

# **SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES**



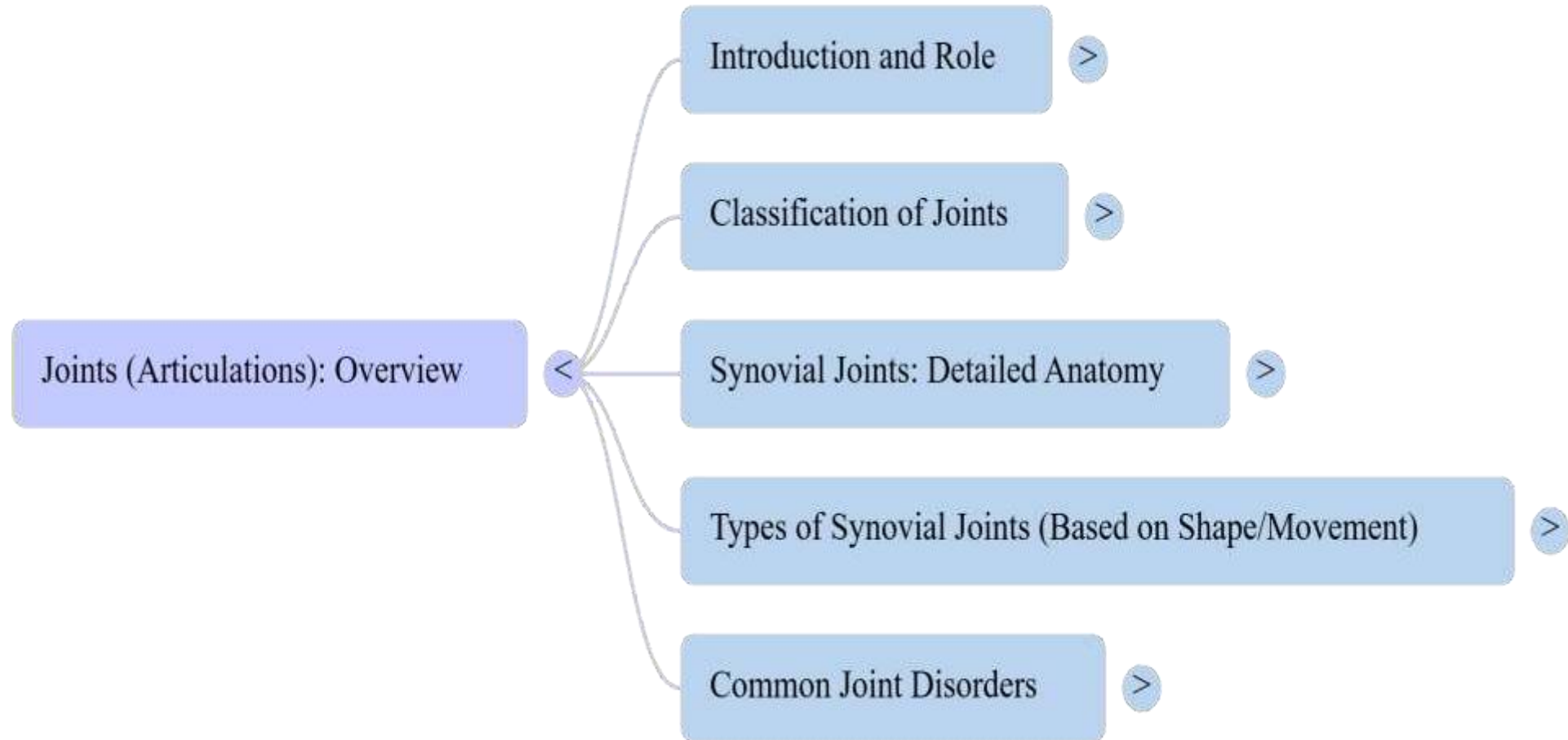
*Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai*  
*Approved by Pharmacy Council of India, New Delhi.*  
**Coimbatore -641035**

