



TEACHER REGISTRATION AND WORKSPACE GUIDE

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I. REGISTERING A TEACHER ACCOUNT

ScienceCourseware.org contains a suite of web-based projects developed since 1995. The Virtual Courseware for Inquiry-based Science Education (VCISE) project is the most recent, and requires teacher and student accounts to utilize the program's complete interactive functions.

1. Click on the VCISE Project section to open up the VCISE homepage. Activities in the Life and Earth Sciences are listed on the right column.
2. As a first time user, a teacher must register. Click on the "Register" button under the "Teacher Registration" section. A new Teacher Registration page in the same window will open.
3. Enter your first and last name and complete the questions by selecting the appropriate responses in the drop down boxes and entering your email, user name, and password.



A Teacher Username will be automatically suggested based on the first and last name. This suggestion can be easily changed by typing over the text. Note that the Username needs to be at least three letters long and contain only letters and numbers.

The Teacher Password will be used to access the database of assessment information for your class. The password must contain 5-15 letters and/or numbers. The password is case-sensitive.

As written in the Privacy Statement when the statement of agreement is checked (default): The name, email address, and school name you provide are used only to send you your class code and for your students to confirm registration in your class and to contact you in the future for feedback surveys. The information you provide will help us understand the context in which this activity is used. It will also provide us with usage statistics that will benefit the development of future web-based science activities. The information will not be publicly identified with the name, email address, or school name you provided above in order to receive a Class Code.

4. Click the "Register" button to submit your responses. A message will indicate whether or not the registration was successful.
5. Click on the "Continue" button to proceed. You will return to the Teacher Log In section of the VCISE

home page.

II. THE TEACHER WORKSPACE

You must login from the VCISE home page to access the Teacher Workspace.

1. Enter your User Name and Password in the indicated fields.
2. Click the "Log In" button.

The Teacher Workspace appears with the "My Classes" section as the default opening screen. The other tabs include:



- My Classes:** for creating and managing classes
- Report:** for editing the guiding questions in the default template report
- Rubric:** for editing the default rubric used to grade student reports
- Assessment:** for reviewing each student's notebook, report score, and quizzes
- Manual:** the activity manual for teachers
- Activity:** to access the activity with the characteristics and options of each class
- Standards:** the alignment of the activity to a particular state and the National Science Education Standards
- Survey:** for providing feedback to the VCISE project team

A. MY CLASSES

You can add each of your classes to your workspace. This allows you to take advantage of the tracking of quiz and report results, online grading, and the ability to customize report instructions and grading rubrics for each of your classes. Adding a class is easy.

1. Click the "Add a New Class" button. A page opens in which information about the class must be entered.
2. Enter a name for the class. This allows you to identify this particular class from your list of classes (for example: Biology Period 2, Integrated Sciences, A.P. Biology, etc.).
3. Use the two drop down lists to select the grade level and general subject area. This information provides the developers the context in which the activity is being used.
4. Click the "Register" button. Once the "Register" button is clicked, a new Class Code is generated.

IMPORTANT: You should make a note of the class code. You will give it to your students to enter when they register for the activity. This will associate their accounts with your class.

5. Click the "Return" button. This brings you back to the My Classes front page which will contain a table of the classes that you added.

Classcode	Course Name	Report	Rubric	Quiz	Sex-Linked
26284 Delete	Biology MWF 0 registered	[Default] <input type="checkbox"/> Activated	[Default] <input type="checkbox"/> Activated	<input type="checkbox"/> Activated 0 Takers	<input type="checkbox"/> Activated 0 Takers

[Update Classes](#) [Reset Changes](#)
[Add a New Class](#)

The database of class information for this particular class will be generated when students use this Class Code to register.

If you are using this activity in multiple classes, the same set up procedure applies by clicking the "Add a New Class" button.

Prior to providing your students this Class Code, we recommend that you set up the activity with an appropriate Report Guide, scoring Rubric, and Quiz. A particular Report Guide and/or Rubric can be selected in the drop down menus under their respective columns. The Default templates for both are listed; these can be renamed and edited in the subsequent Report and Rubric tabs in the Teacher Workspace as discussed below in Sections B and C.

