

# LEVERS

# Simple machines

- Machine is a contrivance which enables an applied force to overcome a given resistance.

# THE THORAX AND CHEST WALL BIOMECHANICS

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Consists of

- × Thoracic vertebra
- × Ribs
- × Sternum

**BIOPHYSICAL  
PROPERTIES OF  
NONCONTRACTILE  
TISSUE**

# Mechanical characteristics of Noncontractile soft tissue

- Non-contractile soft tissue permeates the entire body and is organized into various types of connective tissue to support the structures of body.

# 6 MINUTE WALK TEST

A decorative graphic consisting of a solid teal horizontal bar that spans the width of the slide. Below this bar, on the right side, there are several horizontal lines of varying lengths and colors, including teal and white, creating a layered, stepped effect.

# AMERICAN THORACIC SOCIETY

- **ATS STATEMENT: Guidelines for the Six-Minute walk test**



# HISTORY TAKING

The background of the slide features a blue-to-teal gradient. On the left and right sides, there are decorative patterns of various leaf shapes in a lighter blue shade, creating a border effect.

- Demographic data
- Chief complaint
- History of presenting illness
- Past medical history
- Past surgical history
- Family history
- Drug history
- Personal history
- Socioeconomic history

# OUTCOME MEASURES

- A measure of change, either favorable or adverse, in the actual or potential health status of a person

**LUNG EXPANSION**

**THERAPY**

# Indications

- ▣ Atelectasis
- ▣ Pts having difficulty in deep breathing
- ▣ NMD
- ▣ Heavily sedated
- ▣ Upper abdominal or thoracic surgery
- ▣ SCI
- ▣ BEDRIDDEN PATIENTS
- ▣ Pain

**CA BREAST**


- ❖ Surgical anatomy
- ❖ Lymphatic drainage
- ❖ Carcinoma of breast
- ❖ Types of surgeries
- ❖ Impairments/ complications
- ❖ Precautions during exercise
- ❖ Exercise program



The background of the slide is a dark teal color with a pattern of lighter teal leaf silhouettes scattered across it. The leaves vary in shape and size, some resembling maple leaves and others more like simple ovals.

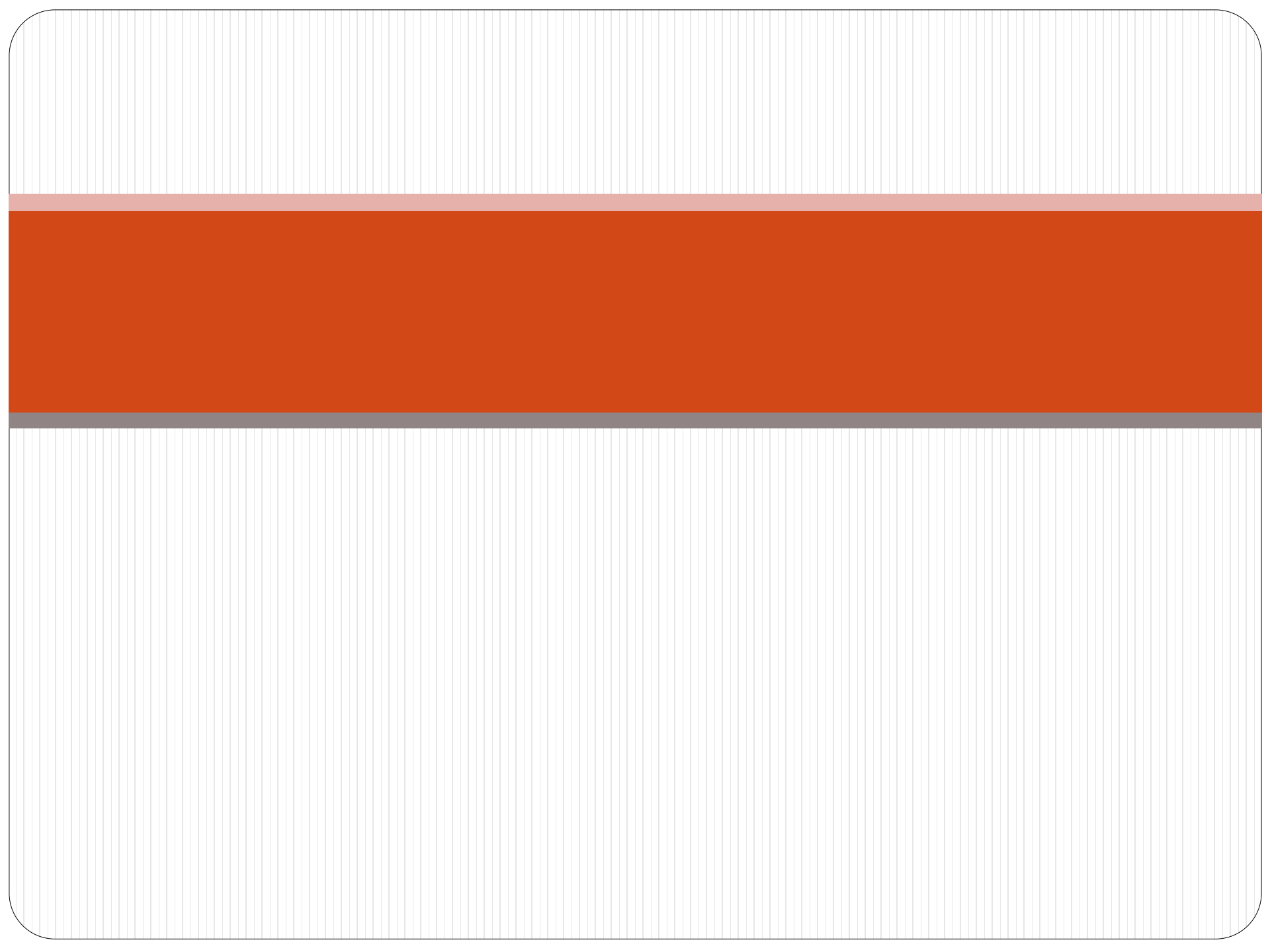
Kyphosis, scoliosis, flail chest

- Kyphoscoliosis is a combination of excessive anteroposterior and lateral curvature of the thoracic spine.



**NEUROPHYSIOLOGICAL  
FACILITATORY TECHNIQUES**

- Breathing is a complex behavior
- Motor synergy of respiration includes the major and accessory respiratory muscles and motor neuron pools from the level of 5 th cranial nerve to the upper lumbar segments



# Development of lungs

Embryonic period ( week 3-5 )



Pseudoglandular period (weeks 6-16)



Canalicular period ( weeks 17-24)



Alveolar sac period ( week 24 – term )

# Respiratory assessment of infant/ child