**COURSE NAME : HUMAN ANATOMY & PHYSIOLOGY**

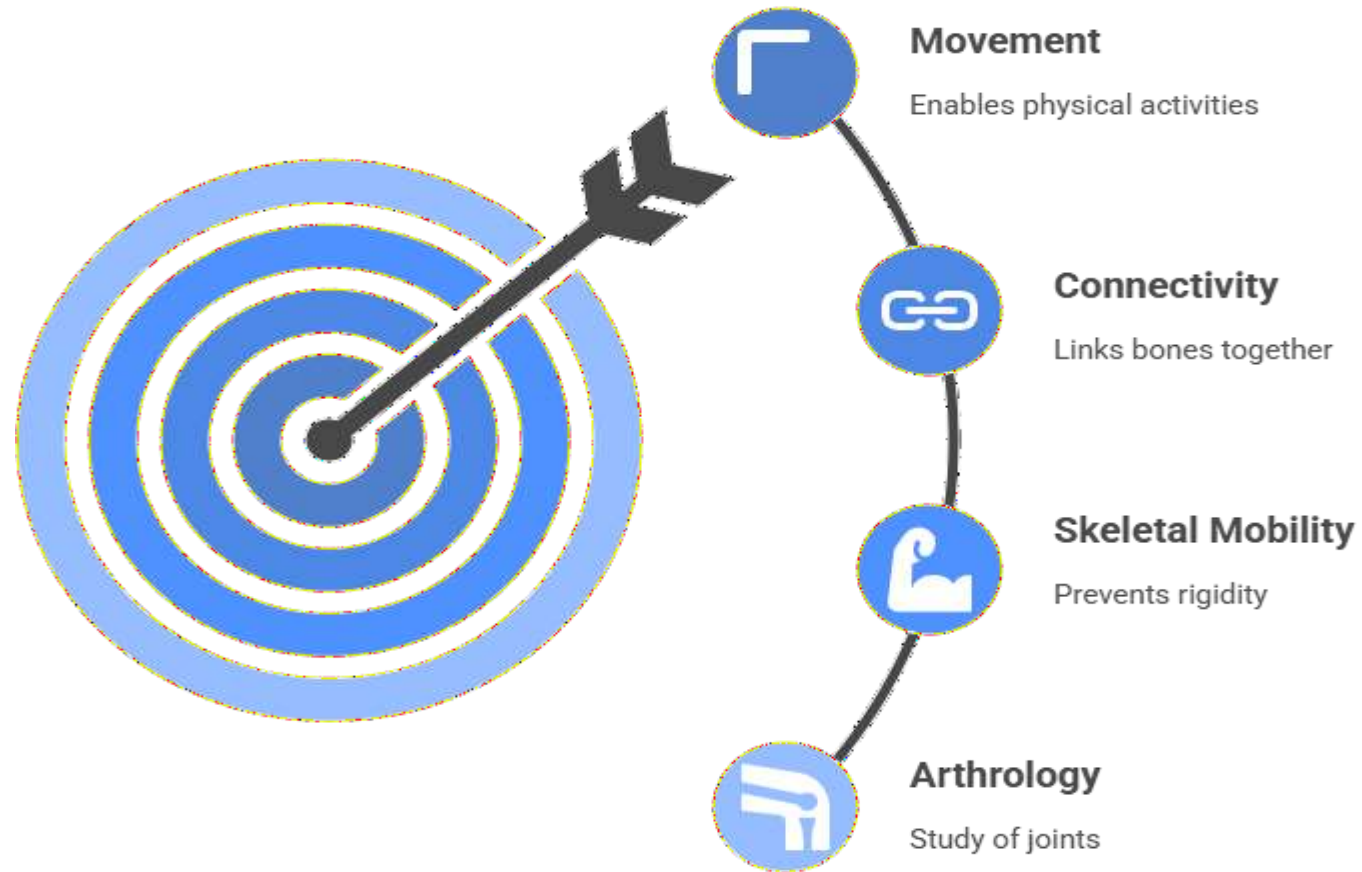
**YEAR: 1 YEAR PHARM D**

**TOPIC : OSSEOUS SYSTEM- IV**

# MINDMAP



# Introduction- Joints



Made with  Napkin

## Joints classification

### Cartilaginous Joints

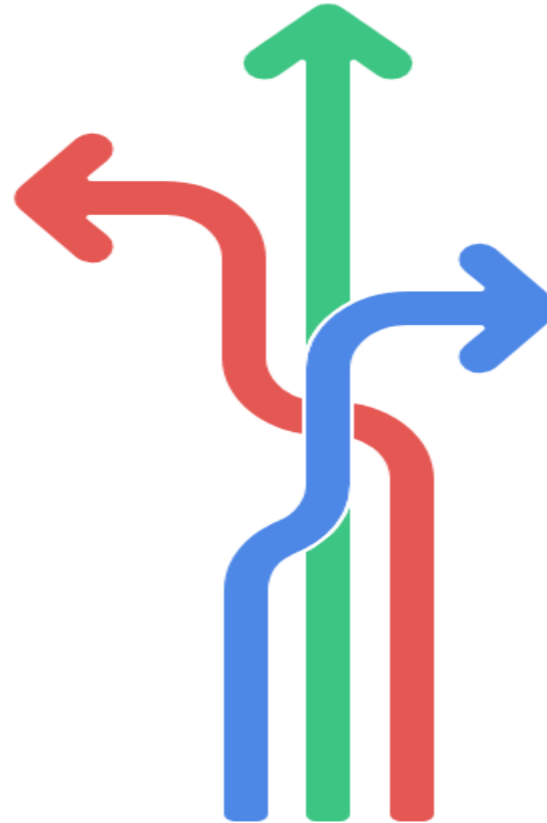
United by cartilage, providing some flexibility and shock absorption.

### Fibrous Joints

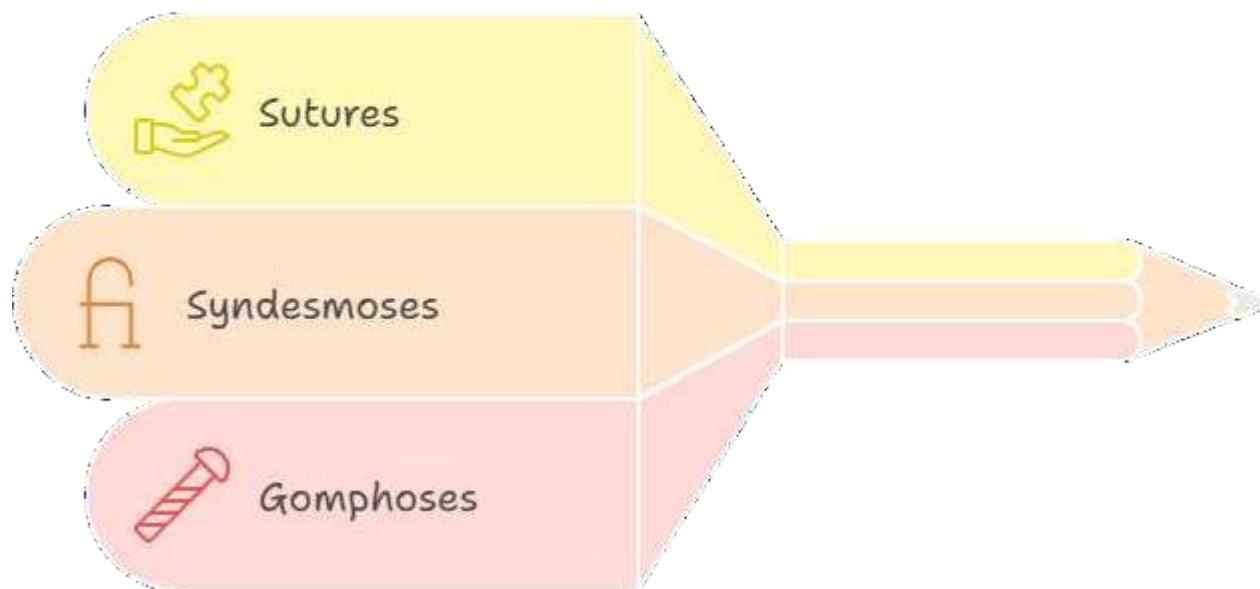
Connected by dense connective tissue, offering stability but limited movement.

### Synovial Joints

Characterized by a fluid-filled cavity, allowing for a wide range of motion.

