Ecole Internationale Provence-Alpes-Côte d'Azur

Forward Planning

Long-Term Semester Planning

Academic Year: 2020-2021

Class: S7
Subject: Lab Science
Teacher: J.RIEHL
No. Students: 10

Ecole Internationale Provence-Alpes-Côte d'Azur

Curriculum – Long-Term Planning 2020-2021

Dates	Learning objectives	Learning outcomes / Assessment	Key Competences	Activities / Resources
September - October	**TECHNIQUES IN CHEMISTRY** **1. Conductivity and its use to measure concentrations** **a. Titration by calibration of a sodium chloride solution** **b. Titration of chloride ions in a mineral water** **2. Spectrometry and absorbance : titration by calibration**	**B Test 1 : written 30 min*** **A mark based on work, behaviour, lab reports**	1. Literacy (reading and writing) 3. Mathematics, Science, Technology and Engineering 4. Digital 6. Personal, Social and Learning to Learn 8. Cultural Awareness and Expression	**Practicals** **Working in groups**
Vacances de Toussaint				
November - December	**3. Organic synthesis : producing a medication (aspirin : synthesis, purification, identification (TFC, melting point)** **4. Aspirin : the various formulations**		1. Literacy (reading and writing) 3. Mathematics, Science, Technology and Engineering 6. Personal, Social and Learning to Learn	

	5. Chemistry and cooking : molecular gastronomy		8. Cultural Awareness and Expression	
B TEST 1				
Christmas holidays				
January - February	**6. Titration of a triprotic acid : phosphoric acid in a cola beverage** **7. Potentiometric titration : iron(II) ions**		1. Literacy (reading and writing) 3. Mathematics, Science, Technology and Engineering 4. Digital 6. Personal, Social and Learning to Learn 8. Cultural Awareness and Expression	
Winter holidays				
March - April	**ELECTRONICS** • **Arduino : use of an electronics platform (introduction)** • **TinkerCard and Arduino : a simulator** • **Using Arduino to build a light detector**		1. Literacy (reading and writing) 3. Mathematics, Science, Technology and Engineering 4. Digital 6. Personal, Social and Learning to Learn 8. Cultural Awareness and Expression	

Spring holidays				
May - June	• **Using Arduino : another application (group project)**	**B Test 2 : a practical, individual assessment of 1 hour**	1. Literacy (reading and writing) 3. Mathematics, Science, Technology and Engineering 4. Digital 6. Personal, Social and Learning to Learn 8. Cultural Awareness and Expression	
B TEST 2				