

# Learning Science Usage Statistics 2020/21

## 1) Bioscience LabSims

Total learning activities taken: 13572

	Total Usage	Usage for Resources Accessed Directly		Usage for Resources in LabSim Assessments	
	Includes resources accessed directly and in LabSim Assessments.	This data is based on the usage for resources that have been added directly to your LMS/VLE using the LTI links.		This data is based on submitted LabSim Assessment attempts.	
Resource Name	Total number of uses	Number of uses	Number of different users	Number of uses	Number of different users
Setting up a Microscope	747	747	347	0	0
Parts of a Pipette (Gilson)	684	684	360	0	0
Operating an Automated Pipette (Gilson)	632	632	313	0	0
Focussing and Navigating	591	591	347	0	0
Dressing for the Lab	504	504	212	0	0
Gram Stain	468	468	245	0	0
Performing Serial Dilutions (Gilson)	446	446	250	0	0
Pour Plate Technique	444	444	143	0	0
Calibration Curves in Spectrophotometry	413	400	190	13	13
Pouring an Agar Plate	400	400	166	0	0
Spectrophotometer: Parts and Theory	394	381	195	13	13
Spread Plate Technique	386	386	236	0	0
Safety Features and Hazards	359	359	206	0	0
Prepare a Smear Slide	352	352	232	0	0
Weighing with Taring using an Analytical Balance	347	347	147	0	0
Streak Plate Technique	345	345	233	0	0
Enzyme-Catalysed Reactions	328	328	142	0	0
Lineweaver-Burk Plot	305	305	142	0	0
Organ Bath: Ileum	301	301	98	0	0
Agarose Gel Analysis	294	294	167	0	0
Estimating Size	290	290	146	0	0
Agarose Gel: Separating DNA by Size	273	273	152	0	0
Spectrophotometer: Calibration and Use	250	237	131	13	13
Performing One-Step Dilutions (Biohit) (Under 5 mL)	231	231	151	0	0

Prepare an Automated Pipette (Gilson)	<b>222</b>	222	126	0	0
Köhler Illumination	<b>216</b>	216	122	0	0
Performing One-Step Dilutions (Gilson) (Under 5 mL)	<b>182</b>	169	81	13	13
Key Stages in Polymerase Chain Reaction (PCR)	<b>178</b>	178	95	0	0
Calibrating a pH Meter	<b>168</b>	168	81	0	0
Loading and Running an Agarose Gel	<b>166</b>	166	108	0	0
Gel Filtration: Separating Proteins by Size	<b>156</b>	156	87	0	0
Pouring an Agarose Gel	<b>156</b>	156	94	0	0
Western Blot	<b>151</b>	151	97	0	0
SDS-PAGE Theory: Separating Proteins by Size	<b>146</b>	146	96	0	0
Cell Counting: Haemocytometer	<b>133</b>	133	86	0	0
Parts of a pH Probe	<b>128</b>	128	75	0	0
Running a Polymerase Chain Reaction (PCR)	<b>121</b>	121	68	0	0
Performing One-Step Dilutions (Gilson) (Over 5 mL)	<b>114</b>	101	62	13	13
SDS-PAGE Analysis	<b>110</b>	110	61	0	0
Scientific Drawing: Low Power Micrograph	<b>105</b>	22	13	83	77
Loading and Running an SDS-PAGE Gel	<b>100</b>	100	69	0	0
Scientific Drawing: Principles	<b>94</b>	11	5	83	77
Electrocardiography (ECG)	<b>91</b>	91	63	0	0
DNA Quantification	<b>75</b>	75	44	0	0
Parts of a Pipette (Biohit)	<b>75</b>	75	49	0	0
Fieldwork: Methods and Approaches	<b>70</b>	70	41	0	0
Basic Labware	<b>68</b>	68	44	0	0
SDS-PAGE Staining	<b>67</b>	67	52	0	0
Operating an Automated Pipette (Biohit)	<b>64</b>	64	43	0	0
Prepare an Automated Pipette (Biohit)	<b>63</b>	63	42	0	0
Purpose and Products of Centrifugation	<b>62</b>	62	37	0	0
Mass Spectrometry: Fundamentals	<b>60</b>	60	34	0	0
Pouring an SDS-PAGE Gel	<b>58</b>	58	47	0	0
Sandwich ELISA	<b>56</b>	56	31	0	0
Ion Exchange Chromatography	<b>47</b>	47	29	0	0