Whichever files are used as a Report Guide and Rubric, the check box must be checked to indicate that it has been "Activated" before the

students can create a Report or view the Rubric as part of the activity. The "Activated" check box is similar to passing out printed hard copies of material to your students. Likewise, the Quiz must be activated before the student can take it. If there are more advanced questions in the quiz and you wish to include them, the check box must be checked in that column as well. After making the appropriate selections within a class, the information must be saved by clicking on the "Update Classes" button.

After students create new accounts with a specific Class Code, the roster can be accessed by clicking on the "# registered" below the Course Name in the My Classes Table. The roster lists the student name, username, date registered and date updated. In case the student forgets his or her password, it can be reset from this screen by clicking on the "Change Password" button.

Name	Username	Registered / Updated	
Allen, LaShawn	lalen	Tue 29 Nov 2005 14:44:55 -0500 Tue 29 Nov 2005 14:44:55 -0500	Change Password Delete Student
Berberyan, Bobby	bberberyan	Tue 29 Nov 2005 14:44:33 -0500 Tue 29 Nov 2005 14:44:33 -0500	Change Password Delete Student
Risner, David	drisner	Tue 29 Nov 2005 14:44:11 -0500 Tue 29 Nov 2005 14:44:11 -0500	Change Password Delete Student

[Return](#)

The following table summarizes the functionality for each column of the Class List:

Classcode: • Identifies the class code for each class.

• Click on the "Delete" button to delete a class.

Course Name: • Click on the "Class Name" link to rename the class.

• Click on the "# Registered" link to see a listing of students who have registered for the class.

- Student listing view:
 - o Displays the user name each student has chosen.
 - o Shows the time each student registered and updated their work for the activity.
 - o Allows you to remove students who have registered in error or multiple times.
 - o Allows you to change student passwords if a student has forgotten their password.

Report: • Click on the pull down list to associate a particular Report Template with your class.

- Click the check box to activate the chosen Report Template for your students.
- Students will not see the button for Report view for the activity until the template is activated.

Rubric: • Click on the pull down list to associate a particular Rubric with your class.

- Click the check box to activate the chosen Rubric for your students to view.
- Students will not have the option to display the rubric for the report until the rubric is activated.

Quiz: • Click the check box to activate the Quiz for your students to view.

- Students will not see the Quiz Tab for the activity until the template is activated.

Other: • Some activities may have additional advanced questions as part of the Quiz. These can be activated or not at the teacher's discretion.

Remember to click on the "Update Classes" button so your changes will take effect.

B. REPORT EDITOR

Students can create a report online by entering text and moving information from their notebook to the report. Instructions are provided to encourage students to follow the format of a scientific paper. Although default instructions are provided, the "Report Editor" allows you to customize these instructions for each of your classes. This involves duplicating an existing report, editing and renaming it, and associating it with a particular class in the "My Classes" area of the Teacher Workspace. The same report can be associated with multiple classes if desired.

The Report tab in the Teacher Workspace displays a table with the default report template and edited versions that you created. You can view and duplicate existing report templates.

Report Template Name	Last Edited	Actions
Default Template		View Duplicate

1. Click the "View" button to view an exiting Report Template. You cannot make any changes while viewing.

2. Click "Return to Catalog" to return to the list of existing Report Templates.

Introduction
 [Text area]
[View your answer here](#)

Hypothesis
 [Text area]
[View your answer here](#)

Experimental Design
 [Text area]
[View your answer here](#)

Materials and Methods
 [Text area]
[View your answer here](#)

To create a new report template, you duplicate an existing report template, rename the template name, and edit the duplicate copy.

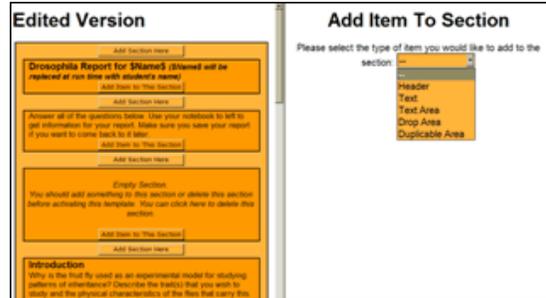
3. Click the “Duplicate” button to create a new Report Template.

Report Template Name	Last Edited	Actions
Default Template		View Duplicate
Copy of Default Template	29-Nov-2006 02:07 PM	View Duplicate Edit Delete

4. Click the “Edit” button.

In the “Edit View” the existing report template appears on the left and the editing area appears on the right. Each entry is a hyperlink. Clicking on an entry allows you to edit it. For example,

5. Click the report name. The right side of the Edit View shows the existing report template name in a text field.



6. Change the name for the Report Template. You will want to create a name that will allow you to distinguish it from other report templates when it comes time to associate this template with a class in the “My Classes” area of the Teacher Workspace.

