Allegheny–Clarion Valley School District

# Chemistry - Organic: Unit 6 - Conformations (Newman & Chair)

| Unit #: | ACVSD-00069200 | Date(s) | 02-11-2019 |
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**Team:** Kristin Hurrelbrink (Author)
**Grade(s):** 11, 12
**Subject(s):** Science

## Unit Focus

Students will learn two main types of organic conformations - Newman projections and chair conformations.

## Prior Learnings/Connection

Bond-line drawings, nomenclature, VSEPR Theory

## Stage 1: Desired Results - Key Understandings

### Standard(s)

**Pennsylvania Assessment Anchors and Eligible Content**
*Chemistry: 11*

- Explain the relationship between the electron configuration and the atomic structure of a given atom or ion (e.g., energy levels and/or orbitals with electrons, distribution of electrons in orbitals, shapes of orbitals). *CHEM.A.2.2.3*
- Use illustrations to predict the polarity of a molecule. *CHEM.B.1.3.3*
- Recognize and describe different types of models that can be used to illustrate the bonds that hold atoms together in a compound (e.g., computer models, ball-and-stick models, graphical models,

### Transfer

*What kinds of long-term, independent accomplishments are desired? Students will be able to independently use their learning to...*

### Meaning

| Understanding(s) | Essential Question(s) |
|---|---|
| *What specifically do you want students to understand? What inferences should they make? Students will understand that...* | *What thought-provoking questions will foster inquiry, meaning making, and transfer? Students will keep considering...* |

### Acquisition of Knowledge and Skill

| Knowledge | Skill(s) |
|---|---|
| *What facts and basic concepts should students know and be able to recall? Students will know...* | *What discrete skills and processes should students be able to use? Students will be skilled at...* |

solid-sphere models, structural formulas, skeletal formulas, Lewis dot structures). *CHEM.B.1.4.1*
- Utilize Lewis dot structures to predict the structure and bonding in simple compounds. *CHEM.B.1.4.2*

## Stage 3: Learning Plan

| Alignment | Code | Learning Activities |
|---|---|---|