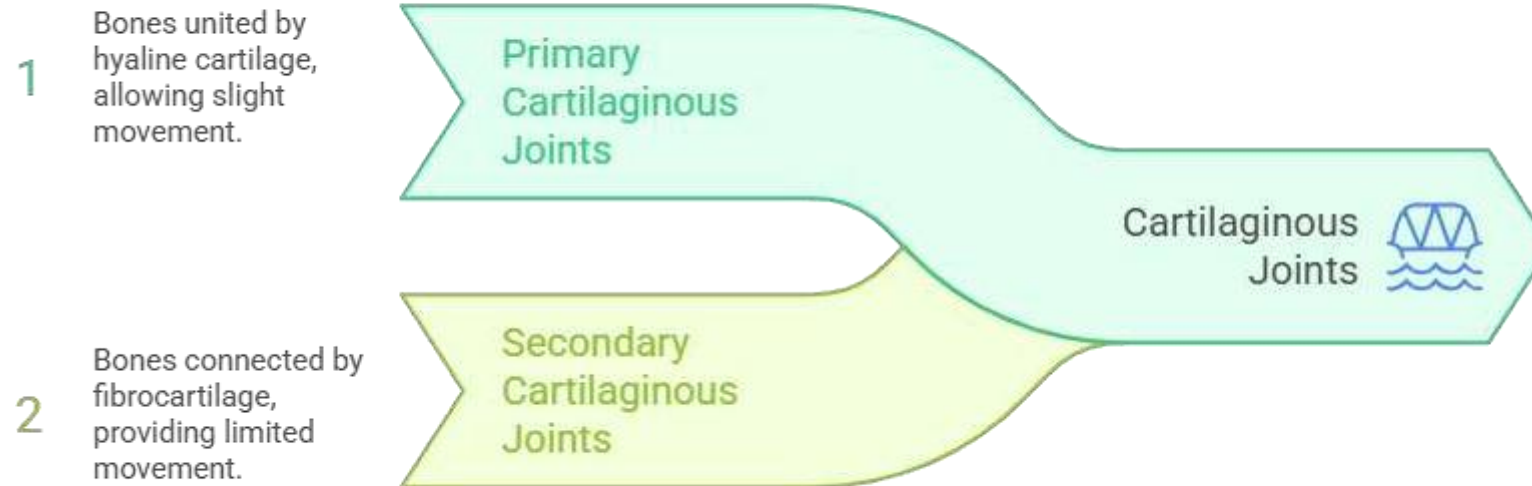


## Types of Fibrous Joints



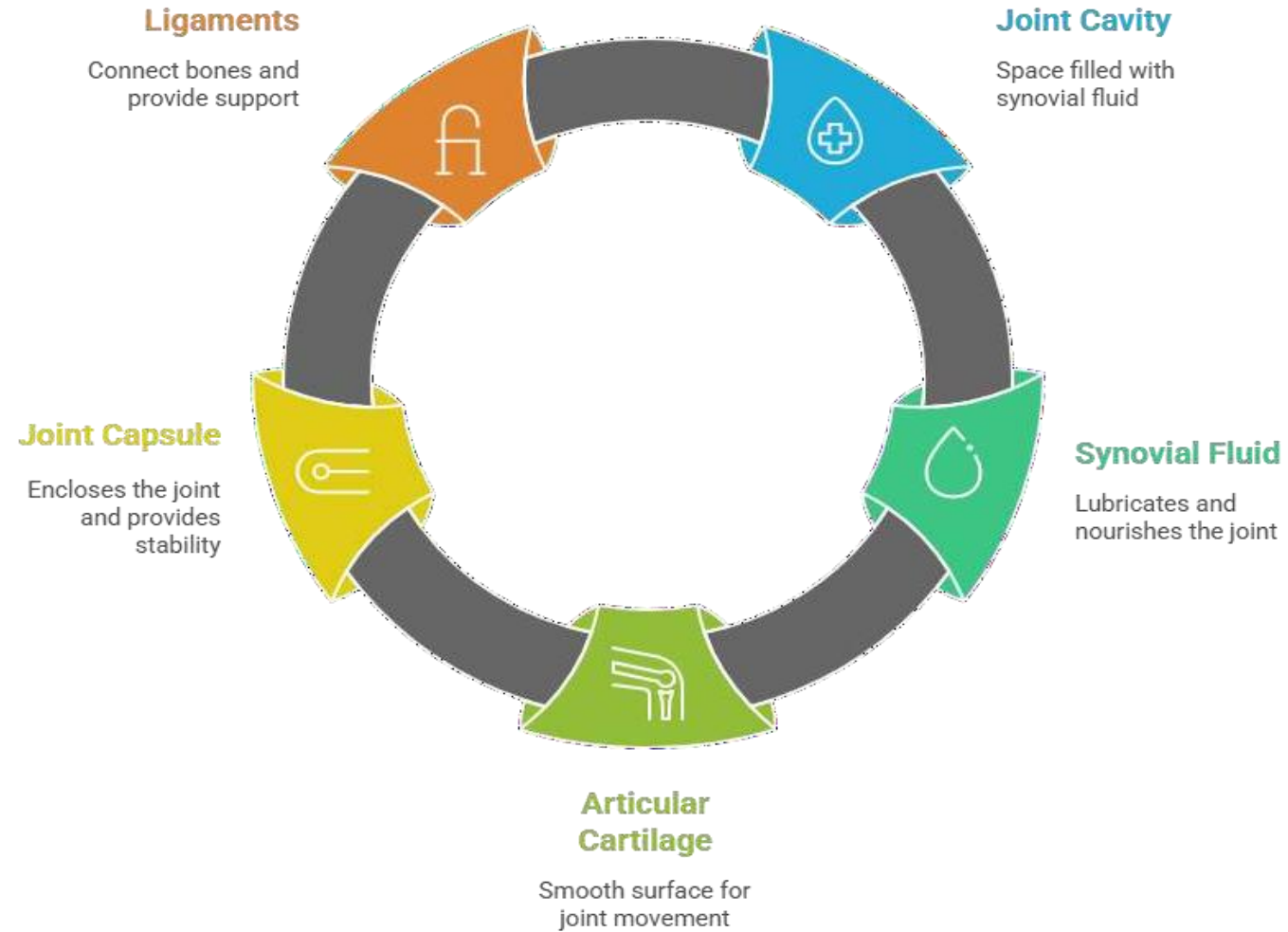
Made with  Napkin

## Types of Cartilaginous Joints

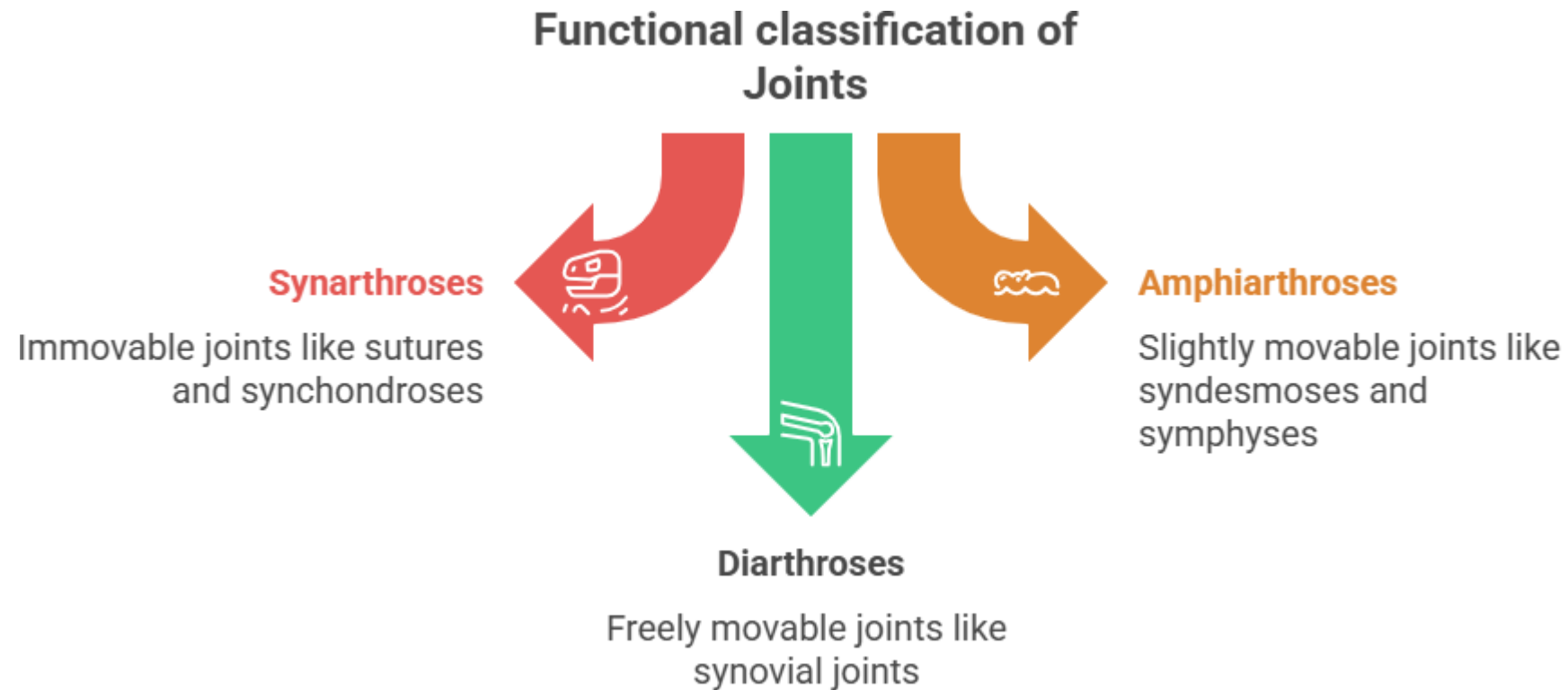


Made with  Napkin

## Synovial Joints



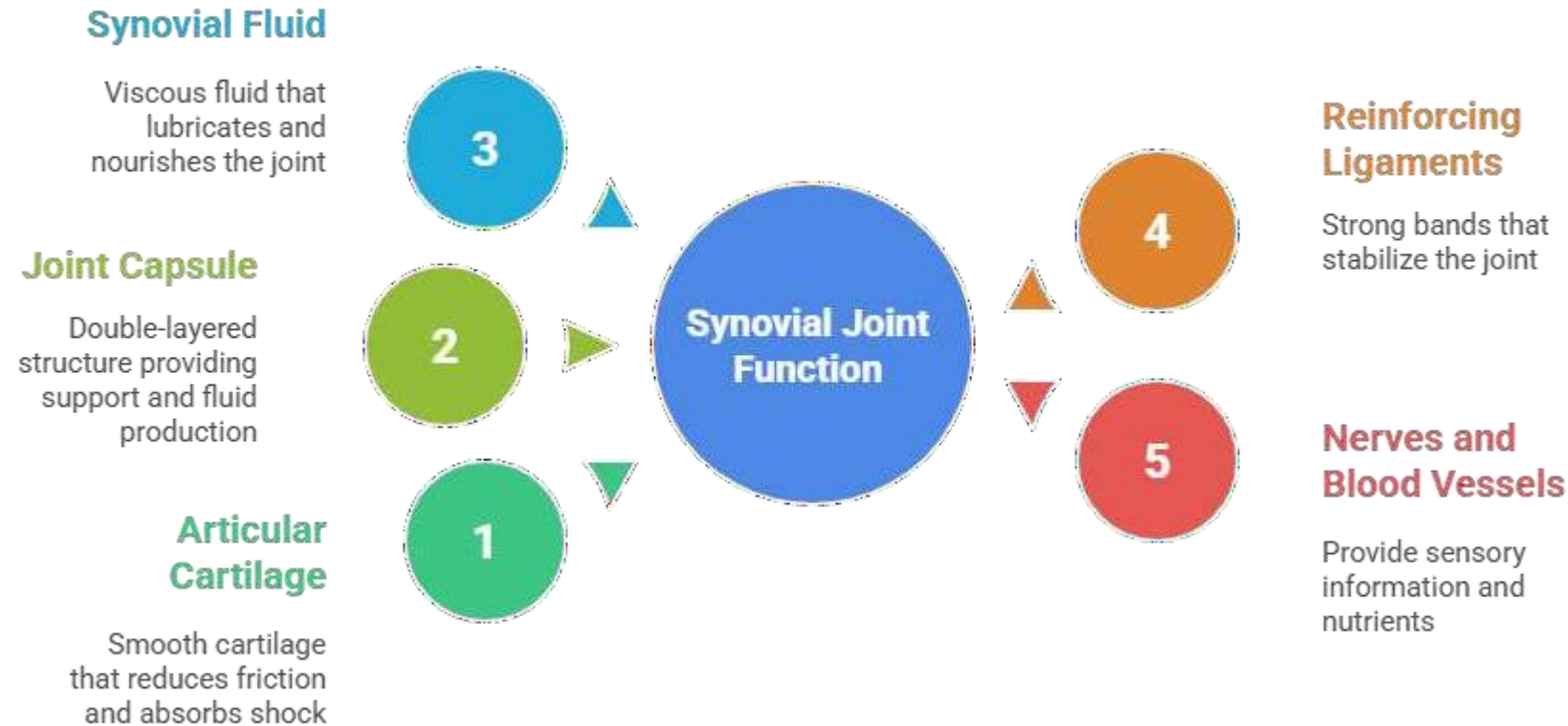
Made with  Napkin



