

Prep Time, Supply List, and Total Lesson Time

Prep Time:

We recommend 30-45 minutes, depending on your expertise level with the content. Each module will vary depending on your previous experience with the content and technology.

Materials:

Each student will need

- a copy of the Clinical Trial Study worksheet that you decide to give each group.
- to be part of a group that will complete the “Fat Soluble vs. Water Soluble” activity in which they will need a copy of the “Vitamin Card Game” sheet.
- access to a computer to view the “Xanadin” video (unless you decide to show the video through the class projector unit) or you may choose not to show it at all.
- their homework added to the online collaborative tool.

You will need

- to identify two or three student examples from the dose/response curves that students posted within last night’s homework assignment on their online collaborative tool.
- access to a computer to view the example answer of the fictional drug Xanadin, if you choose to share it with your students.
- to make copies of the Clinical Trial Study worksheets and decide which student groups receive which worksheet.
- to decide if you would like to complete the optional discussion on mutagenesis.
- to print and cut the “Vitamin Card Game” pieces in order to hand them out to your students.
- to determine how you will share a case study about Viktor Yushchenko with your students.
- to post your students’ homework to your class’s online collaborative tool.

Total Lesson Time:

Lesson Activity	Amount of Time in Class
Guided Discussion: Pharmaceutical Company Scenario	5 Minutes
Group Activity: Clinical Trial Study	20 Minutes
Post-Activity Discussion: Experimental Design	10 Minute
Guided Discussion: How Can an Acute Exposure Give Rise to a Chronic Effect?	5 Minutes
Guided Discussion: Mutagenesis (<i>Optional Activity</i>)	15 Minutes (Time not calculated in total time)
Group Activity: Fat Soluble vs. Water Soluble	5 Minutes
Article: Case Study	2 Minutes
Guided Discussion: Case Study	4 Minutes
Guided Discussion: Conclusion	2 Minutes
Total Time	53 Minutes

Lesson Activity	Amount of Time out of Class
Video: Addiction and Carcinogenesis from Smoking	3 Minutes
Reflective Questions: Addiction and Carcinogenesis from Smoking	15 Minutes
Reflective Questions: How Can the Body Get Rid of Toxins and Drugs?	5 Minutes
Total Time	23 Minutes