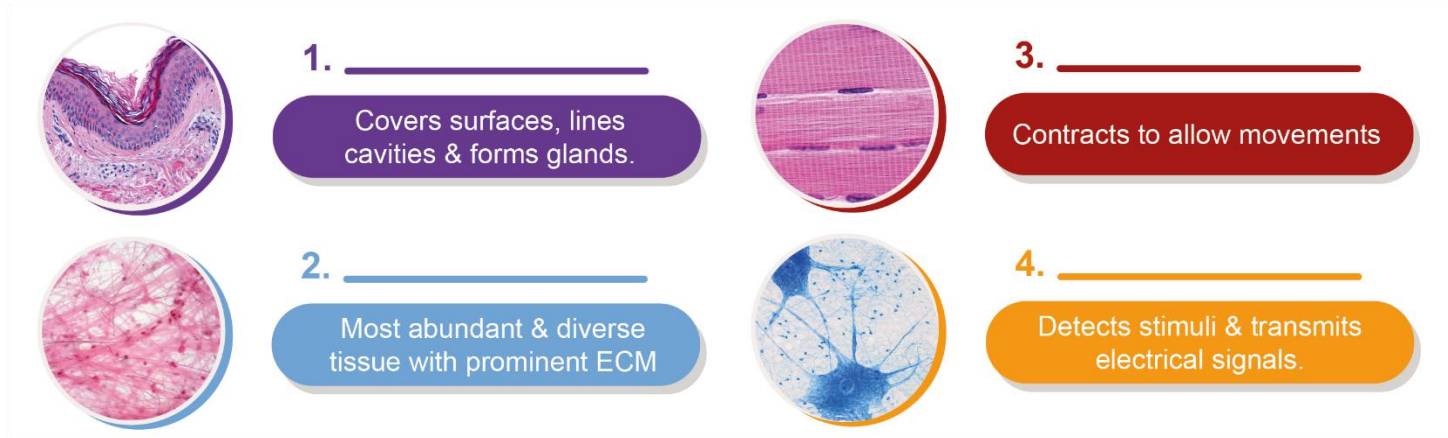


TOPIC: INTRODUCTION TO TISSUES & HISTOLOGY

- The human body is amazingly complex yet is only built from _____ primary types of tissue.
 - Recall: **Tissues**: _____ of *similar* cells working together to perform related functions.
 - “Tissues” can also include **Extracellular Matrix** (_____): surrounding material *outside* cells.

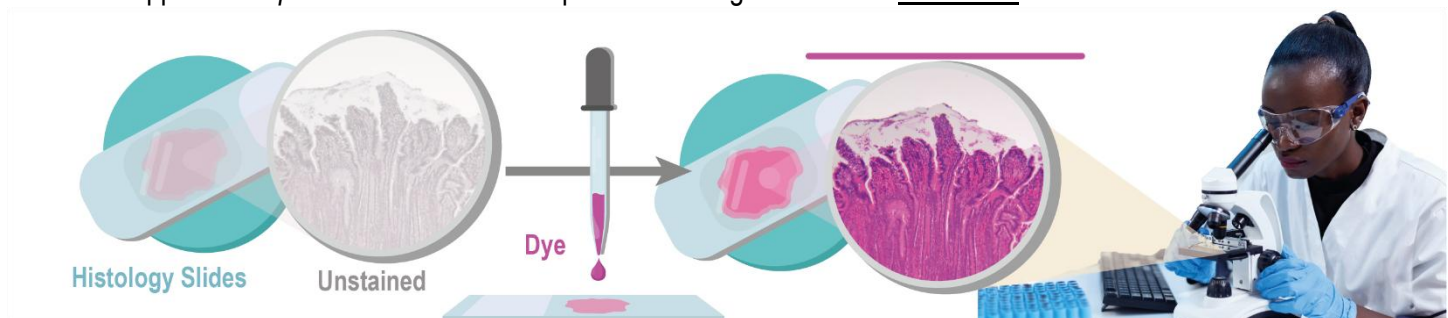


PRACTICE: Which of the following statements is true?

- a) Human body has trillions of cells operating completely independently of one another.
- b) All organisms are composed of a unique combination of just four different tissue types.
- c) The ECM is a combination of complex molecules found inside connective tissue cells.
- d) “Tissues” can be used to refer not only to coordinating groups of similar cells but also to their ECM.

The Study of Tissues

- _____: scientific study of *tissue structure & function* (including *shape, size, arrangement, & ECM*).
- Tissues appear *transparent* under a microscope *before* being *stained* with _____.



PRACTICE: Which of the following is something that a histologist would NOT be expected to do?

- a) Utilize a light microscope to inspect a biopsy of suspected cancerous tissue to detect cellular abnormalities.
- b) Prepare a sample of lung tissue using the Gram stain technique to identify presence of bacteria.
- c) Conducting a cardiac tissue bypass surgery to replace damaged tissue & restore normal blood flow to heart.
- d) Analyze cellular structure & ECM of a bone biopsy to help in diagnosis of osteoporosis.

TOPIC: INTRODUCTION TO TISSUES & HISTOLOGY

Map of the Lesson on Tissues

- Here is a _____ that you can continuously use to help guide you through our lessons on *tissues*.

