

Special Senses Project Rubric

DUE DATE = _____

Project: Create an informational packet on the special senses. You may complete your project in a variety of formats including: scrapbook, pamphlet/booklet, typed in Word, or Power Point. This project is an independent study of the special senses that will be completed outside of class.

Computerized pictures are allowed as long as you **hand label** the picture. You may also type your facts on the computer and add them to the pamphlet/booklet.

Introduction

Topics	Points Possible	Points Earned
Explain the 5 types of receptors: chemoreceptors, nociceptors, thermoreceptors, mechanoreceptors, photoreceptors	5	
What is the difference between sensation and perception?	4	
Explain the difference between touch and pressure, temperature, and pain senses - In your explanation, include free nerve ending, corpuscles, cold and warm receptors, visceral pain, and pain nerve fibers	10	

Total: 19 _____

Mouth and Nose: Taste and Smell

Topics	Points Possible	Points Earned
Main purpose of organ	1	
Type of receptor	1	
Smell – parts with definition <u>AND</u> steps of stimulation (summary from book) - Parts: olfactory receptors, olfactory receptor cells, olfactory bulb, and olfactory nerve	7	
Diagram of olfactory receptors (p.266) – accurate and hand labeled	10	
Why does sniffing increase the smell stimulus?	2	
How do adaptations to smell occur?	1	
Taste – parts with definition <u>AND</u> steps of stimulation (summary from book) - taste buds, gustatory cells and hairs	6	
Four taste sensations – what specific things does each sense and the diagram (p.268 and look up location of senses)	10	
How are smell and taste related?	1	
Explain 1 smell and 1 taste disorder?	4	

Total: 43 _____

Ear: Hearing and Equilibrium

Topics	Points Possible	Points Earned
Main purpose of organ	1	
Type of receptor	1	
Anatomy of 3 parts of ear: include the function or a characteristic of each - Outer Ear – pinna, external auditory canal, ceruminous glands, tympanic membrane (eardrum) - Middle Ear – lateral and medial borders, auditory tube, ossicles (hammer, anvil, and stirrup) - Inner Ear – osseous labyrinth, cochlea, vestibule, semicircular canals, perilymph, membranous labyrinth	14	

Diagram of anatomy of ear (p.269) – accurate and hand labeled	10	
How can you get equal pressure in middle and outer ear?	2	
Explanation of Mechanism of Hearing – parts with definition <u>AND</u> steps of stimulation (summary from book) - Parts: Organ of Corti, basilar membrane, tectorial membrane, cochlear nerve	7	
What happens when auditory receptors become adapted to unchanging sound?	1	
Mechanisms of equilibrium Vestibular apparatus 1) Static Equilibrium – part and <u>STEPS OF STIMULATION</u> - maculae, otolithic membrane, otoliths, vestibular nerve 2) Dynamic Equilibrium – parts and <u>STEPS OF STIMULATION</u> - crista ampullaris, vestibular nerve	7 5	
Diagrams of static and dynamic equilibrium centers in ear (p.274 and 275) – accurate and hand labeled	6	
Explain 1 disorder associated with the ear?	3	

Total: 57 _____

Eye: Vision

Topics	Points Possible	Points Earned
Main purpose of organ	1	
Type of receptor	1	
External eye and Accessory parts: list 1 fact about each - eyelids, eyelashes, conjunctiva, lacrimal apparatus, extrinsic eye muscles	5	
What can cause an increase in lacrimal secretions?	1	
Internal eye parts: list 1 fact about each - eyeball, sclera, cornea, choroid, iris, pupil, retina, photoreceptors, lens, aqueous humor, vitreous humor	11	
Diagram of eye (p.278) – accurate and hand labeled	10	
Rods and Cones – structural difference, location difference, and light wave difference	6	
How is the blind spot in your eyes created?	1	
Explain the Pathway of Light from the Cornea to the Brain – List all the parts light travels through from the Cornea to the Occipital lobe (including optic nerve, optic chiasm, optic tract) Explain: real image, convexity of lens, sight from each eye	10 3	
What is the difference between near and far sightedness?	2	
Eye Reflexes – photopupillary reflex and accommodation reflex	2	
Explain 1 disorder associated with the eye?	3	

Total: 56 _____

Total points possible= 175

Intro= _____ Taste/Smell = _____ Ear = _____ Eye = _____

Your Total = _____ pts = _____