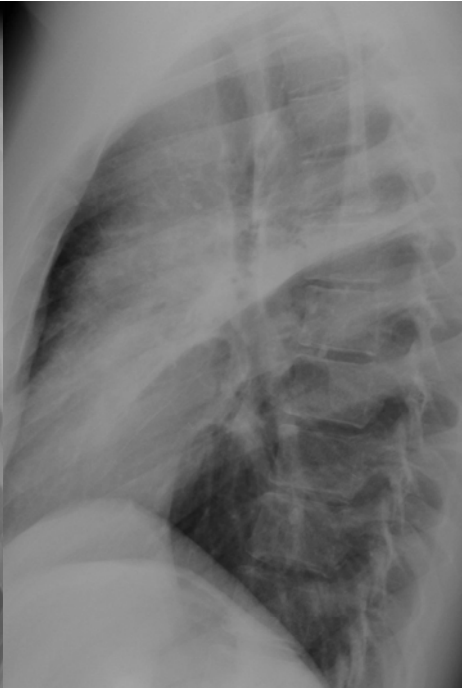
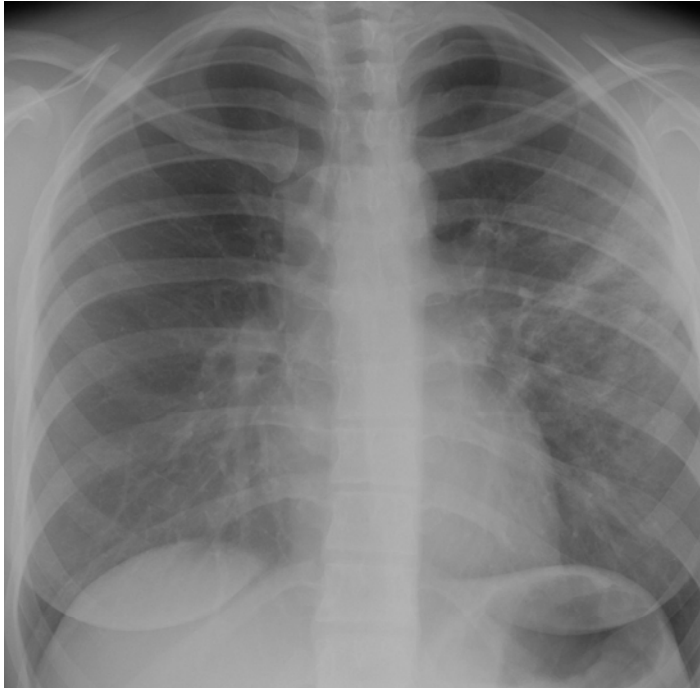
Create foils for the following question:

In a 50-year-old man with the following CXR, what is the likely diagnosis?

