## **Anglophone School District North**



## Grade 3 Science - Key Skills Assessment

School:

Teacher: \_\_\_\_\_

Part 1

**Multiple Choice** 

A community in New Brunswick is thinking about allowing a shopping mall to be built on an area that is currently a local park. The mayor suggests that a scientific investigation be conducted to determine the best option for the community.



# Which question would be appropriate for the community to use for their purpose?

- A. What will be the impact on Canadian Geese who live in the park?
- B. What adaptations do the animals use that live in the park?
- C. How much money can the community make if we build a shopping mall on the park?
- D. What effects will building a shopping mall have on all organisms in the park habitat?

Students are learning about the pitch of sound in science class. Pitch determines the strength of a sound.

Judy hits notes on the xylophone in the picture. She hits the "C" note and then the "D" note. She notices that the pitch of the "D" note is higher. Next, she hits the "E" note and notices that it is even higher than the "D" note.

The teacher asks the students in the class to make a prediction about which note will have the highest pitch.



#### Which prediction fits this pattern?

- A. The "A" note will have the highest pitch because it will be the last note to be struck
- B. The "E" note will have the highest pitch because it's the highest pitch struck so far
- C. The "F" note will have the highest pitch because it will be the next note to be struck
- D. The "G" note will have the highest pitch because it's the furthest along in the alphabet

Students are doing an experiment to test the right amount of water to grow a healthy plant. They had been growing Potatoes (container A) and Yellow Beans (container B & C).



The teacher told them the experiment was not fair. The teacher said they would have to start their experiment over and to *have controls to make it fair.* 

# What variable needs to be controlled (kept the same) to make this experiment a fair test of the right amount of water to grow a healthy plant?

- A. The students would have to use the same amount of water in each container
- B. The students would have to use the same type of seeds in each container
- C. The students would have to use a different type of soil in each container
- D. The students would have to use a different type of seeds in each container

At an Elementary School students are asked to take a survey about eye colour. They are asked to identify if their eye colour is more **Blue***ish*, **Green***ish*, or **Brown***ish*.

The principal compiled the results of the survey:

Eye Colour	Number of Students	
Blue <i>ish</i>	21	
Green <i>ish</i>	15	
Brown <i>ish</i>	60	

# Based on the data table, which of the following graphs best represents the data?

Α.



Β.



C.







The graph below show some average monthly air temperatures for a city in New Brunswick.



Based on the data pattern in the graph, what would the average air temperature probably have been in July?

- A. 14°C
- B. 17°C
- C. 23°C
- D. 31°C

A rubber ball was dropped from the same height onto five different surfaces. The height of the first bounce was measured and recorded. The graph shows the data.



### Based on the data, which of the following is the best conclusion?

- A. Rubber balls bounced the same on all surfaces.
- B. Rubber balls bounce higher on harder surfaces.
- C. All rubber balls bounce higher indoors than they do outdoors.
- D. Large rubber balls do not bounce as high as small rubber balls.

Part 2

**Constructed Response** 

### **Bouncing Ball Scenario**

We are going to conduct a small investigation using two different balls. I am going to drop each of the balls from the same height and we are going to measure how high each of the ball bounce. We will be bouncing each of the balls 3 times.

1. Write a question that could be used to explain what we will be investigating.

- 2. Write a prediction statement about what you think will happen in this investigation.
- 3. A What items are you testing?
- 3. B What will you be measuring?
- 3. C What do you need to control to make this a fair test?

#### Record The Data

Type of Ball	Trial 1	Trial 2	Trial 2
Ball 1			
Ball 2			

4. Graph the results - construct a bar graph that represents the data collected.

5. Based on the pattern of ball # 1, what would the height of ball # 1 in a fourth trial?

6. Based on the data, write a conclusion about what you learned.