Albert contains thousands of high-quality questions for students at **various academic levels**, all **aligned** to current College Board standards.

Question Features:

- **Expertly aligned**

- **Authored by current or former educators** with deep subject matter expertise

- **In-depth explanations**

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Students use our in-depth explanations to learn from mistakes and address common misconceptions.

Teachers and students know exactly which standards align to each question.

Use this to enrich and remediate based on student needs.

EXPLANATION

The answer is **Choice 'D'**.

There are five conditions required for a population to be at HW equilibrium: random mating, no natural selection, no mutations, no gene flow, and a large population. Equilibrium is when the allele frequencies for a gene remain constant over time, and evolution is not occurring. **Choice 'D'** states that the population is large, and a stable environment suggests that natural selection may be occurring at a lower rate than a changing environment. A changing environment would result in changes to selection pressures, increasing the natural selection rates.

Choice 'C' is incorrect because in a small population, allele frequencies can change significantly due to random events and therefore, a small population is not in Hardy-Weinberg equilibrium. Colonizing a new area also introduces a population to new selection pressures, and natural selection would be expected to increase.

The population described in **Choice 'B'** is presumably exposed to radiation, which can increase mutation rates. The environment of the surrounding area would be expected to undergo changes as well, introducing new selection pressures.

Sexual dimorphism (**Choice 'A'**) describes a population with distinct differences between males and females. One explanation for this phenomenon is sexual selection, with females choosing males based on a specific trait. This trait tends to become more pronounced over time. Sexual selection indicates that mating is not random, and the population is not the most likely of the choices to be at equilibrium.

Label	Description
Essential Knowledge	**EK 1.A.1.g**: Conditions for a population or an allele to be in Hardy-Weinberg equilibrium are: (1) a large population size, (2) absence of migration, (3) no net mutations, (4) random mating and (5) absence of selection. These conditions are seldom met.
Science Practice	**SP 5.3**: The student can evaluate the evidence provided by data sets in relation to a particular scientific question.
Science Practice	**SP 2.2**: The student can apply mathematical routines to quantities that describe natural phenomena.
Essential Knowledge	**EK 1.A.1**: Natural selection is a major mechanism of evolution.
Learning Objective	**LO 1.2**: The student is able to evaluate evidence provided by data to qualitatively and/or quantitatively investigate the role of natural selection in evolution.

Albert includes thousands of questions so all you need to do is decide which to assign.

Albert does the grading. Focus your time on instruction and curriculum.
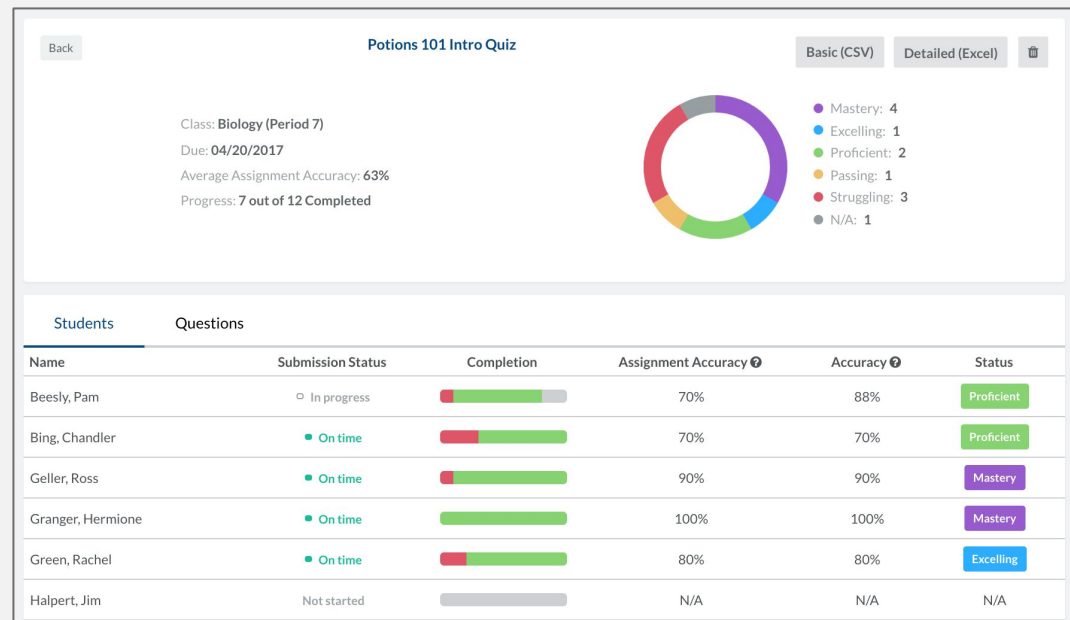
Grading on Albert:

- All assignments are **automatically graded**

- See data breakdowns on the **classroom**, **single-student**, and **question** levels

- Student mastery is determined using **advanced data analytics**

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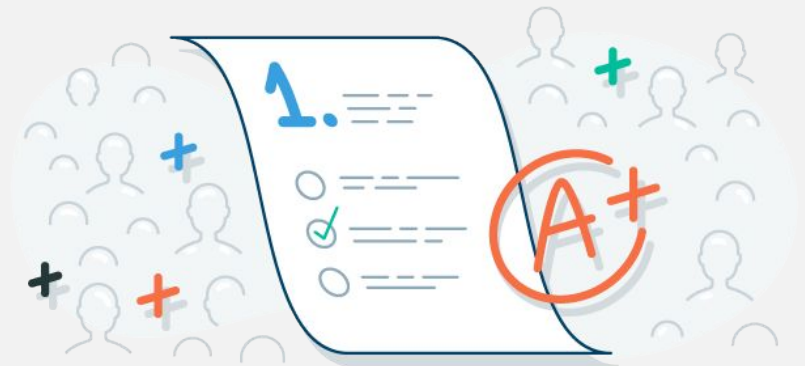
Monitor student assignment mastery in real-time, then use data to provide personalized support.

Know exactly which questions and standards students are struggling with.

Adjust instruction based on student needs.

Albert does the grading for you so you can spend your time focusing on instruction.

Back   **Potions 101 Intro Quiz**   Basic (CSV) Detailed (Excel) 🗑

Class: **Biology (Period 7)**
Due: **04/20/2017**
Average Assignment Accuracy: **63%**
Progress: **7 out of 12 Completed**

- ● Mastery: **4**
- ● Excelling: **1**
- ● Proficient: **2**
- ● Passing: **1**
- ● Struggling: **3**
- ● N/A: **1**

Students   Questions

Name	Submission Status	Completion	Assignment Accuracy ❓	Accuracy ❓	Status
Beesly, Pam	▢ In progress		70%	88%	Proficient
Bing, Chandler	● On time		70%	70%	Proficient
Geller, Ross	● On time		90%	90%	Mastery
Granger, Hermione	● On time		100%	100%	Mastery
Green, Rachel	● On time		80%	80%	Excelling
Halpert, Jim	Not started		N/A	N/A	N/A

Students   **Questions**

Question	Avg. Duration	Performance Breakdown
D Metabolic Processes and Toxic By-Products in Freshwater Fish	19s	
E Cell Membrane Function 2	13s	
M Facilitated Diffusion: Structural Characteristics	6s	
M Cell Signaling: Steroid vs. Protein Hormones	10s	
E Cell Transport: Facilitated Diffusion	10s	
D Intracellular Membranes	8s	
D Glycosylation of Polypeptides	7s	

Albert's **cutting-edge analytics tools** facilitate data-driven instruction

Data on Albert:

- Full reports **tracking student progress** throughout the year

- Know how much **time students spend** on each question

- See **personalized areas of growth** for each student

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Create customized reports to reveal strengths and areas of growth at the individual level.

Track student progress throughout a topic and differentiate based on individual needs.

Albert's straightforward analytics reports make data-driven instruction easy.

Thousands of teachers and admin already love Albert:

*"Albert.io proved to be **one of the best investments we've made** for our Advanced Placement Program. When I introduced Albert.io to our AP instructors, they were 100% on board. Our **test scores showed a significant increase** over last year's scores."*

- **Kevin Seidel,** AP Coordinator at Huntington Beach High

*"Albert has **helped me save time** and focus on helping my students prepare for what is really important, such as subject mastery and exam preparation. Albert allows me to incorporate technology in my classroom and it **provides interactive exercises** with **custom feedback**"*

- **Kiana Uluave,** Kahuku High School

*"I think (Albert) is a resource that **really helps students** and **makes teachers' lives a little bit easier.**"*

- **Tom Skiles,** Los Osos High School

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Contact us to learn more!

schools@albert.io

1-800-554-8115 ext 1