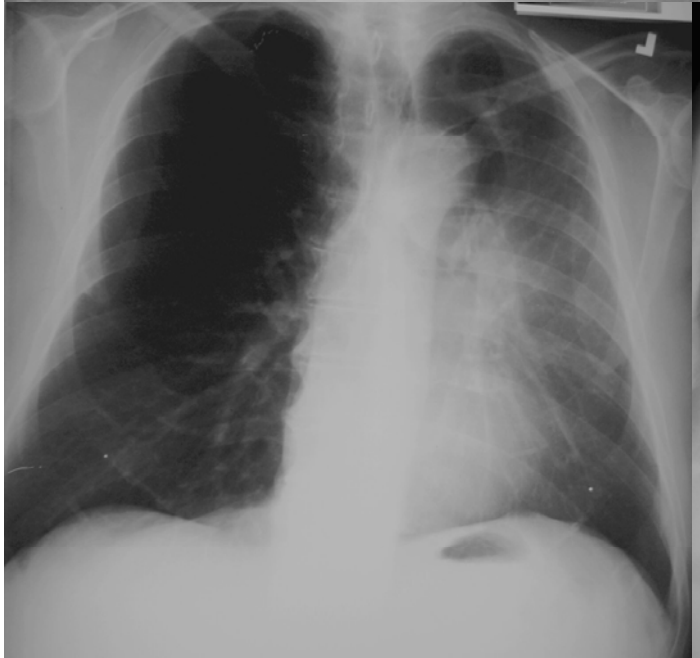


1. Lung cancer
2. Anterior mediastinal lymphoma
3. Left pneumothorax
4. LUL pneumonia

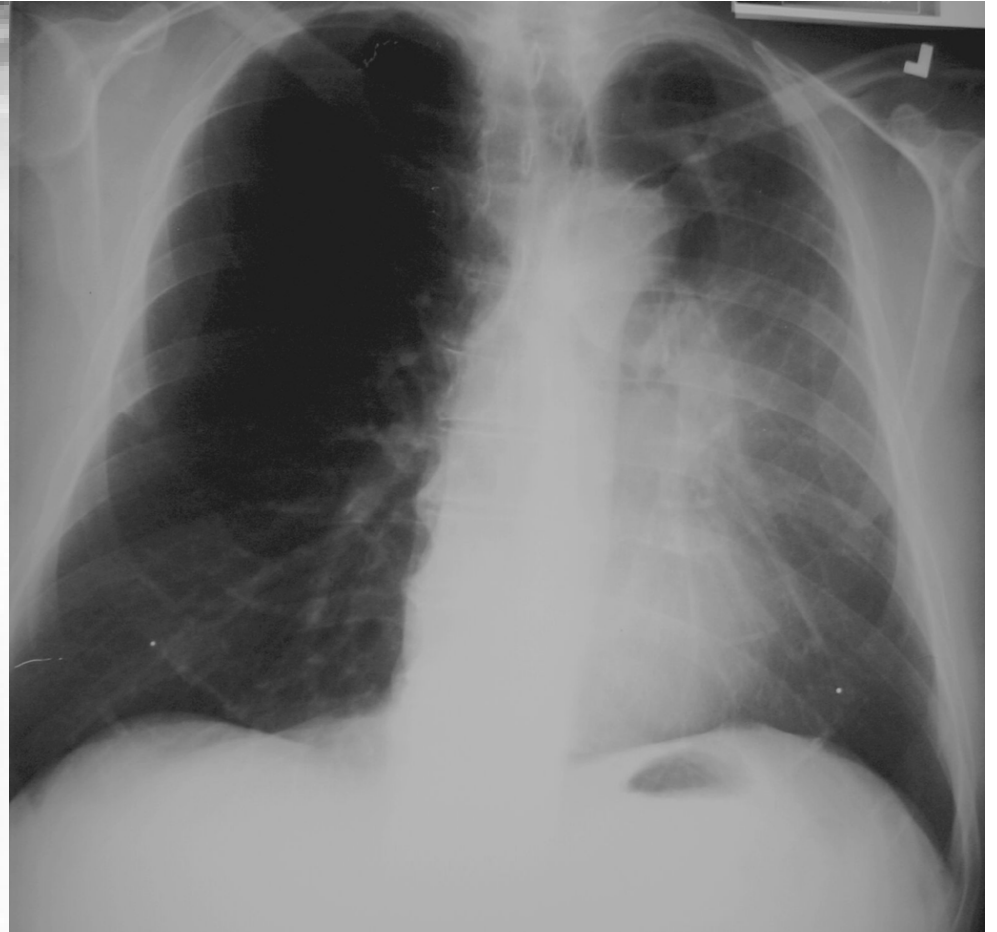