Understanding qPCR	45	45	29	0	0
Michaelis-Menten Plot	43	43	14	0	0
Next Generation Sequencing	33	33	22	0	0
Running a Protein Purification Column	26	26	16	0	0
Miniprep 1: Isolate Plasmid DNA	24	24	8	0	0
Water Bath	22	22	18	0	0
RNA Extractions from Animal Cells	19	19	13	0	0
Miniprep 2: Purify Plasmid DNA	11	11	6	0	0
Performing Serial Dilutions (Biohit)	11	11	9	0	0
Action Potential	9	9	5	0	0
Cloning: Overview	8	8	7	0	0
Scientific Drawing: High Power Micrograph	7	7	5	0	0
NMR: Fundamentals	5	5	5	0	0
Fish Dissection	4	4	4	0	0
Diffusion and Osmosis	3	3	3	0	0
Crossing Over and Recombination	3	3	3	0	0
Blood Smear Preparation	3	3	3	0	0
Staining Blood Smear: Leishman's Stain	2	2	2	0	0
Organ Bath: Aorta	2	2	2	0	0
Performing One-Step Dilutions (Biohit) (Over 5 mL)	2	2	2	0	0
Plasmid Ligation	1	1	1	0	0
Cloning: Selection	1	1	1	0	0
Blue-White Screening Theory	1	1	1	0	0
SNP Detection with CAPS	1	1	1	0	0
Cloning and Expression Plasmids	0	0	0	0	0
SSLP Detection	0	0	0	0	0

## 2) Chemistry LabSims

Total learning activities taken: 4653

	Total Usage	Usage for Resources Accessed Directly		Usage for Resources in LabSim Assessments	
	Includes resources accessed directly and in LabSim Assessments.	This data is based on the usage for resources that have been added directly to your LMS/VLE using the LTI links.		This data is based on submitted LabSim Assessment attempts.	
Resource Name	Total number of uses	Number of uses	Number of unique users	Number of uses	Number of unique users
Volumetric Pipette (Simulation)	153	153	103	0	0
Preparing Standard Solutions (Simulation)	143	143	101	0	0
pH Meter (Simulation)	136	136	93	0	0
Titration Calculations (Guide)	136	136	78	0	0
UV-Vis Spectrophotometer (Simulation)	135	135	85	0	0
Titration Burette Reading (Simulation)	126	126	88	0	0
Melting Point Analysis (Video)	125	125	78	0	0
Volumetric Pipette (Video)	122	122	46	0	0
Melting Point Analysis (Simulation)	119	119	80	0	0
Weighing by Difference using an Analytical Balance (Video)	116	116	79	0	0
Titration Setup (Simulation)	112	112	83	0	0
Weighing with Taring using an Analytical Balance (Video)	112	112	81	0	0
Weighing with Taring using an Analytical Balance (Simulation)	109	109	77	0	0
Carbon-13 NMR: Assigning Peaks (Simulation)	101	101	67	0	0
Titration End Point (Simulation)	99	99	84	0	0
Gas Chromatography: Practical (Guide)	96	96	53	0	0
Bunsen Burner (Simulation)	95	95	54	0	0
IR: Assigning Peaks (Simulation)	91	91	48	0	0
Mole Calculations Involving Liquids - Organic (Guide)	89	89	41	0	0
Preparing Standard Solutions (Video)	87	87	67	0	0
Titration (Video)	87	87	71	0	0