7. Click the “Save Name Change” button. The change should now appear on the left side display of the Report Template.

Other elements can be edited similarly or deleted.

Buttons allow you to (a) add items within a section and (b) add entire sections. The types of items you can add are summarized below.

Header: usually the title of the section. You can include a variable for the student’s name.

Text: instructions for the student. These are not included in the final student report.

Text Area: a text form where students can type text into their report. You can specify the default text, if any, that appears in the

Drop Area: a place where students can place an item (e.g. image, data table) from their notebook into the report

The following example shows how you could add an “Abstract” section before the Introduction.

8. Click the “Add Section Here” button just above the Introduction section. A new “Empty Section” box will appear in the template.
9. Click the “Add Item to This Section” button at the bottom of the new section. The right side of the Edit Template View will change to allow you to specify the type of item you wish to add.
10. Select “Header” from the pull down list.
11. Type “Abstract” in the field for the Header Text and click the “Add Header” button. Note that the new section now has the title Abstract.
12. Click the “Add Item to This Section” button at the bottom of the new section. The right side of the Edit Template View will change to allow you to specify the type of item you wish to add.
13. Select “Text” from the pull down list.
14. Type instructions for the student to follow in the text form. For example, you might type “Enter a short paragraph that summarizes what you did and what you found.” Click the “Add Text” button when you are done. Note that the instructions now appear in the new section below Abstract title.
15. Click the “Add Item to This Section” button at the bottom of the new section. The right side of the Edit Template View will change to allow you to specify the type of item you wish to add.
16. Select “Text Area” from the pull down list. This will appear as a text form in the report template where students can type their abstract.
17. Type instructions for the student to follow in the text form. For example, you might enter “Type your Abstract here.” You can also use the pull down list at the bottom of the right side to change the visible height of the Click the “Add Text Area” button when you are done. Note that the text area now appears in the new section below Abstract title.

A new Abstract section now appears in the custom Report Template. If you want to delete it, select each element in the new section and delete them individually, then delete the empty section.

18. Click “Return to Catalog” button at the bottom of the left side. This will take you back to your listing of Report Templates.

IMPORTANT: Remember to return to the “My Classes” page, select the Report Template in the pull down menu, and check the “Activated” box to make the report template functional for a particular class.

C. RUBRIC EDITOR VCISE

applications include a rubric that can be used to grade the students’ reports. A default rubric is included, but the “Rubric Editor” allows teachers to customize rubrics for their specific needs. This involves duplicating an existing rubric, editing and renaming it, and associating it with a particular class in the “My Classes” area of the Teacher Workspace. The same rubric can be associated with multiple classes if desired. At their discretion, teachers can use the “My Classes” area of the Teacher Workspace to allow their students to view the rubric.

The Rubric tab in the Teacher Workspace displays a table with the default rubric and custom versions that you are able to edit. Clicking "View" permits you to only view a particular version.

1. Click the "View" button to view an existing Rubric. You cannot make any changes while viewing.

2. Click "Return to Catalog" to return to the list of existing Rubrics.

Drosophila Rubric Editor			
Choose the rubric you would like to view or edit below. To create a new rubric, duplicate an existing rubric and edit the duplicate. You cannot delete or edit the default rubric.			
Rubric Name	Last Edited	Actions	
Default		View	Duplicate

Default Rubric

Introduction

1. The objective and rationale of the activity is clearly understood.
2. The background information provides an introduction to the experiment.

Hypothesis

3. The hypothesis is well formulated, clearly stated, and testable.

Experimental Design

4. The design of the experiment accurately tests the hypothesis.

Materials and Methods

5. The written procedure can be followed so that the experiment can be easily replicated.

Results and Discussion

6. Collection of data is appropriate.
7. The figures and tables are adequately labeled.
8. The data are described accurately.
9. The results are interpreted correctly.

Knowledge Demonstrated

10. Student understands the genetic principles of segregation and independent assortment.
11. Student understands the meaning of dominant and recessive traits.
12. Student understands the chromosomal basis of sex-determination.
13. Student understands genetic linkage and recombination.
14. Student understands the process of scientific inquiry.