Show examples of Foils



Left upper
lobe
pneumonia



Left upper
lobe
collapse

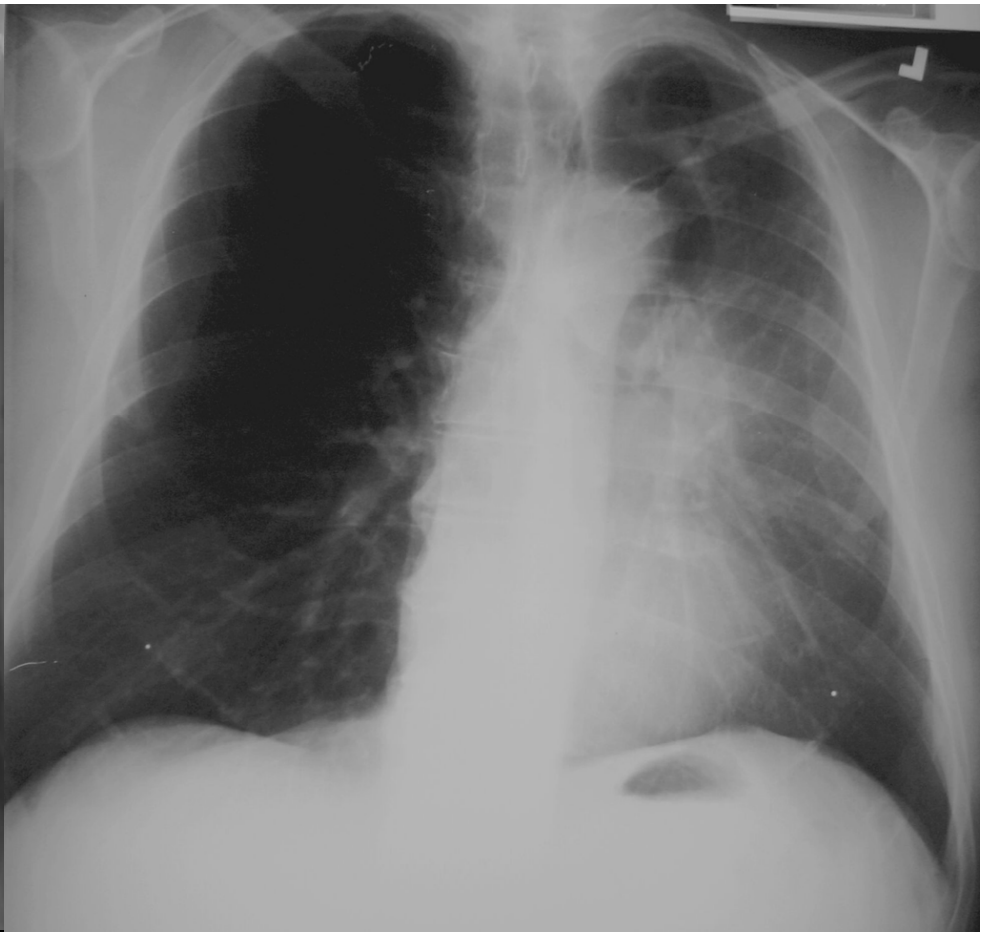
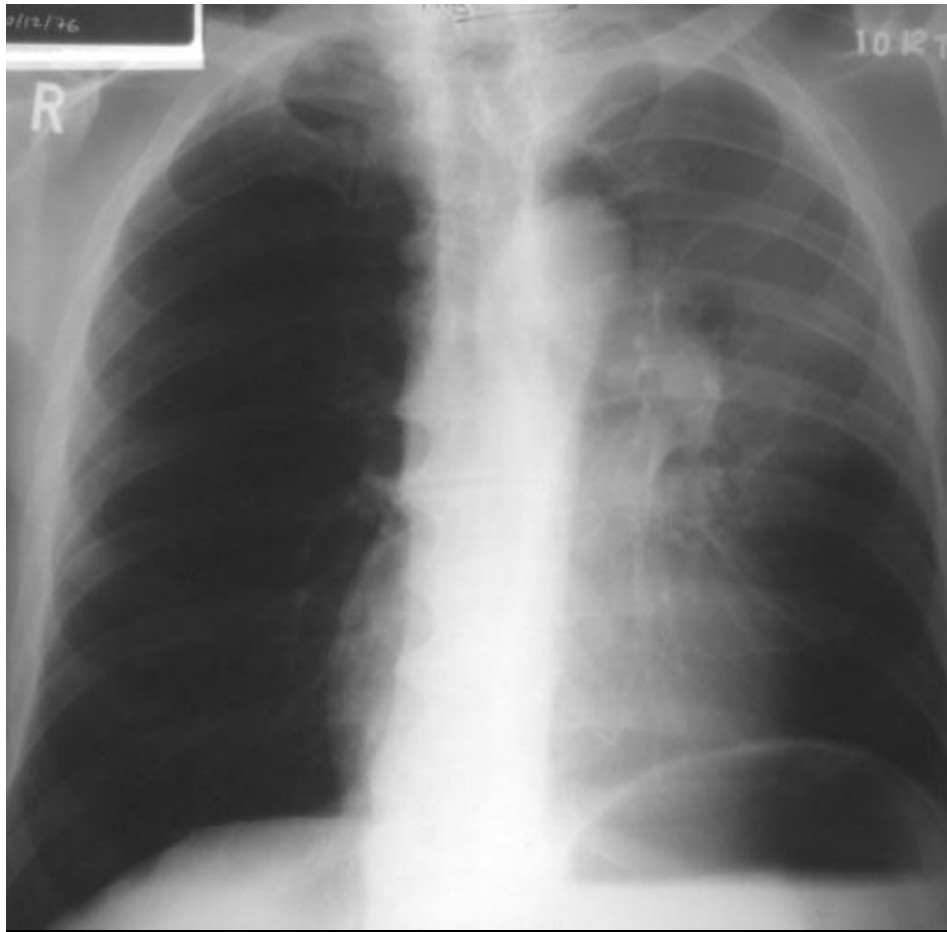


