

Pedagogica: Tests and Surveys

Teacher's Guide

1.0 Overview

1.1 Contents

Each of the four subject areas in Pedagogica contains test instruments. These include a **Learning Survey**, **Modeling Survey**, a **Pre-Test**, and a **Post-Test**. Please be sure to include them in the sequence of activities as directed below. They are an essential part of this research project.

For Biologica and Dynamica, the two surveys can be taken during the same class period. However, for all subject areas, students should have one full class period to take the Pre-Test and Post-Test. The Pre-Test should be taken **before** students work on any of the core activities. The Post-Tests and Post-Surveys are to be done after all student work in other activities is complete.

1.2 Enabling/Disabling Tests and Surveys

For all subject areas, only the Pre-Test and Pre-Surveys are available to students when they first log onto Pedagogica. Please do not allow students to work on the Pre-Test for more than one period. To ensure that they do not, disable the test after it has been administered. In order to disable the test and enable other activities, you must go to the MAC Project Web Portal at <http://mac.concord.org>. Enable the Post-Test and Post-Surveys only after students have completed the core activities.

2.0 Learning and Modeling Surveys

The learning and modeling surveys are used to assess student views and attitudes about science and modeling. Not all subject areas have both surveys. Each survey should not take students longer than 15 minutes to complete.

2.1 Biologica- Genetics

Surveys included in Biologica:

- Pre-Modeling Survey
- Pre-Learning Survey
- Post-Modeling Survey
- Post-Learning Survey

2.2 Dynamica- Motion and Forces

Surveys included in Dynamica:

- Pre-Modeling Survey
- Pre-Learning Survey
- Post-Modeling Survey
- Post-Learning Survey

2.3 Connected Chemistry- Gas Laws

Surveys included in Connected Chemistry:

- Pre-Modeling Survey
- Pre-Learning Survey
- Post-Modeling Survey
- Post-Learning Survey

2.4 Chemica- Atoms and Molecules

Surveys included in Chemica:

- Pre-Modeling Survey
- Pre-Learning Survey
- Post-Modeling Survey
- Post-Learning Survey

3.0 Pre-Test and Post-Test

The Pre-Test and Post-Test are vital to our research. Students should take these tests very seriously and try their best. Please allow students one entire class period to take each test. After a class has taken the test, please disable it within the MAC Portal.

3.1 Biologica- Genetics

The test has been significantly shortened this year. In addition, questions have been revised and rewritten. Tests included in Biologica:

- Pre-Test
- Post-Test

3.2 Dynamica- Motion and Forces

The test has been significantly shortened this year. In addition, questions have been revised and rewritten. Tests included in Dynamica:

- Pre-Test
- Post-Test

3.3 Connected Chemistry- Gas Laws

This is a new test for this year that includes some free-response questions. Tests included in Connected Chemistry:

- Pre-Test
- Post-Test

3.4 Chemica- Atoms and Molecules

This is a new test for this year that is entirely multiple-choice. Tests included in Chemica:

- Pre-Test
- Post-Test

4.0 Student Reports

Your students' Pre-Test and Post-Test responses are logged and viewable on the MAC Project Web Portal at <http://mac.concord.org>. For each student, you can view pre-test and post-test reports containing questions, answers and scores. Surveys are not scored and teachers cannot see the results.