Conclusion

15. Offers a convincing argument for confirming or rejecting the hypothesis.
16. Reaches a conclusion that is supported by the data.
17. Interprets the results consistent with the principles of genetic inheritance.

Summary

18. The main points have been concisely summarized.

To create a new rubric, you duplicate an existing report template, rename the template name, and edit the duplicate copy.

3. Click the "Duplicate" button to create a new Rubric.

4. Click the "Edit" button.

Rubric Name	Last Edited	Actions	
Default		View	Duplicate
Copy of Default Rubric	29-Nov-2005 02:18 PM	View	Duplicate
		Edit	Delete

In the "Edit View" the existing Rubric appears on the left and the editing area appears on the right. Each entry is a hyperlink. Clicking on an entry allows you to edit it. For example,

5. Click the Rubric name. The right side of the Edit View shows the existing rubric name in a text field.

6. Change the name for the Rubric. You will want to create a name that will allow you to distinguish it from other report templates when it comes time to associate this template with a class in the "My Classes" area of the Teacher Workspace.

Edited Version

Introduction

1. The objective and rationale of the activity is clearly understood.
2. The background information provides an introduction to the experiment.

Hypothesis

3. The hypothesis is well formulated, clearly stated, and testable.

Experimental Design

4. The design of the experiment accurately tests the hypothesis.

Materials and Methods

5. The written procedure can be followed so that the experiment can be easily replicated.

Results and Discussion

6. Collection of data is appropriate.
7. The figures and tables are adequately labeled.
8. The data are described accurately.
9. The results are interpreted correctly.

Knowledge Demonstrated

10. Student understands the genetic principles of segregation and independent assortment.

Add Objective

Objective Statement

Place new objective

After "The background information provides an intro"

7. Click the "Save Name Change" button. The change should now appear on the left side display of the Rubric. Other elements can be edited similarly or deleted. Buttons at the bottom of each section allow you to insert new items within a section. For example, the following steps add a new objective to the "Experimental Design" section:

8. Click the "Add Objective to This Section" button in the "Experimental Design" section. The right side of the Edit Rubric view will change to allow you to type a new objective.

9. Type a new objective statement in the text form. For example, you might type "The design of the experiment was complete."

10. Use the pull down list to place the new objective before "The design of the experiment accurately ..." existing objective and click the "Add Objective" button. The left side of the Edit Rubric view will change to display the new objective. All the objectives will be renumbered sequentially.

Buttons at the bottom of the Rubric view on the left side allows you to insert a new section. For example, the following steps add a new section for evaluating the "Abstract" which was added to the Report Template in section B above:

11. Click the "Add Section" button on the bottom of the left side of the Edit Rubric view. The right side of the Edit Rubric view will change to allow you to add a section name and type a new objective.

12. Type "Abstract" in the "New Section Name" text field.

13. Type a new objective statement in the text form. For example, you might type "The abstract was a concise summary of what was done and the results that were obtained."

14. Use the pull down list to place the new section before the "Introduction" section and click the "Add Section" button. The left side of the Edit Rubric view will change to display the Abstract section with the new objective. Other objectives could be added to this section if desired. All the objectives will be renumbered sequentially.

15. Click "Return to Catalog" button at the bottom of the left side. This will take you back to your listing of Rubrics.

IMPORTANT: Remember to return to the "My Classes" page, select the Rubric in the pull down menu, and check the "Activated" box to make the report template functional for a particular class.

Classcode	Course Name	Report	Rubric	Quiz	Sex-Linked
27543 Delete	Biology TTh 3 registered	medium version <input checked="" type="checkbox"/> Activated	More difficult <input checked="" type="checkbox"/> Activated	<input checked="" type="checkbox"/> Activated 0 Takers	<input checked="" type="checkbox"/> Activated 0 Takers
29148 Delete	Bio MWF 3 registered	difficult version <input checked="" type="checkbox"/> Activated	Very difficult <input checked="" type="checkbox"/> Activated	<input checked="" type="checkbox"/> Activated 0 Takers	<input checked="" type="checkbox"/> Activated 0 Takers
30440 Delete	A.P. Biology - Pasadena High School 3 registered	simple version <input checked="" type="checkbox"/> Activated	Easy <input checked="" type="checkbox"/> Activated	<input checked="" type="checkbox"/> Activated 0 Takers	<input type="checkbox"/> Activated 0 Takers

D. ASSESSMENT

All VCISE activities have two methods of built-in assessment: (1) grading of the student online reports using the rubric, and (2) the on-line quiz which is randomized for each student and automatically graded. The "Assessment" area of the Teacher Workspace provides access to assessment tools and results. You can view your students' notebooks, score their reports, and view their results on the quiz. You can also see analyses of report and quiz results for your class as a whole.

