

32. Connective Tissue Podcast
Study Guide
BIO 122 – Principles of Modern Biology

I. Introduction

A. Location

1. General

2. Examples

B. Function

C. Cells and matrix

D. Fibers and ground substance

II. Classification of connective tissue

A. Connective tissue proper

1. Loose connective tissue
 - a. General features

b. Areolar connective tissue

i. Where found

ii. Features

1. Cells

2. Fibers

c. Adipose connective tissue

i. Where found

ii. Features

1. Cells

2. Fibers

- a. Reticular connective tissue

- i. Where found

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- ii. Features

- 1. Cells

- 2. Fibers

- 3. Dense connective tissue

- a. General features

- b. Ligaments

- c. Tendons

- d. Irregular dense connective tissue

- B. Special connective tissue

- 1. General features

2. Bone

a. Component of skeleton

b. Tissue

i. Spongy

ii. Compact

1. Osteon

2. Shape

3. Osteocytes

4. Matrix

5. Haversian canal

6. Bone as a living tissue

4. Cartilage

a. Properties

i. Features

ii. How different from bone

b. Where found

5. Blood

a. Composition

i. Cells

ii. Matrix

Questions

1. Explain how the structure of connective tissue differs from that of epithelium.
2. Where is connective tissue found, and how does it function?

3. List and discuss three types of cells found in areolar connective tissue.
4. List and discuss three types of fibers found in areolar connective tissue.
5. How do adipose and reticular tissues compare with areolar tissues, both in terms of structure and function?
6. Explain the similarities and differences between a tendon and a ligament.
7. How can bone refer to both a tissue and a component of our skeleton?
8. What is an osteon, in terms of structure, composition, and function?
9. What is meant when somebody says that bone is a living tissue?
10. How does cartilage relate to bone, in terms of structure and function?
11. Why is blood typically regarded as a type of connective tissue?