

## TOPIC: SENSORY RECEPTOR CLASSIFICATION BY MODALITY

- Sensory receptors can be classified by the type of stimulus they detect (modality). There are \_\_\_\_\_ types:

| Stimulus Type              |                                                                                     | Function                                             |
|----------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------|
| 1. <b>Mechanoreceptors</b> |    | Respond to _____ force.                              |
| 2. _____ receptors         |    | Respond to temperature changes.                      |
| 3. <b>Photoreceptors</b>   |    | Respond to _____.                                    |
| 4. _____ receptors         |   | Respond to chemicals (in the air or fluids in body). |
| 5. <b>Nociceptors</b>      |  | Respond to damaging stimuli, causing _____.          |

**EXAMPLE:** If a receptor is “rapidly adapting”, it will respond maximally to a stimulus when it is first detected, and then the response will decrease if the stimulus is maintained. Which type of receptor is *least* likely to be rapidly adapting?

- a) Mechanoreceptors.
- b) Photoreceptors.
- c) Nociceptors.
- d) Thermoreceptors.

**PRACTICE:** Which receptor type would you expect to find on the tongue, allowing us to taste?

- a) Thermoreceptors.
- b) Nociceptors.
- c) Mechanoreceptors.
- d) Chemoreceptors.