

POGIL Polymers

*Guided-Inquiry Activities
for Polymer Chemistry and Polymer Physics*

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The current source for these materials is accessible on Github:

<https://github.com/jlaaser/pogil-polymers>

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Part I

Introduction to Polymers

Chapter 1

From Molecules to Polymers

Activity 1: Activity Template

Instructor Notes:

Here is some information for the instructor about doing this activity.

Eventually, the `pogil` class may be updated to include macros to standardize formatting, but for now, you will probably find it useful to include information about:

- Activity type
- Content goals
- Process goals
- Estimated time required
- Instructor preparation required
- Prerequisite knowledge

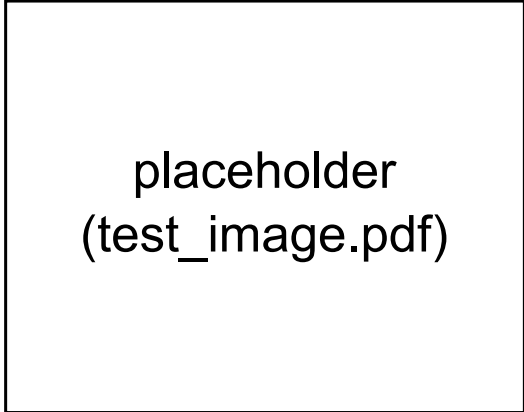
Activity 1: Activity Template

Focus question: Put a central question for the students to consider through this exercise here.

Model 1: ABC

Here is the first model for students to consider

Here is a second paragraph of text, followed by an image:



placeholder
(test_image.pdf)

Critical Thinking Questions:

1. First question?

2. Second question?

Here is a dummy answer in the solution space.

3. Third question?

Here is something we show only when we process the instructor version.

Model 2: DEF

Here is a second model for students to consider.

Critical Thinking Questions:

4. First question?
5. Second question?

Here's a solution environment that doesn't have a height set, but does have content.
(The previous solution environment has no height and no content.)

Information:

Here is some useful information that might help the students with the next few critical thinking questions. In some cases, it might include an equation:

$$a^2 + b^2 = c^2$$

or even more than one equation:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Critical Thinking Questions:

6. First question?
7. Second question?

Exercises:

1. First exercise

2. Second exercise

Problems:

1. First exercise
2. Second exercise

Part II

Polymer Chemistry

Chapter 2

Fundamentals of Polymer Chemistry

Chapter 3

Step-Growth Polymerizations

Chapter 4

Free-Radical Polymerization

Chapter 5

Controlled Polymerizations

Chapter 6

Copolymers

Part III

Polymer Physics

Chapter 7

Conformations of Polymer Chains

Chapter 8

Mechanical Properties of Polymers

Chapter 9

Phase Behavior of Polymers & Their Solutions

Chapter 10

Thermal Properties of Polymers