Made with  Napkin

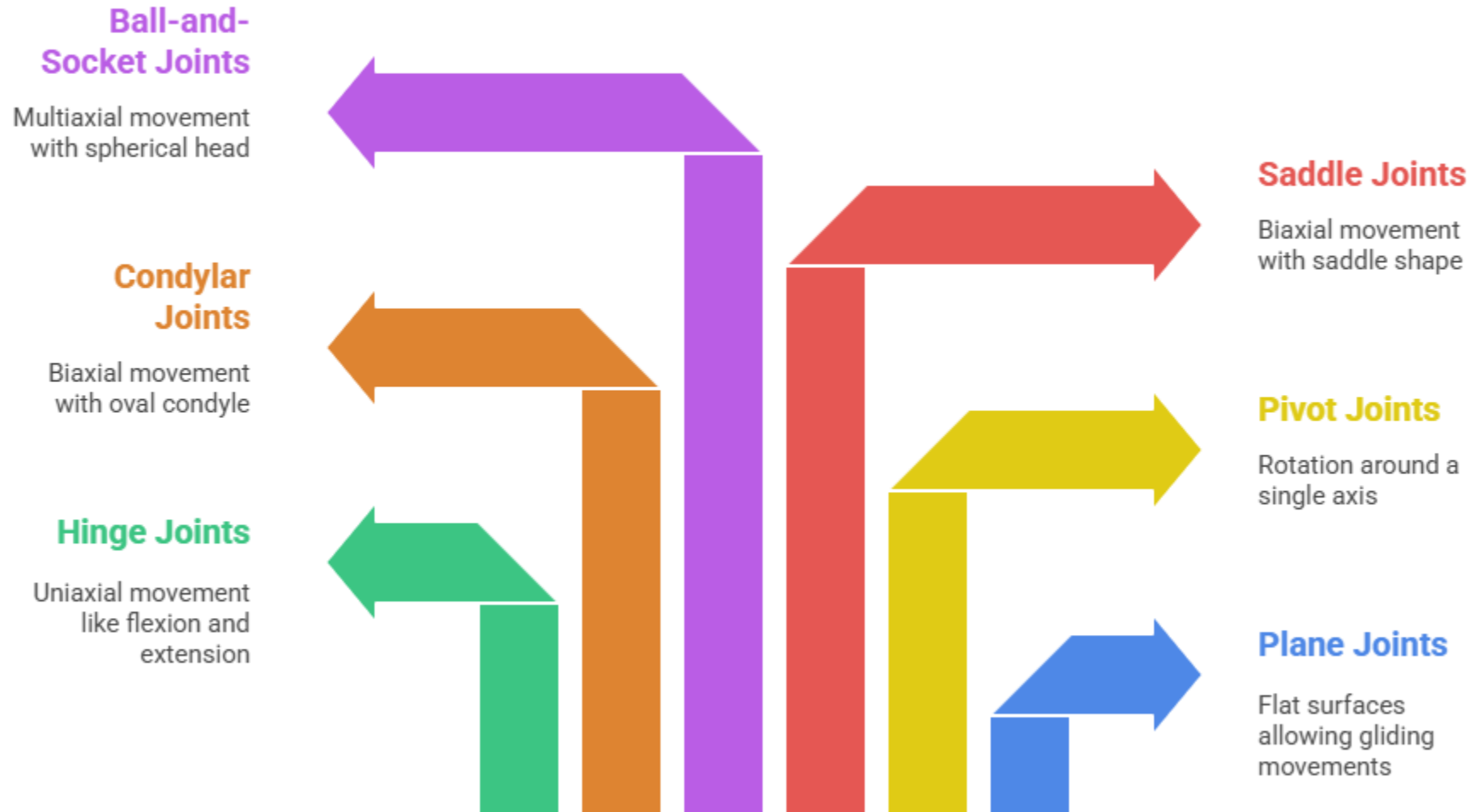


## Components of a Synovial Joint



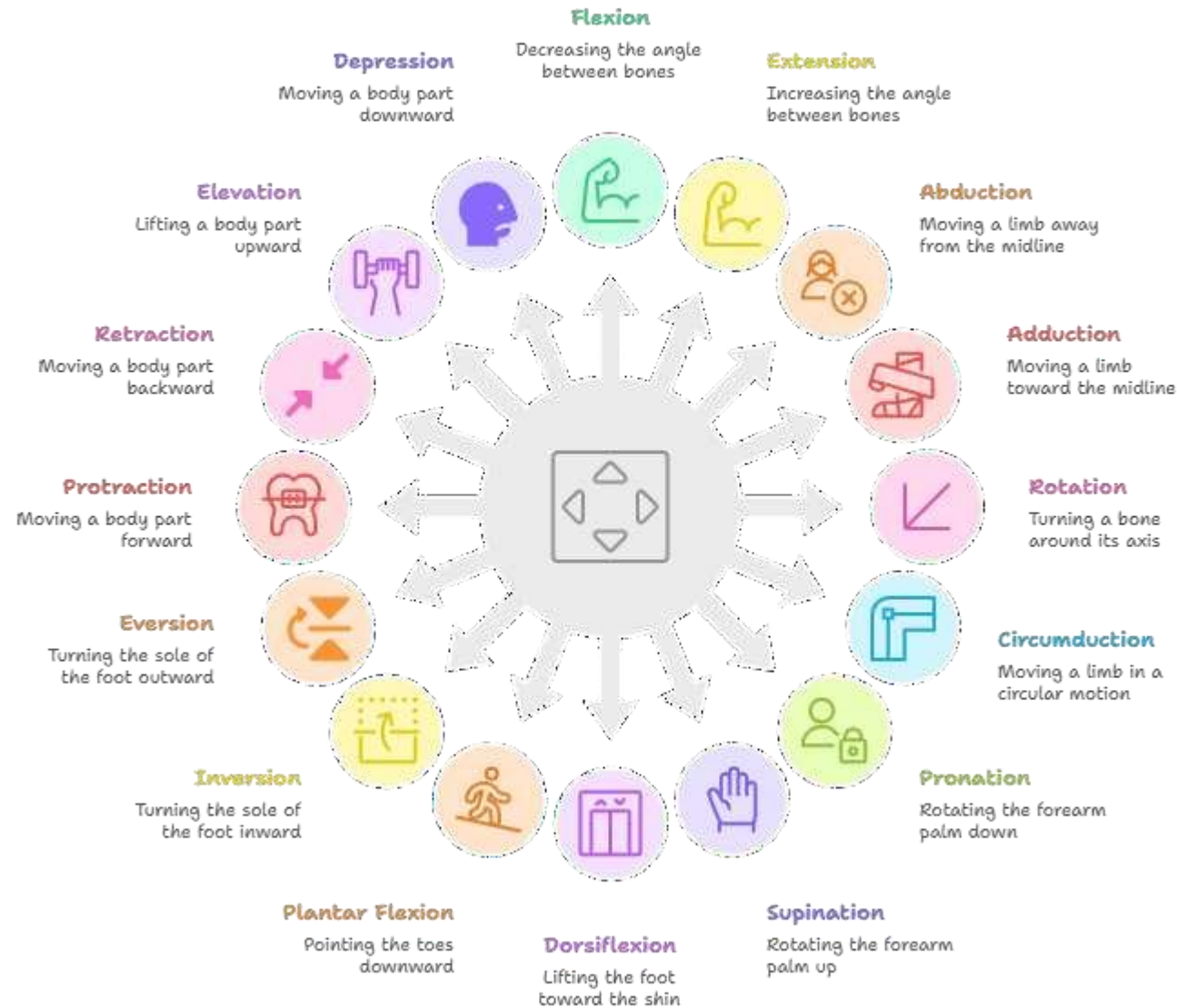
Made with  Napkin

## Types of synovial joint

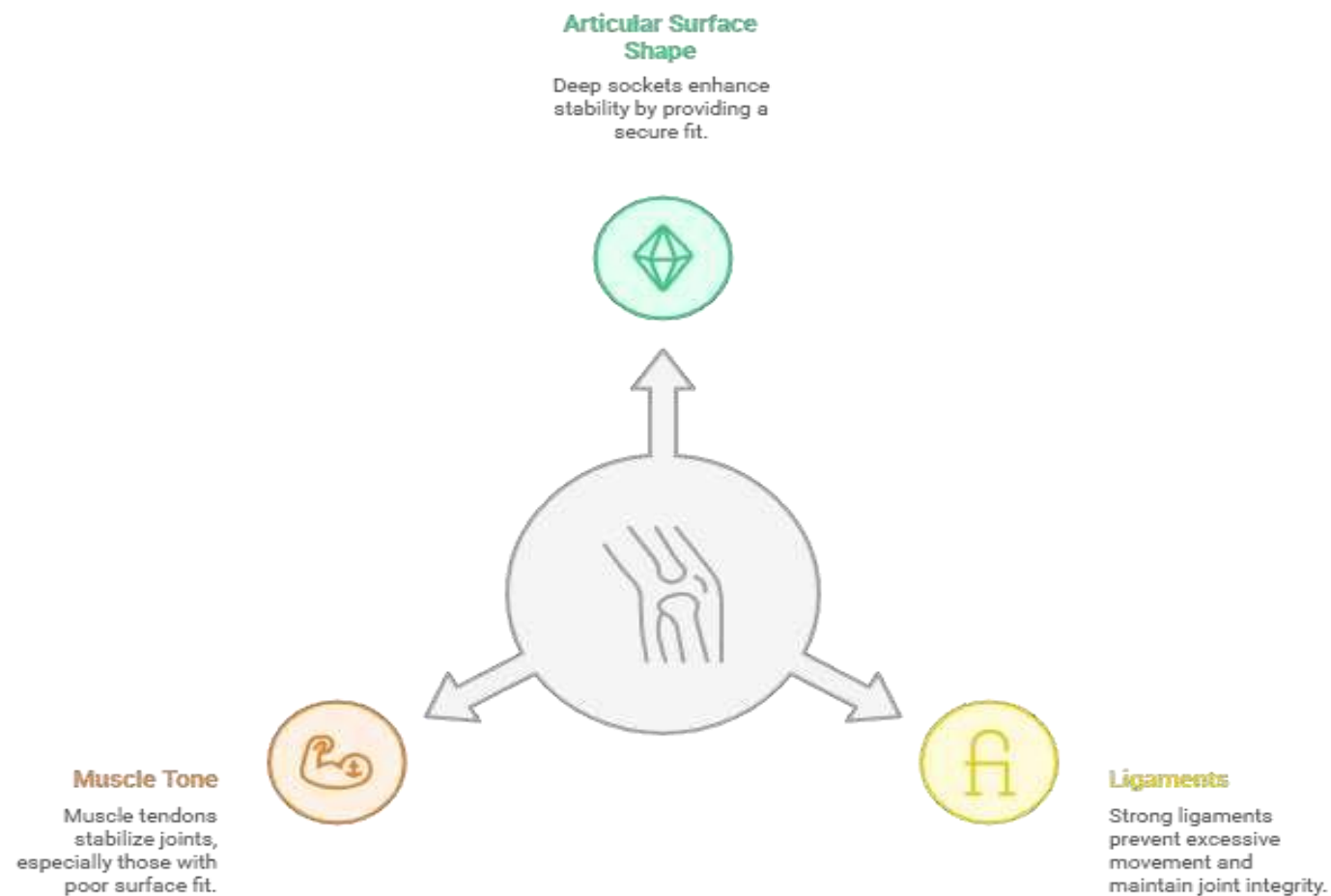


Made with  Napkin

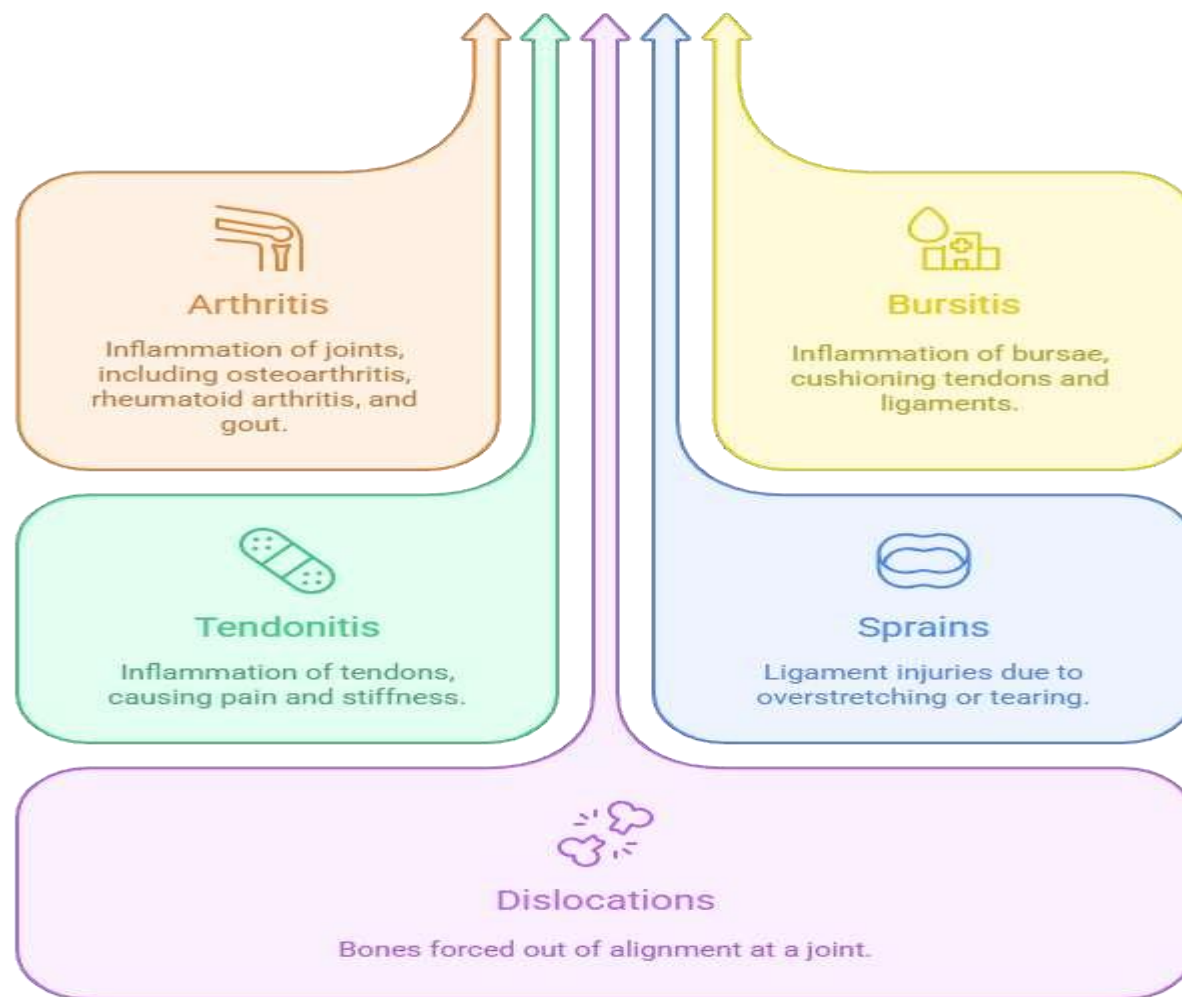