27543 - Biology TTh (3 registered)			
Name	Notebook	Report	Quiz
LaShawn Allen	Last Saved: 1-Dec-2005	Last Saved: 1-Dec-2005 Last Scored: 1-Dec-2005 Score: 75.0%	Last Taken: 1-Dec-2005 Score: 90.7% Length of Time: 10:45
Bobby Berberyan	Last Saved: 1-Dec-2005	Last Saved: 1-Dec-2005 Last Scored: 1-Dec-2005 Score: 80.0%	Last Taken: 1-Dec-2005 Score: 83.3% Length of Time: 3:14
David Rosner	Last Saved: 30-Nov-2005	Last Saved: 30-Nov-2005 Last Scored: 1-Dec-2005 Score: 85.7%	Last Taken: 1-Dec-2005 Score: 83.3% Length of Time: 20:20
3 registered	3 Notebooks Saved	3 Reports Saved 3 Reports Scored 80.8% Average Score <input type="button" value="Analysis"/>	3 Students Have Taken Quiz 57.4% Average Score 8:13 Average Length of Time <input type="button" value="Analysis"/>

The Assessment tab in the Teacher Workspace displays a table with components of the assessment per student. Once the student saves his or her Notebook, it can be accessed from this page. The student's Report is accessible and must be scored according to the Rubric that was designated and activated. Lastly, the student's answers to the Quiz, the correct answers, and the scores are presented in a table. If you students take the quiz more than once, the scores for the quizzes can be set according to the following policies in the pull down menu: Last Taken, First Taken, and Highest Score. Each set of answers and scores can be viewed. The "Export Names and Scores" button on the bottom permits the name and scores to be exported into a Microsoft Excel Worksheet.

Report and Scoring Rubric view:

Whole Class Analysis of Report Scores

Quiz View:

Question #	User Answer	Correct Answer	Correct
1	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
2	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
3	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
4	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
5	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
6	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
7	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
8	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
9	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
10	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
11	Female: X, X	Female: X, X	Yes
12	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
13	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
14	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
15	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
16	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
17	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
18	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
19	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
20	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
21	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
22	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
23	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
24	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
25	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
26	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
27	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
28	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
29	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
30	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
31	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
32	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
33	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
34	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
35	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
36	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
37	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
38	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
39	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
40	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
41	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
42	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
43	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
44	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
45	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
46	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
47	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
48	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
49	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
50	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
51	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
52	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
53	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
54	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
55	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
56	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
57	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
58	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
59	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
60	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
61	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
62	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
63	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
64	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
65	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
66	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
67	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
68	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
69	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
70	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
71	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
72	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
73	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
74	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
75	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
76	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
77	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
78	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
79	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
80	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
81	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
82	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
83	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
84	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
85	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
86	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
87	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
88	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
89	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
90	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
91	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
92	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
93	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
94	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
95	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
96	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
97	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
98	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes
99	Male: X, X Female: Y, Y	Male: X, X Female: Y, Y	Yes
100	Male: Y, Y Female: X, X	Male: Y, Y Female: X, X	Yes

Student given see limited version of quiz
Time taken to Complete Quiz: 18:38

Whole Class Analysis of Quiz Answers

Report Analysis for Classcode 27543, Rubric Name: More difficult, 3 Takers	
Objective	Average Score
Introduction	
1. The objective and rationale of the activity is clearly understood.	3.7
2. The background information provides an introduction to the experiment.	3.3
Section Average 3.6 out of 6.0 43.8%	
Hypothesis	
3. The hypothesis is well formulated, clearly stated, and testable.	3.3
Experimental Design	
4. The design of the experiment accurately tests the hypothesis.	3.3
Materials and Methods	
5. The written procedure can be followed so that the experiment can be easily replicated.	3.0
Results and Discussion	
6. Collection of data is appropriate.	3.0
7. The figures and tables are adequately labeled.	3.3
8. The data are described accurately.	3.7
9. The results are interpreted correctly.	3.3
Section Average 3.3 out of 6.0 28.8%	
Knowledge Demonstrated	
10. Student understands the genetic principles of segregation and independent assortment.	3.3
11. Student understands the meaning of dominant and recessive traits.	3.0
12. Student understands the chromosomal basis of sex determination.	2.7
13. Student understands genetic linkage and recombination.	3.0
14. Student understands the process of scientific inquiry.	3.3
Section Average 3.1 out of 20.0 15.3%	
Conclusion	
15. Offers a convincing argument for confirming or rejecting the hypothesis.	3.3
16. Reaches a conclusion that is supported by the data.	3.0