IR: Recording Spectra (Simulation)	<b>86</b>	86	52	0	0
Thin Layer Chromatography (TLC) Setup (Simulation)	<b>82</b>	82	46	0	0
Graduated Pipette (Simulation)	<b>81</b>	81	70	0	0
Water Bath (Simulation)	<b>77</b>	77	57	0	0
IR: Fundamentals (Simulation)	<b>75</b>	75	45	0	0
Graduated Cylinder (Simulation)	<b>73</b>	73	59	0	0
Thin Layer Chromatography (TLC) Rf Measurement (Simulation)	<b>64</b>	64	42	0	0
Thin Layer Chromatography (TLC) Technique (Simulation)	<b>62</b>	62	40	0	0
Mole Calculations Involving Molar Mass (Guide)	<b>60</b>	60	36	0	0
Automated Pipette (Simulation)	<b>59</b>	59	43	0	0
Mole Calculations Involving Solutions (Guide)	<b>59</b>	59	36	0	0
Sections of a Laboratory Report (Guide)	<b>59</b>	59	30	0	0
pH Meter (Video)	<b>56</b>	56	47	0	0
Report Writing - Styles and Formatting (Guide)	<b>56</b>	56	23	0	0
Thin Layer Chromatography (TLC) (Video)	<b>55</b>	55	37	0	0
Electric Hotplate and Magnetic Stirrer (Simulation)	<b>54</b>	54	45	0	0
Mole Calculations Involving Molar Mass - Organic (Guide)	<b>54</b>	54	37	0	0
Balancing Equations (Guide)	<b>53</b>	53	39	0	0
Separating Funnel (Simulation)	<b>52</b>	52	29	0	0
Weighing with Taring using a Top Pan Balance (Simulation)	<b>52</b>	52	43	0	0
Mole Calculations Involving Solids (Guide)	<b>47</b>	47	32	0	0
Preparing Standard Solutions (Guide)	<b>47</b>	47	38	0	0
Ice Bath (Simulation)	<b>46</b>	46	42	0	0
IR Spectroscopy (Guide)	<b>45</b>	45	23	0	0
Titration Calculations - Redox (Guide)	<b>45</b>	45	35	0	0
Mole Calculations to Determine Yield - Organic (Guide)	<b>43</b>	43	16	0	0

Separating Funnel (Video)	42	42	30	0	0
Mass Spectrometry: Fundamentals (Simulation)	41	41	24	0	0
Mole Calculations Involving Solids - Organic (Guide)	41	41	31	0	0
Safety Features and Hazards (Simulation)	39	39	34	0	0
Centrifuge (Simulation)	38	38	22	0	0
Gas Chromatography: Theory (Guide)	35	35	22	0	0
UV-Vis Spectrophotometer (Video)	35	35	22	0	0
Preparing Solutions by Dilution (Video)	34	34	27	0	0
pH Indicators (Guide)	32	32	28	0	0
Graduated Pipette (Video)	30	30	26	0	0
Preparing Solutions by Dilution (Guide)	29	29	21	0	0
Mole Calculations to Determine Yield (Guide)	29	29	14	0	0
Keeping a Laboratory Notebook (Guide)	27	27	14	0	0
NMR: Fundamentals (Simulation)	25	25	15	0	0
Proton NMR: Assigning Peaks (Simulation)	25	25	15	0	0
Centrifuge (Video)	24	24	18	0	0
Recrystallization (Video)	22	22	12	0	0
Proton NMR Spectroscopy (Guide)	22	22	13	0	0
Vacuum Filtration - Buchner (Video)	14	14	6	0	0
Gravity Filtration (Video)	13	13	8	0	0
Automated Pipette (Video)	12	12	6	0	0
Reflux (Video)	12	12	7	0	0
Carbon-13 NMR Spectroscopy (Guide)	12	12	9	0	0
Proton NMR: Sample Preparation (Simulation)	11	11	10	0	0
Electrochemical Cells (Simulation)	10	10	6	0	0
Weighing by Difference using a Top Pan Balance (Video)	10	10	7	0	0
Error Analysis: Standard Deviation (Guide)	9	9	7	0	0
Introduction to Glassware (Guide)	8	8	8	0	0
Vacuum Filtration - Buchner (Simulation)	3	3	1	0	0
Graduated Cylinder (Video)	3	3	3	0	0
Recrystallization (Simulation)	3	3	2	0	0

