SENSATION & PERCEPTION Unit 4 Notes

Sensation can be defined as the passive process of bringing information from the outside world into the body and to the brain. The process is passive in the sense that we do not have to be consciously engaging in a "sensing" process.

Perception can be defined as the active process of selecting, organizing, and interpreting the information brought to the brain by the senses.

HOW THEY WORK TOGETHER:

1) Sensation occurs:

- a) sensory organs absorb energy from a physical stimulus in the environment.
- b) sensory receptors convert this energy into neural impulses and send them to the brain.

2) Perception follows:

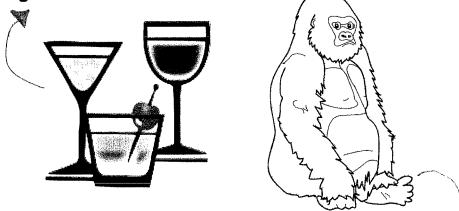
- a) the brain organizes the information and translates it into something meaningful.
- b) But what does "meaningful" mean? How do we know what information is important and should be focused on?

BOTTOM-UP PROCESSING- we process this way when we have no prior knowledge. We start at the bottom and work our way up.

TOP-DOWN PROCESSING- we process this way when we have prior knowledge. We start at the top and have to work to process details. (see page 116)

Figure 4.1 – You should see __Faces @ ?

1) **Selective Attention** – the focusing of conscious awareness on particular stimulus. *For* <u>example</u> – the '<u>cocktail party effect'</u>. This is your ability to attend to only one voice among many. Same for driving and talking on the phone- process of switching selective attention.



- 2) <u>Selective Inattention or Inattentional</u> <u>Blindness</u>- failing to see visible objects when our attention is directed elsewhere. (gorilla clip)
- 3) **Change Blindness-** failing to notice changes in the environment (Figure 4.3- interruption picture)