Name
TA

Science 9

Learning Guide # 1: Safety and Scientific Processes

BIG IDEA: To ensure the safety of yourself and those around you during hands on science and to explore the scientific process.

Fundamental Knowledge (I know)

- ☐ The safety rules in the lab
- ☐ The WHMIS symbols
- ☐ Various lab equipment
- ☐ Methods for lab procedures
- ☐ How to complete a lab write up

Curricular Competencies (I can)

	Proficiency Scale Teacher and Student self assessment (Circle one)	**Evidence (How do you know?)**
I can: **Contribute to care for self, others, community and world through personal or collaborative approaches**	**Emerging (EMG)** Initial Understanding **Developing (DEV)** Partial/Near Complete Understanding **Proficient (PRF)** Complete Understanding **Extending (EXT)** Sophisticated Understanding	.
Evaluate their methods and experimental conditions, including identifying the sources of error or uncertainty, confounding variables, and possible alternative explanations and conclusions.	**Emerging (EMG)** Initial Understanding **Developing (DEV)** Partial/Near Complete Understanding **Proficient (PRF)** Complete Understanding **Extending (EXT)** Sophisticated Understanding	
Collaboratively and personally plan, select and use appropriate investigative methods, including field work and lab experiments, to collect reliable data (qualitative and quantitative)	**Emerging (EMG)** Initial Understanding **Developing (DEV)** Partial/Near Complete Understanding **Proficient (PRF)** Complete Understanding **Extending (EXT)** Sophisticated Understanding	

Name Science 9

TA

Instructions: To help guide your learning, make your way through the activities in Option 1, Option 2, or Option 3. You may "mix and match" between the different Option columns. **Check off the activity after you finish it.**

TOPIC	OPTION 1	OPTION 2	OPTION 3
Knowing the Lab	**A.** Create a safety map of the SGH. Be sure to include all of the escape routes and equipment	**A.** Create a safety map of the SGH. Be sure to include all of the escape routes and equipment	Choose your own adventure! Pick up a planning sheet from the Science Kiosk. Create a plan! Make sure you read through the first page of this LG, as you will need to design ways to learn/practice and show your understanding of the topic(s) and skill(s) (competencies.) You will need to have a teacher approve your plan before beginning the LG. Interview with your teacher for evaluation Don't forget to do the lab!
Safety Rules	**B.** Choose a lab from your BC Science textbook. Add 5 relevant safety rules to those already suggested. ○ Explain/include why each rule is important and relevant to this lab	**B.** Make a diagram or story of safety rules (ex. Lab gone wrong; newspaper article; Instagram post; etc) Include 5 important rules ○ Explain/include why each rule is important and relevant to this lab	
WHMIS	**C.** Complete the WHMIS symbols worksheet. Make sure you know all of the symbols and what they mean.	**C.** Create flashcards for the WHMIS symbols. Make sure you know all of the symbols and what they mean.	
Lab Equipment	**D.** Find a video or reputable website on common science lab equipment. Make notes on 10 types and their uses. Reference your website.	**D.** Find a video or reputable website on common science lab equipment. Create a poster or pamphlet that has sketches of 10 pieces of lab equipment and describes what they're used for. Reference your website.	
LAB	Complete the **Bag of Change** lab. Sign up at the science kiosk. Complete the guided lab worksheet.		
Self Assessment	Reflect on the Fundamental Knowledge and Curricular Competencies. Use the rubric and make goals to improve for your next learning guide.		
Interview or Quiz	See you teacher for an interview or to have a quiz slip signed for the test center. Bring your work and staple it to your quiz when complete.		