Accidents and Incidents (Guide)	3	3	3	0	0
Calorimeter for Measuring Enthalpy Change of Neutralization (Simulation)	2	2	2	0	0
Density Calculations (Guide)	2	2	2	0	0
Electrochemical Cells (Video)	2	2	1	0	0
Error Analysis: Percentage Error (Guide)	2	2	2	0	0
Clothing Safety (Guide)	2	2	1	0	0
Spectrometer Design (Simulation)	2	2	2	0	0
Calorimeter for Measuring Enthalpy Change of Combustion (Simulation)	1	1	1	0	0
Column Chromatography (Simulation)	1	1	1	0	0
Cyclic Voltammetry: Fundamentals (Simulation)	1	1	1	0	0
Significant Figures (Guide)	1	1	1	0	0
Electric Hotplate and Magnetic Stirrer (Video)	1	1	1	0	0
Heating with a Water Bath (Video)	1	1	1	0	0
Heating Using a Crucible (Guide)	1	1	1	0	0
Digital Thermometer (Guide)	1	1	1	0	0
Le Chatelier's Principle (Guide)	1	1	1	0	0
pH and Buffer Calculations (Guide)	1	1	1	0	0
U-tube Manometer (Guide)	1	1	1	0	0
Qualitative Tests for Organic Functional Groups (Guide)	1	1	1	0	0
Rotary Evaporator (Simulation)	1	1	1	0	0
Dressing for the Lab (Simulation)	1	1	1	0	0
Fire Safety (Guide)	1	1	1	0	0
Glassware Safety (Guide)	1	1	1	0	0
Lab Safety Points (Guide)	1	1	1	0	0
Boiling Point Theory (Guide)	0	0	0	0	0
Boiling Point Analysis by Distillation (Guide)	0	0	0	0	0
Boiling Point Analysis by Inverted Capillary Method (Guide)	0	0	0	0	0
Calorimeter for Measuring Enthalpy Change of Combustion (Video)	0	0	0	0	0

Enthalpy Change Calculations - Combustion (Guide)	0	0	0	0	0
Calorimeter for Measuring Enthalpy Change of Neutralization (Video)	0	0	0	0	0
Column Chromatography (Video)	0	0	0	0	0
Size Exclusion Chromatography (Simulation)	0	0	0	0	0
Decantation (Guide)	0	0	0	0	0
Decolorizing Carbon (Guide)	0	0	0	0	0
Introduction to Distillation (Guide)	0	0	0	0	0
Simple Distillation (Simulation)	0	0	0	0	0
Simple Distillation (Video)	0	0	0	0	0
Fractional Distillation (Simulation)	0	0	0	0	0
Fractional Distillation (Video)	0	0	0	0	0
Vacuum Distillation (Guide)	0	0	0	0	0
Steam Distillation (Guide)	0	0	0	0	0
Redox Reactions (Guide)	0	0	0	0	0
Error Analysis: Combining Errors (Guide)	0	0	0	0	0
Evaporating Solvents (Guide)	0	0	0	0	0
Introduction to Filtration Methods (Guide)	0	0	0	0	0
Gravity Filtration (Simulation)	0	0	0	0	0
Vacuum Filtration - Hirsch (Simulation)	0	0	0	0	0
Vacuum Filtration - Hirsch (Video)	0	0	0	0	0
Microscale Pipette Filtration (Simulation)	0	0	0	0	0
Microscale Pipette Filtration (Video)	0	0	0	0	0
Molar Mass Determination by Freezing Point Depression (Guide)	0	0	0	0	0
Mechanical and Magnetic Stirring (Guide)	0	0	0	0	0
Alternative Methods of Heating (Guide)	0	0	0	0	0
Cooling with an Ice Bath (Video)	0	0	0	0	0
Equilibrium Constant Calculations (Guide)	0	0	0	0	0
Ideal Gas Calculations (Guide)	0	0	0	0	0
Rate of Reaction Calculations (Guide)	0	0	0	0	0



Polarimetry (Guide)	0	0	0	0	0
Qualitative Tests for Cations (Guide)	0	0	0	0	0
Qualitative Tests for Anions (Guide)	0	0	0	0	0
Reflux (Simulation)	0	0	0	0	0
Rotary Evaporator (Video)	0	0	0	0	0
Chemical Safety and Disposal (Guide)	0	0	0	0	0
Electrical Safety (Guide)	0	0	0	0	0
Solvent Safety (Guide)	0	0	0	0	0
Drying Agents (Simulation)	0	0	0	0	0
Drying Agents (Video)	0	0	0	0	0
Sublimation (Guide)	0	0	0	0	0
Trapping Gauge (Guide)	0	0	0	0	0
Weighing with Taring using a Top Pan Balance (Video)	0	0	0	0	0