Quiz Analysis for Classcode 27543		
Question #	# Correct	% Correct
1	0	0.0%
2	1	33.3%
3	3	100.0%
4	2	66.7%
5	3	100.0%
6	3	100.0%
7	0	0.0%
8	2	66.7%
9	3	100.0%
Formulating Hypotheses section		63.0%
10	2	66.7%
11	2	66.7%
12	2	66.7%
13	0	0.0%
Designing Experiments section		66.0%
14	2	66.7%
15	2	66.7%
16	2	66.7%
17	1	33.3%
18	1	33.3%
Analyzing and Interpreting Data section		63.3%
Total Score		67.4%
Average Time Taken		8:12

The following table summarizes the functionality for each column of the Assessment table:

- Name:**
- Click on the pull-down list to choose the class from the list created in “My Classes”.
 - Identifies the student by the name they entered when they registered using the class code.
 - The total number of students who have registered is displayed in the bottom row of the table.

- Notebook:**
- Displays the last date when they saved their notebook results
 - Click on the text link in the table cell to view the last saved version of the notebook.
 - The students’ notebooks cannot be edited.
 - The total number of students who have saved their notebooks is displayed in the bottom row of the table.

- Report:**
- Displays the last date when the students saved their reports.
 - Displays the last date when the students’ report was scored.
 - Displays the current score for scored reports.
 - Click on the text link in the table cell to score the student’s report using the rubric.
 - o Student’s report appears on the left and the rubric on the right.
 - o Click the radio buttons next to the rubric objectives to score the report.
 - o Click the “Save Scoring” button to save the results and return to the Assessment table.
 - o A cumulative total score appears below the rubric.
 - o There are five buttons at the bottom of the view:
 - Click “Print Report” to print a copy of the student’s report.
 - Click “Print Scoring” to produce a web page with the student’s scores. This can be saved or printed using the browser’s menu button. You will be asked to save the scoring results before the web page is generated.
 - Click “Save Scoring” to save the scoring results and return to the Assessment Table.
 - Click “Clear Scoring” to clear all the radio buttons in the rubric. However the scoring results are not cleared from the database unless you click “Save Scoring”.
 - Click “Cancel Scoring” to return to the Assessment Table. This cancels the current session without saving. However, previously saved scoring results are not cleared from the database.
 - The total number of saved and scored reports is displayed in the bottom row of the table.
 - The average of all scored reports is displayed in the bottom row of the table.
 - Click on the “Analysis” button to see statistical summary of all scored reports.
 - o Averages are provided for each rubric objective.
 - o Averages are provided for each section of the rubric.
 - o The average for the total class on all questions appears at the bottom of the table.
 - o Click on the “Return” button to go back to the Assessment Table.

- Quiz:**
- Click on the pull down menu in the title row to select your “grading policy” for the quiz. This is necessary because students can take the quiz more than once. The options are:
 - o Last Taken: use the score for the last time the students took the quiz
 - o First Taken: use the score for the first time the students took the quiz
 - o Highest Score: use best score for students who have taken the quiz multiple times
 - Displays the selected policy and the date when that quiz was taken.
 - Displays the amount of time the student took to complete the quiz for the selected policy.
 - Displays the quiz score for the selected policy.
 - Click on the text link in the table cell to view the student’s answers for the quiz.
 - o If the student has taken the quiz multiple times, a table appears entries for each time the student took the quiz.
 - The date and time is displayed for each quiz the student completed.
 - The score is displayed for each quiz the student completed.
 - Click the radio button “Used in Class Stats” column to override the grading policy and select a particular quiz for use in the statistical summary.
 - Click the “View Results” link in the last column to view the student’s answers for that particular quiz.
 - Click the “Return” button to go back to the Assessment Table.
 - o A table of the student’s quiz scores appears when viewing a student’s answers for a quiz. The table shows
 - the student’s answer and the correct answer,
 - a summary score for each learning objective,
 - an overall score for the quiz,
 - the amount of time it took the student to complete the quiz.
 - Click the “Return” button to go back to the Assessment Table.
 - Click on the “Analysis” button to see statistical summary of all quizzes.