# Synovial Joint Movements



## Factors Affecting Joint Stability



## Common Joint Disorders



Made with Napkin

## Strategies for Joint Health

### Regular Exercise

Strengthens muscles and improves flexibility

### Healthy Weight

Reduces stress on weight-bearing joints

### Proper Posture

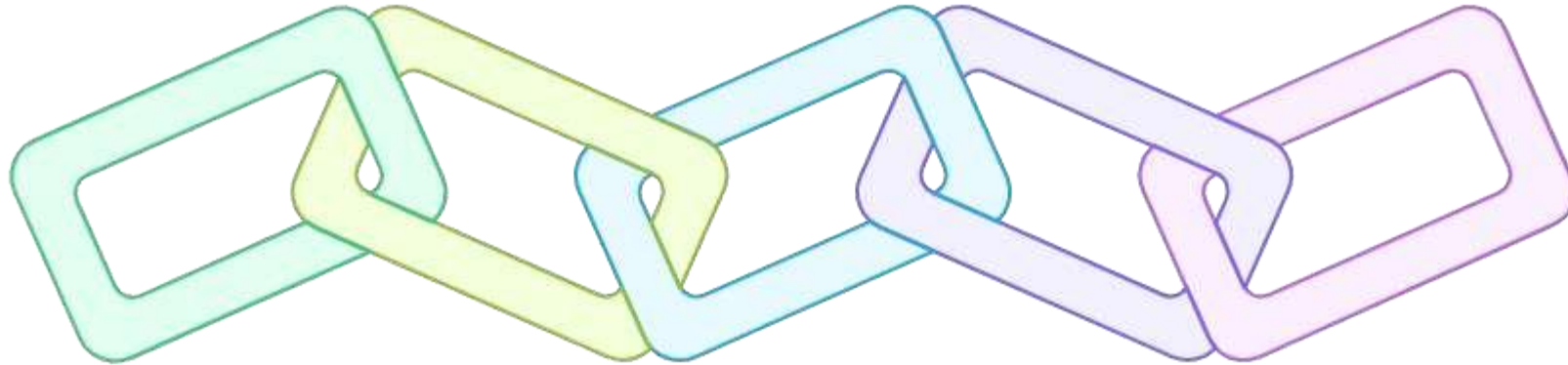