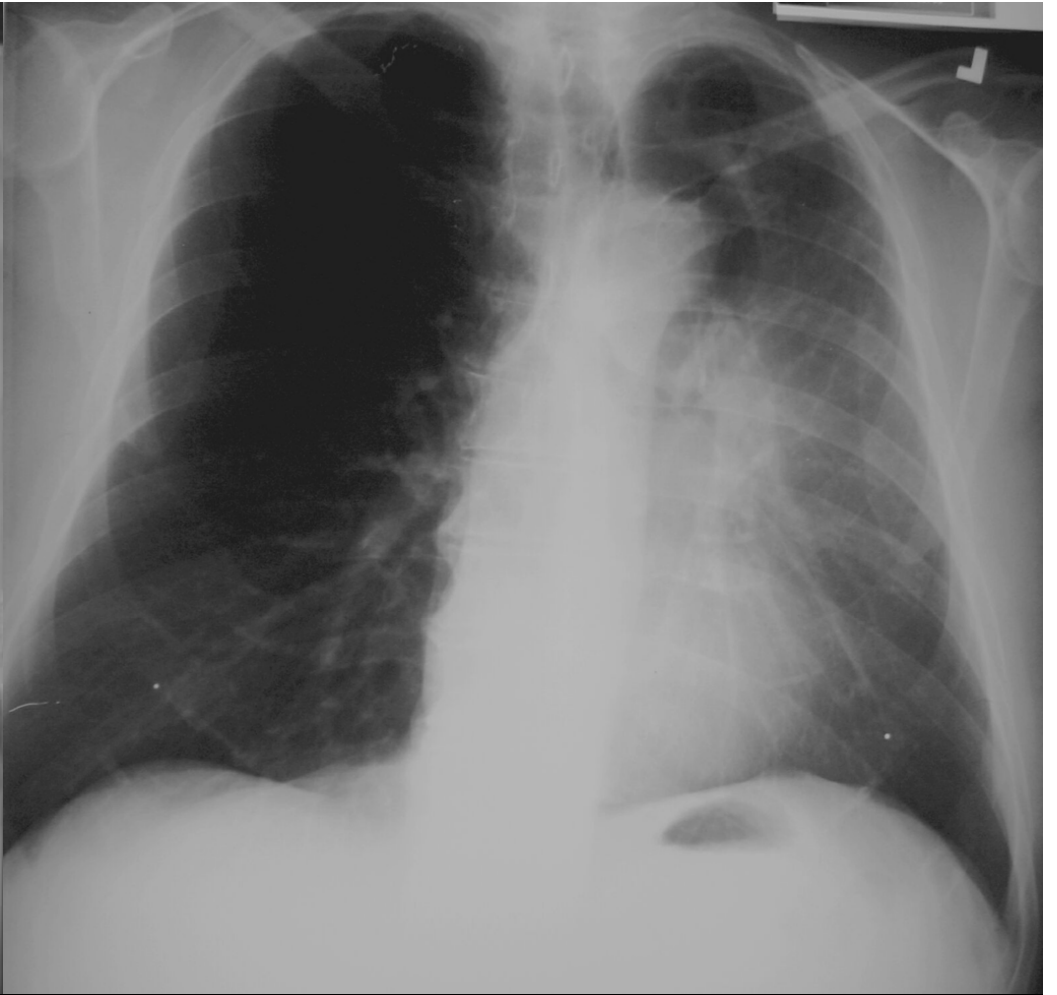
Left pleural effusion

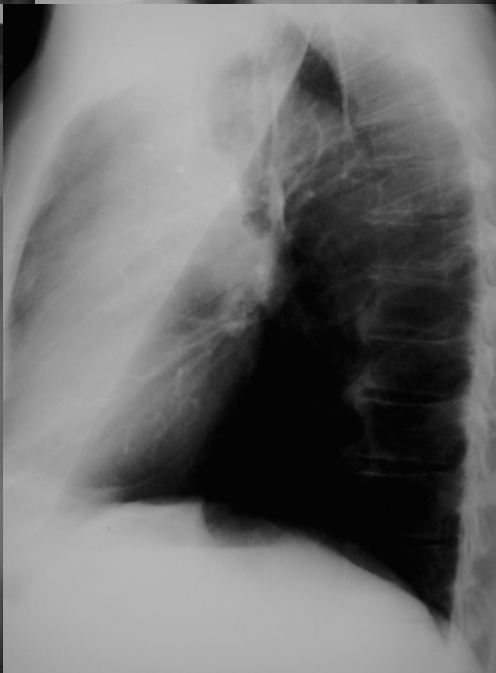
