# Venom CoLab

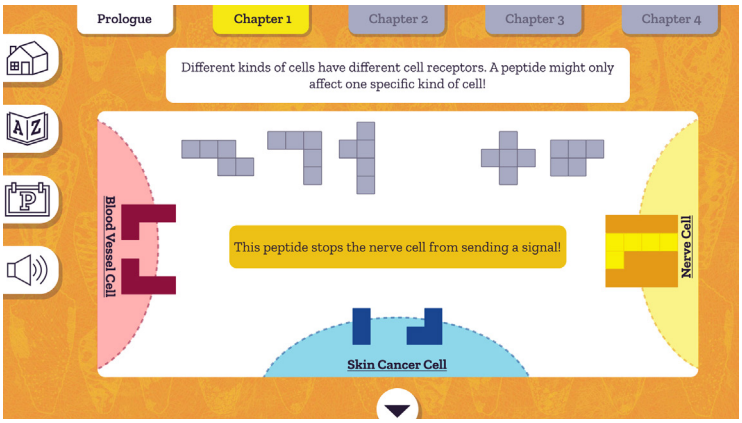
Killer Snails

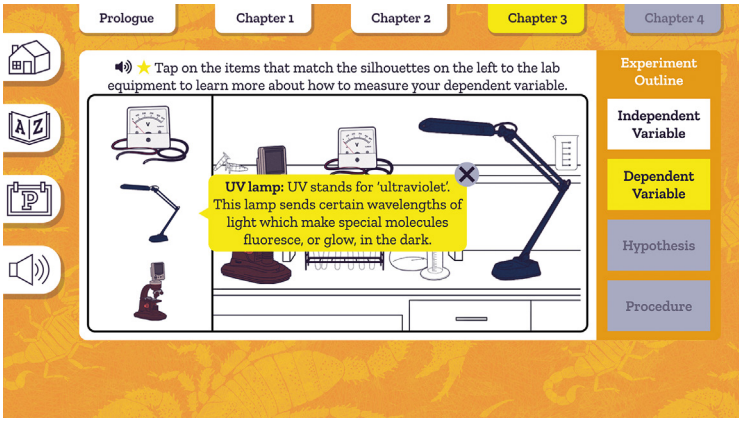
## What is a Molecular Biologist?

Molecular Biology is the study of specific molecules in living organisms, and understanding what the molecules do in cells. A Molecular Biologist studies the molecules and cells of living organisms. For example, a Molecular Biologist might study whether a specific peptide binds to a cell receptor. Most of a Molecular Biologist's work takes place in a lab, using specialized equipment to conduct experiments on biological samples.

## What does the Molecular Biologist do in Venom CoLab?

The Molecular Biologist investigates how venom molecules affect cells. The Molecular Biologist has the most background information about how molecules in venom such as proteins (especially for the Snake group) and peptides (for all other groups) bind to cell receptors to have effects on cells. Through several activities, the Molecular Biologist understands that the shape of these molecules is very important in determining which cell receptors it can bind to, which determines the effect a molecule will have on a cell. Throughout all chapters in Venom CoLab, the Molecular Biologist contributes their knowledge about how exactly molecules from venom cause changes in cells.




## XR Component

The Molecular Biologist uses XR in Chapter 3. In the virtual lab, the Molecular Biologist is responsible for testing the 3 candidate molecules and control substance (salt water) on tissue samples. The results of this experiment indicate which molecules had a desirable effect that would be relevant to treat the health issue the team is investigating.