# **Student Sheet 6-1: Independent Investigation Guidelines**

Independent Investigation Guidelines<sup>1</sup>

## **STEP 1: CREATE A QUESTION**

- 1.) What do you want to find out?
- 2.) Does your question relate to the topic?
- 3.) Can you develop an experiment to answer your question?
- 4.) Does your question make sense? Is it confusing?

### **STEP 2: HYPOTHESIS**

- 1.) What do you think will happen?
- 2.) BE SPECIFIC!
- 3.) Use complete sentences.

### **STEP 3: PROCEDURE**

- 1.) What steps will you follow to find an answer?
- 2.) BE SPECIFIC! Label your steps using 1, 2, 3, etc.
- 3.) Would someone else be able to follow your directions?
- 4.) How will you collect your data?
- 5.) How will you ensure reliable results?
- 6.) What safety issues need to be addressed?

### **STEP 4: EXPERIMENT & DATA**

- 1.) Be sure to display your data in an organized manner. Use a table or chart
- to help you show your results. Don't forget to label!
- 2.) Include enough data to prove or disprove your hypothesis.

#### **STEP 5: ANALYSIS/CONCLUSION**

- 1.) What happened during your experiment?
- 2.) Did your results support your hypothesis?
- 3.) Write a summary of what you learned during your experiment and address your results.
- 4.) Explain any unexpected results.
- 5.) Are your results reliable?
- 6.) Did you use complete sentences?

<sup>&</sup>lt;sup>1</sup> Source: <u>http://sciencespot.net/Media/indinvestgdIns.pdf</u>