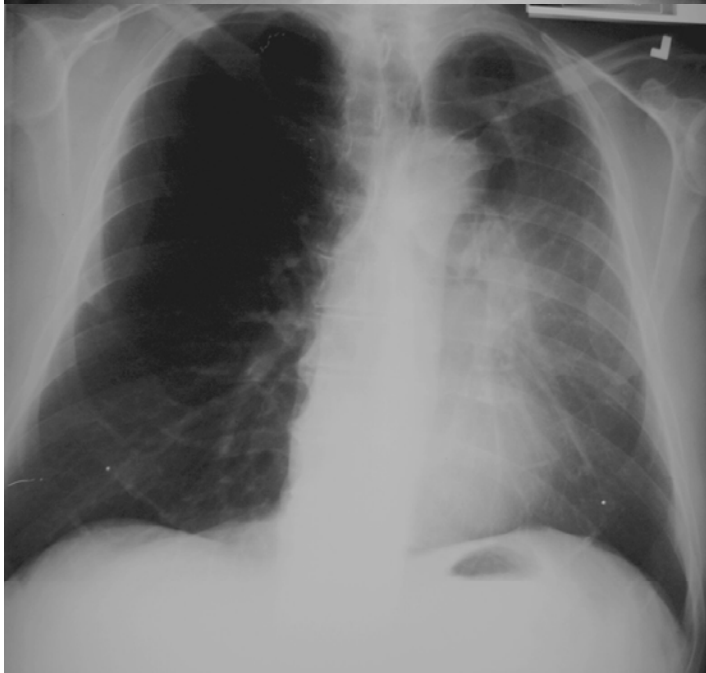
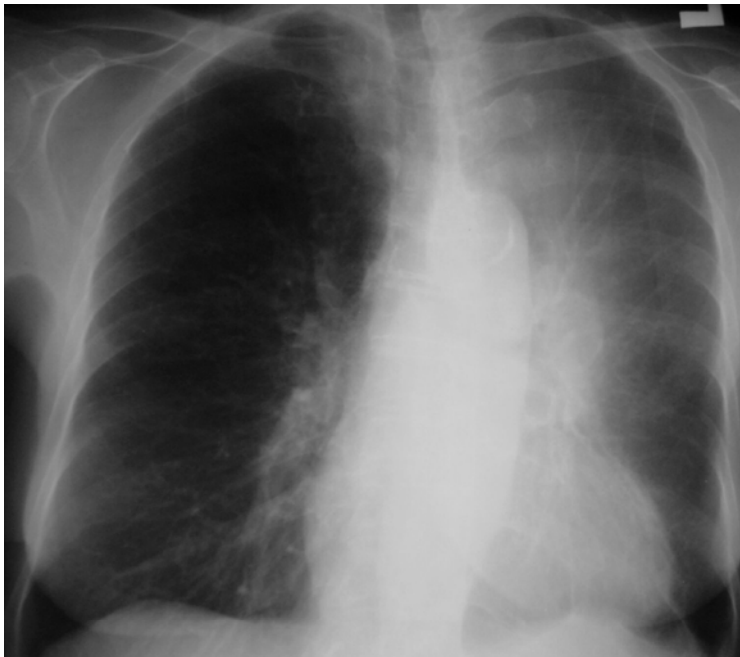
LUL collapse