Minimizes strain on joints

### Balanced Diet

Provides essential nutrients for joint health

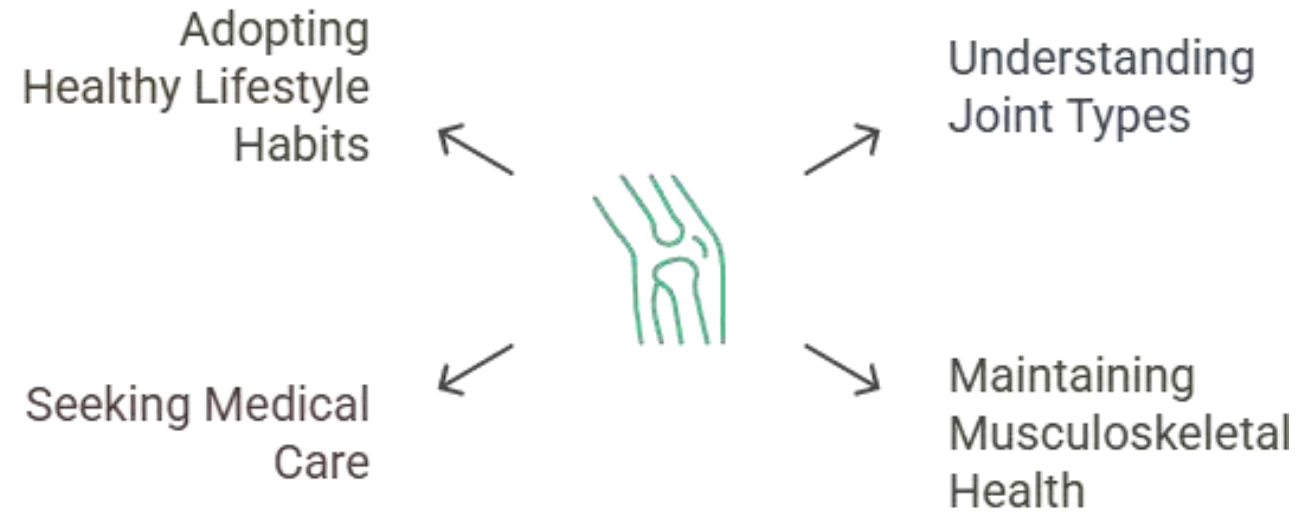
### Avoiding Overuse and Injury

Prevents joint damage



Made with  Napkin

## Joint Health Strategies



Made with  Napkin

## Summary



### Structural Classification

Focuses on the material binding bones and the presence of a joint cavity.



### Functional Classification

Emphasizes the degree of movement allowed at the joint.



### Synovial Joint Anatomy

Details the key features of the most versatile joint type.



### Types of Synovial Joints

Classifies joints based on shape and movement.



