

Part 3 - Correction of Refractive Errors

Note: _____ In OneNote, set this worksheet as background. Use the simulation's "Export" button _____ to save an image and insert it at the marked place in the worksheet.

With myopia, the eyeball is too long or the refractive power of the cornea and lens is too strong. People can see only nearby objects sharply, while distant objects appear blurred. With hyperopia, the eyeball is too short or the refractive power is too weak. In this case, people can see distant objects sharply, while nearby objects appear blurred.

Section A: Myopia

Task 1: Cause of myopia

Select "Myopia". Describe when and why a person cannot see clearly. Export a state with a blurred visual impression. Activate the corrective lens (aid lens), adjust the image until it is sharp, and export the figure.

Myopia without visual aid

Myopia with visual aid

Insert here

Insert here

Task 2: Correction of myopia _____

Name the type of visual aid used (converging lens or diverging lens) and explain why this lens makes a sharp visual impression possible again.

Section B: Hyperopia _____

Task 1: Cause of hyperopia _____

Select "Hyperopia". Describe when and why a person cannot see clearly. Export a state with a blurred visual impression. Activate the corrective lens (aid lens), adjust the image until it is sharp, and export the figure.

Hyperopia without visual aid	Hyperopia with visual aid
Insert here	Insert here

Task 2: Correction of hyperopia _____

Name the type of visual aid used (converging lens or diverging lens) and explain why this lens makes a sharp visual impression possible again.
