Biology 1 & Biology 2 Interactive Laboratory Assignments utilizing H5P

Interactive laboratory assignments for various topics in Biology 1 and 2 have been designed utilizing H5P. These assignments will include various exercises such as drag & drop with words, drag & drop with image labeling, and multiple-choice questions. These assignments can be used as pre-lab or post-lab assignments or can be used in conjunction with lecture content. The various assignments and a brief description are listed below as well as a link to the assignments which can be incorporated into your learning management system via H5P assignments.

Title	Description	Tags	Embed Code
Bio 1 lab Activity 1: Scientific Method	drag & drop H5P matching activities using definitions of the scientific method	Scientific method, hypothesis, dependent variable, independent variable, control variable, control group, experimental group	<iframe src="https://mcc.h5p.com/content/1292200741564956228/embed" aria-label="Bio 1 Lab Activity 1: Scientific Method" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 2: Microscope Labeling	drag & drop H5P matching activities using an image of a microscope for identification	Parts of a microscope, objective lens, ocular lens, fine adjustment knob, coarse adjustment knob, revolving nosepiece	<iframe src="https://mcc.h5p.com/content/1292041765340622308/embed" aria-label="Bio 1 Lab Activity 2: Microscope Labeling" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 3a: Plant & Animal Cell Labeling	drag & drop H5P matching activities using images of plant and animal cells structures	Animal cell, plant cell, structures, organelles	<iframe src="https://mcc.h5p.com/content/1292203239649249468/embed" aria-label="Bio 1 Lab Activity 3a: Plant & Animal Cell Labeling - The following questions will allow the learners to understand the parts of the plant and animal cell." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 3b: Animal Cell Functions	drag & drop H5P matching activities using an image of a plant cell to identify organelle functions	Animal cell, structures, organelles, function	<iframe src="https://mcc.h5p.com/content/1292225585409054188/embed" aria-label="Bio 1 Lab Activity 3b: Animal Cell Functions - In this activity, learners will be able to identify functions of animal cell structures." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 3c: Organelles	multiple-choice H5P assignment of cell structures and function	Cell structures, cell functions, organelles, animal cell	<iframe src="https://mcc.h5p.com/content/1292272638516932168/embed" aria-label="Bio 1 Lab Activity 3c: Organelles - The following questions will allow the learners to understand the parts of an animal cell and its organelles." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 4a: Osmosis	multiple-choice H5P assignment covering osmosis in plant and animal cells	osmosis, plant cell, animal cell, hypertonic, hypotonic, isotonic	<iframe src="https://mcc.h5p.com/content/1292272648002320878/embed" aria-label="Bio 1 Lab Activity 4a: Osmosis - The following questions will allow the learners to understand the process of osmosis." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *;

			midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 4b: Diffusion	multiple-choice and interactive images in H5P reviewing diffusion	diffusion, diffusion through agar, diffusion through air, diffusion through liquid, iodine (IKI) test for starch, Benedict's test for simple sugar	<iframe src="https://mcc.h5p.com/content/1292241312924515978/embed" aria-label="Bio 1 Lab Activity 4b: Diffusion - The following questions will allow the learners to understand the process of diffusion." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 5: Macromolecules	drag & drop H5P matching activities using images and multiple-choice questions covering macromolecules	macromolecules, positive control, negative control, Iodine (IKI) test for starch, Benedict's test for simple sugar, Biuret test for proteins	<iframe src="https://mcc.h5p.com/content/1292229143924067308/embed" aria-label="Bio 1 Lab Activity 5: Macromolecules - This assignment will aid in the understanding of macromolecule structure and testing." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 6a: Enzyme & Scientific Method	multiple-choice H5P assignment reviewing the scientific method and enzymes	Enzymes, protein, dependent variable, independent variable, control variable, hypothesis, denature, denaturation	<iframe src="https://mcc.h5p.com/content/1292241337577449778/embed" aria-label="Bio 1 Lab Activity 6a: Enzymes & Scientific Method - In this activity, students will practice using the scientific method and apply it to enzymes." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 6b: Protein Synthesis	multiple-choice H5P assignment covering DNA replication, transcription, translation, and protein synthesis	DNA, RNA, mRNA, Okazaki fragments, mutation, DNA replication, transcription, translation, gene, amino acids, protein, codon, ribosome	<iframe src="https://mcc.h5p.com/content/1292272656804686528/embed" aria-label="Bio 1 Lab Activity 6b: Protein Synthesis - The following questions will allow the learners to understand the processes of DNA replication, transcription, and translation." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 7: Cell Division	multiple-choice H5P assignment reviewing the cell cycle, cell division, mitosis, & meiosis	cell cycle, cell division, mitosis, meiosis, chromosomes, chromatids, homologous, gametes, zygote, gonads, fertilization, egg, sperm, diploid, haploid	<iframe src="https://mcc.h5p.com/content/1292241331854378828/embed" aria-label="Bio 1 Lab Activity 7: Cell Division - By completing this Question Set, learners will understand the basics of cell division." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>
Bio 1 lab Activity 8a: DNA Matching	drag & drop H5P matching activity reviewing complementary base pairing in DNA	DNA, complement, nitrogenous bases, base pairing, DNA replication	<iframe src="https://mcc.h5p.com/content/1292241390797793548/embed" aria-label="Bio 1 Lab Activity 8a: DNA Matching - In this activity, students will review complementary base pairing in DNA." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>