### Common Joint Disorders

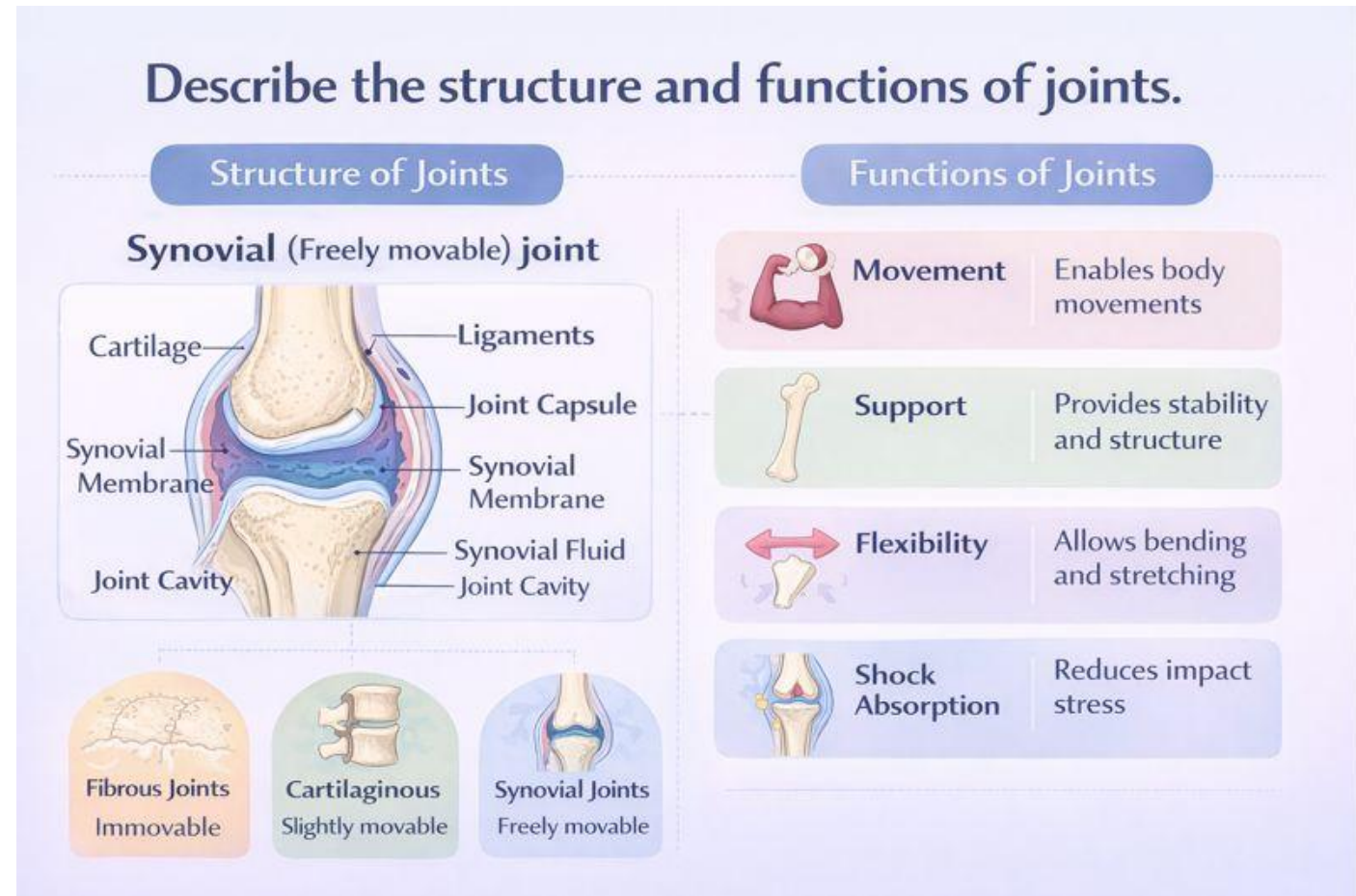
Highlights prevalent conditions affecting joint health.

Made with  Napkin



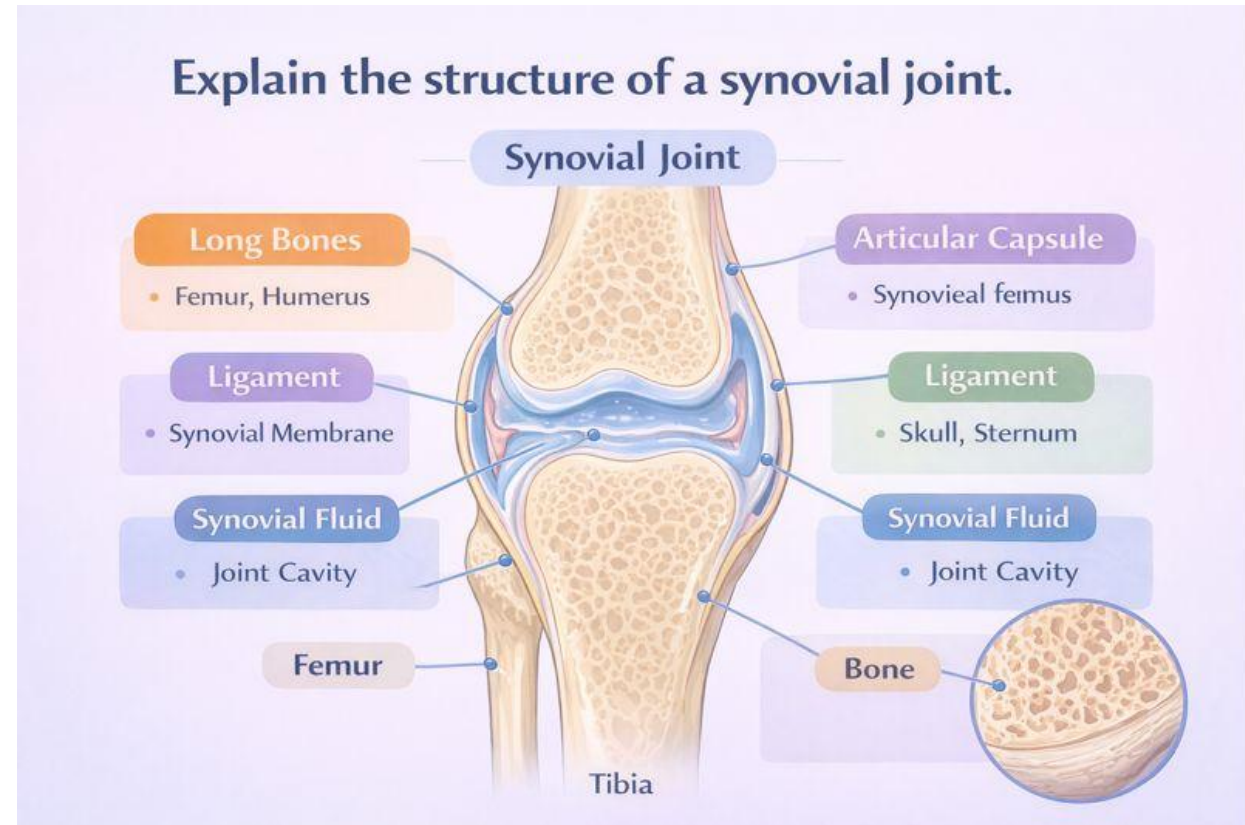
# ASSESSMENT

## 1. Describe the structure and functions of joints.



# ASSESSMENT

## 2. Explain the structure of synovial joint.



## REFERENCES



- ✓ Ross And Wilson Anatomy And Physiology In Health And Illness, Anne Waugh & Allison Grant
- ✓ Essentials of Medical Physiology, K. Sembulingam & P. Sembulingam (Jaypee Brothers Medical Publishers)
- ✓ Human Anatomy & Physiology Gerard J. Tortora & Bryan H. Derrickson (Wiley)
- ✓ A Textbook of Human Anatomy and Physiology-I, SIA Publishers



# Thank You