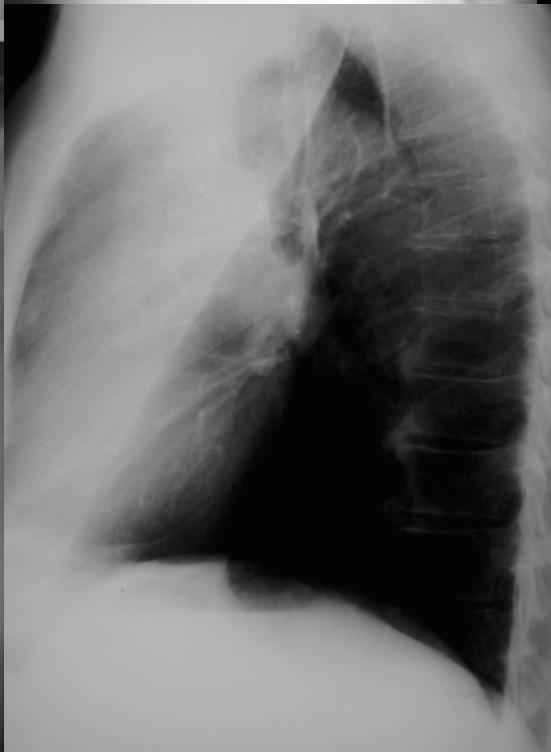
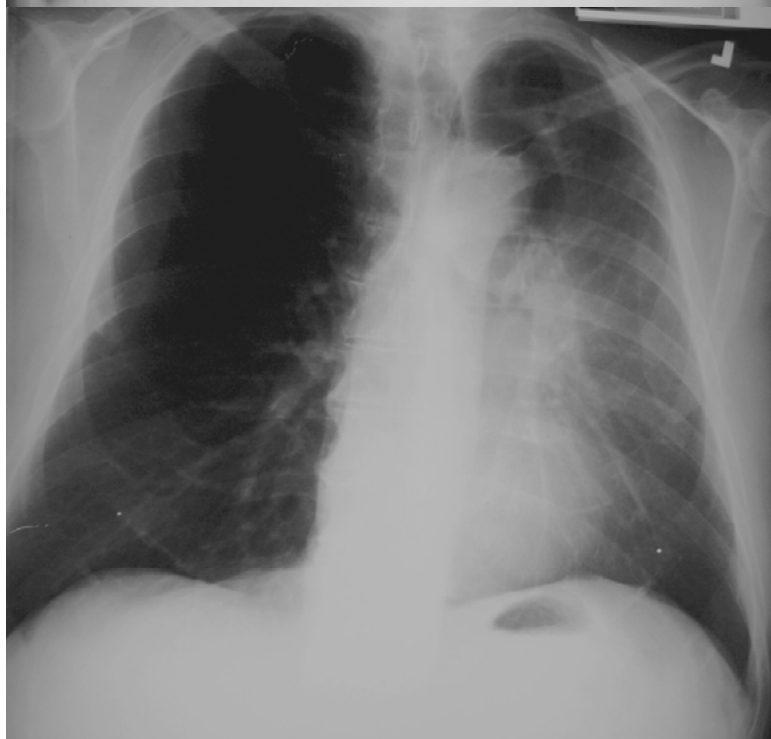
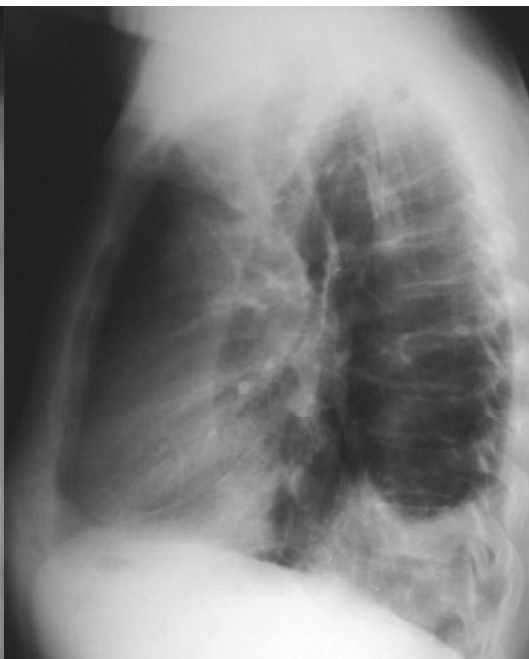
Show additional examples
(expand the sushi experience)











Review of Key Points

- Case-based teaching builds a foundation of knowledge using practical, work-related cases
- It is based on the similarities and differences between multiple cases

- It encourages critical thinking if the questions and foils are tailored to the objectives

PEOPLE GENERALLY REMEMBER:

_____ % of what they HEAR

_____ % of what they SEE

_____ % of what they HEAR
and SEE

PEOPLE GENERALLY REMEMBER:

- 20% of what they HEAR
- 30% of what they SEE
- 50% of what they HEAR
and SEE

End

The Lecture Song