Bio 1 lab Activity 8b: DNA	multiple-choice H5P assignment covering the nucleic acids DNA, and RNA.	DNA, RNA, nucleic acids, nucleotides, nitrogenous bases, completmentary base pairing, double helix, semiconservative DNA replication	`<iframe src="https://mcc.h5p.com/content/1292272664722821628/embed" aria-label="Bio 1 Lab Activity 8b: DNA - The following questions will allow the learners to understand the structure and function of nucleic acids." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 1 lab Activity 8c: RNA Matching	drag & drop H5P matching activity reviewing complementary base pairing in RNA	RNA, mRNA, complement, nitrogenous bases, base pairing, DNA, transcription	`<iframe src="https://mcc.h5p.com/content/1292271451155779088/embed" aria-label="Bio 1 Lab Activity 8c: RNA Matching - The following questions will allow the learners to understand the structure and function of nucleic acids." width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`

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Bio 2 Lab Activity 1: Plants	drag & drop H5P matching activities using images and descriptions of plants	land plants, alternation of generations, sporophyte, gametophyte, vascular plants, seed plants, seedless plants, non-vascular plants, archegonium, antheridium	`<iframe src="https://mcc.h5p.com/content/1292114168340723478/embed" aria-label="Bioi 2 Lab Activity: Plants" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 2a: Pig External Structures and Digestive System	drag & drop H5P matching activities using fetal pig images to identify digestive and external structures	fetal pig, digestive structures, external structures	`<iframe src="https://mcc.h5p.com/content/1292134986206240288/embed" aria-label="Bio 2 Pig Dissection Digestive Tract" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 2b: Models-Digestive System	drag & drop H5P matching activities using images of the digestive system	digestive structures	`<iframe src="https://mcc.h5p.com/content/1292135000789320628/embed" aria-label="Bio 2 Pig Dissection Digestive Stystem" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 3a: Pig-Circulatory and Respiratory Systems	drag & drop H5P matching activities using images and descriptions of the respiratory and cardiovascular systems	fetal pig, respiratory structures, heart, cardiovascular,	`<iframe src="https://mcc.h5p.com/content/1292137544184418228/embed" aria-label="Bio 2 Lab Activity Pig Respiratory and Circulatory Systems" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`

Bio 2 Lab Activity 3b: Models- Respiratory and Cardiovascular Systems	drag & drop H5P matching activities using images of the respiratory and cardiovascular systems	respiratory structures, larynx, bronchioles, heart, cardiovascular	`<iframe src="https://mcc.h5p.com/content/1292157374641192208/embed" aria-label="Bio 2 Activity Cardiovascular and Respiratory Systems" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 4a: Pig and Sheep Urogenital System	drag & drop H5P matching activities using images and descriptions of the urinary and reproductive systems	pig, kidney, urinary structures, reproductive structures	`<iframe src="https://mcc.h5p.com/content/1292157401549349478/embed" aria-label="Bio 2 Pig Dissection Urogenital Tract" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 4b: Models- Urogenital System	drag & drop H5P matching activities using images of the urinary and reproductive system	urinary structures, kidney, urogenital system, nephron, male reproductive structures	`<iframe src="https://mcc.h5p.com/content/1292162602451427468/embed" aria-label="Bio 2 Lab Activity Urogenital Systems" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 5a: Nervous System	drag & drop H5P matching activities using images and descriptions of the nervous system	nervous structures, neuron, senses, nervous system, sympathetic, parasympathetic, brain, lobes of the brain	`<iframe src="https://mcc.h5p.com/content/1292162614234820588/embed" aria-label="Bio 2 Lab Activity Nervous System" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 5b: Eye	drag & drop H5P matching activities using images and descriptions of the eye	eye structures, eye layers, eye function	`<iframe src="https://mcc.h5p.com/content/1292194530317904998/embed" aria-label="Bio 2 Lab Activity: Eye" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 5c: Ear	drag & drop H5P matching activities using images and descriptions of the ear	ear structures, ear functions	`<iframe src="https://mcc.h5p.com/content/1292194567858465588/embed" aria-label="Bio 2 Lab Activity: Ear" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`
Bio 2 Lab Activity 5d: Nervous System and Senses	drag & drop H5P matching activities using images and descriptions of nervous system structures	brain, nervous structures, eye structures, ear structures	`<iframe src="https://mcc.h5p.com/content/1292200669492198988/embed" aria-label="Bio 2 Lab Activity Nervous System and Senses" width="1088" height="637" frameborder="0" allowfullscreen="allowfullscreen" allow="autoplay *; geolocation *; microphone *; camera *; midi *; encrypted-media *"></iframe><script src="https://mcc.h5p.com/js/h5p-resizer.js" charset="UTF-8"></script>`