- o Averages are provided for each question.
- o Averages are provided for each learning objective.
- o The average for the total class on all questions appears at the bottom of the table.
- o The average time to take the quiz for the total class appears at the bottom of the table.
- o Click on the "Return" button to go back to the Assessment Table.

Exporting: • Click on the "Export Names and Scores" button in the bottom row of the Assessment Table to export the student assessment data in an Microsoft Excel spreadsheet compatible file.

- o The file will contain rows with student names, report scores, and quiz scores.
- o Class averages will appear in the last row.
- o Missing scores will appear as blank cells.

E. MANUAL

The Manual tab in the Teacher Workspace parallels the demonstration in the tour. The manual describes how a student creates a new account, registers within a class code, and performs the simulation activity. The manual is intended for the teacher's use. It contains background information, suggested assignments, and supplementary information.

F. ACTIVITY

The Activity tab in the Teacher Workspace allows you to run the activity as it would appear to one of your students in a particular class. A table is displayed with options that were set up for each class in the "My Classes" area. To access the activity using these options, choose and click on a highlighted row. You will be able run the activity as a student with the name "Teacher Account."

See the animated tour for a demonstration of the activity. See also the Manual tab in the Teacher Workspace.

Choose what class to run the activity under by clicking on a row below				
Classcode	Name	Grade Level	Subject	Options
27543	Biology TTh	College/University	Biology	Report (medium version), Rubric (slow effort), Sex-Linked Quiz
29148	Bio MWF	College/University	Biology	Report (difficult version), Rubric (very difficult), Sex-Linked Quiz
30440	A.P. Biology - Pasadena High School	High School (9-12)	A.P. Biology	Report (simple version), Rubric (Easy), Non-Sex-Linked Quiz

G. STANDARDS

The Standards tab in the Teacher Workspace brings up a map of the United States. Clicking on a particular state will bring up the activity's alignment highlighted to the science and inquiry standards of that state. Clicking "Show All" will open the rest of the life or earth science and inquiry standards of the state. Clicking on the U.S. flag will bring up the National Science Content Standards.



Drosophila Standards for California

While every effort has been made to ensure these standards are accurate, teachers should refer to their official copy of the standards for any updates or changes.
Please CONTACT us if you feel these standards are in error.

Show All Print Standards

<p>Cell Biology</p> <p>Genetics</p> <p>2. MUTATION AND SEXUAL REPRODUCTION LEAD TO GENETIC VARIATION IN A POPULATION:</p> <ul style="list-style-type: none"> c. Students know how random chromosome segregation explains the probability that a particular allele will be in a gamete. d. Students know new combinations of alleles may be generated in a zygote through the fusion of male and female gametes (fertilization). e. Students know why approximately half of an individual's DNA sequence comes from each parent. f. Students know the role of chromosomes in determining an individual's sex. g. Students know how to predict possible combinations of alleles in a zygote from the genetic makeup of the parents. <p>3. A MULTICELLULAR ORGANISM DEVELOPS FROM A SINGLE ZYGOTE, AND ITS PHENOTYPE DEPENDS ON ITS GENOTYPE, WHICH IS ESTABLISHED AT FERTILIZATION.</p> <ul style="list-style-type: none"> a. Students know how to predict the probable outcome of phenotypes in a genetic cross from the genotypes of the parents and mode of inheritance (autosomal or X-linked, dominant or recessive). b. Students know the genetic basis for Mendel's laws of segregation and independent assortment.
<p>Ecology</p> <p>Evolution</p> <p>7. THE FREQUENCY OF AN ALLELE IN A GENE POOL OF A POPULATION DEPENDS ON MANY FACTORS AND MAY BE STABLE OR UNSTABLE OVER TIME.</p> <ul style="list-style-type: none"> a. Students know new mutations are constantly being generated in a gene pool.
<p>Physiology</p> <p style="text-align: center;"> Show All Print Standards </p>