EMS Science Skills Lab

Science 9

This lab has 12 stations.

Please read the instructions and complete the station activities.

Answer all station questions in this booklet.

Name _____ **Score** _____

Date _____

Period _____

1. Observations

1. Go to the szynalski website on the iPad. Record the range that you can here, from LOWEST to HIGHEST.

_____-_____Hz_

2. Describe **ONE** of the leaves at your station. Use only words.
(Anyone should be able to use your description to distinguish your leaf from the other samples at the station).

_____

_____

_____

_____

_____

_____

_____

_____

3. Box Observations:

_____

_____

_____

_____

_____

2. Making a Hypothesis

Example A: _____

_____

Example B: _____

_____

Example C: _____

_____

Example D: _____

_____

3. Estimating

1. Estimation of number of Corks: _____

2. How did you come up with your “guess - timation”?

_____

_____

4. Measuring

3. Voltage of one battery: _____Volts

4. Amperage of one battery: _____amps

5. Making Inferences

What I see (evidence)	What I know	My Inference
Ex. Empty water bottle	Water is a good thirst quencher.	The owner of this was probably thirsty.

6. Predicting

Object	Prediction MAGNETIC	Prediction NOT MAGNETIC	Test Results
"C" shaped object			
Aluminum foil ball			
Chain links			
Sea shell			
Rock			
Copper Wire			
Golden Penny			

7. Recording Info/Data

Trial	**Car 1 (seconds)**	**Car 2 (seconds)**	**Car 3 (seconds)**
1.			
2.			
3.			
Average			

Draw your diagram here in **pencil**, using a **ruler**. Labels should be written in pen, connected to your diagram by horizontal pencil lines, drawn with a ruler. Make sure your diagram has a **title.**

8. Making/Using Models

What type of cell is the model? _____

What structure do the following letters represent?

A._____

B._____

C._____

D._____

E._____

F._____

9. Classifying

Part 1:

1. On what basis did you arrange your items into **two** groups?

2. How many items did you have in each group?

Part 2:

1. On what basis did you arrange your items into **two** groups **this time**?

2. How many items did you have in each group?

3. Looking back at your two different arrangements, do you think that one was a better way to classify than the other? Explain.

Part 3:

1. On what basis did you arrange your items into **three** groups?

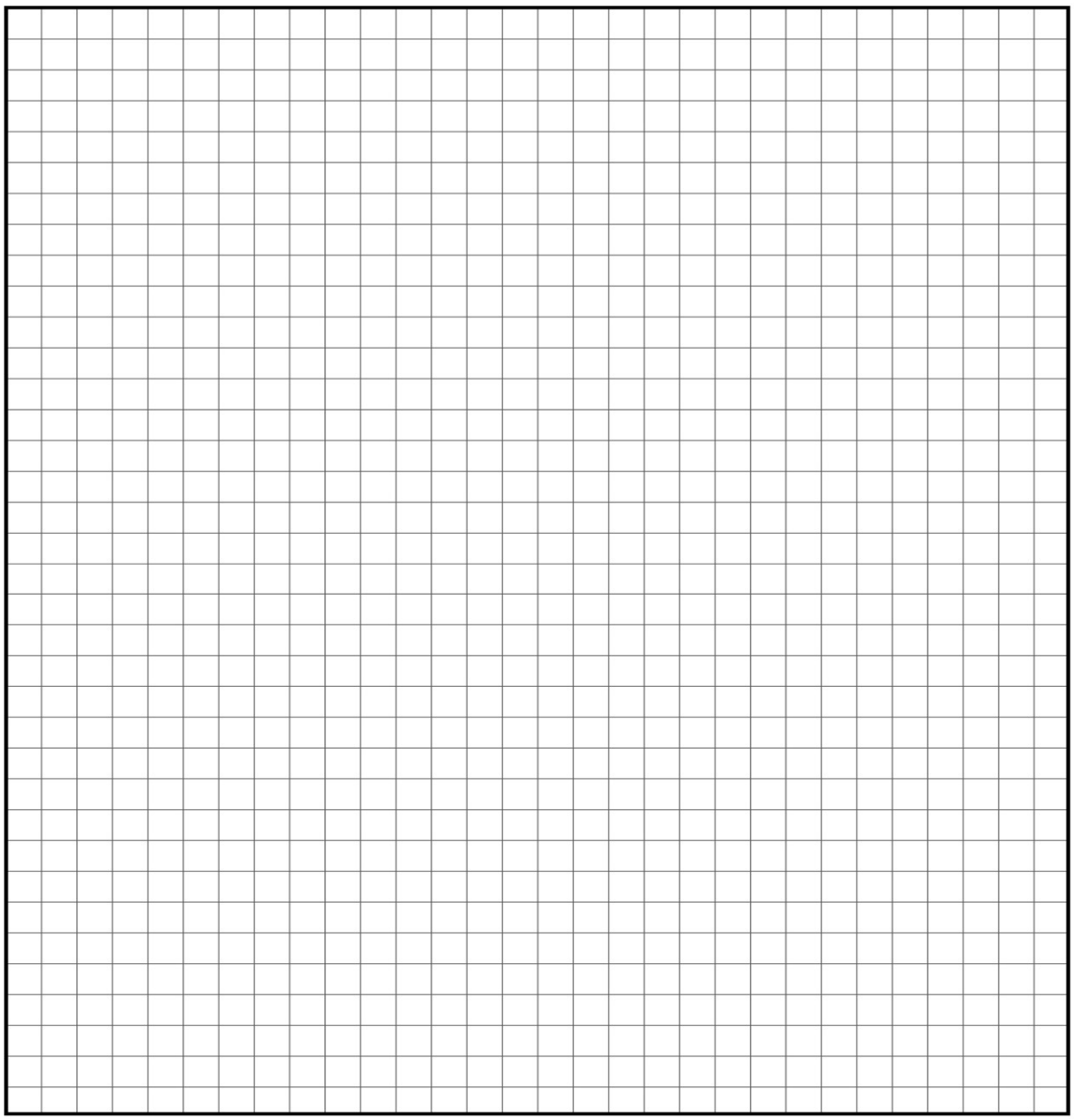
2. How many items did you have in each group?

3. Can you think of another way that you could have classified the items into three groups?

4. Why do you think scientists like to classify things?

10. Organizing Data

Make sure your graph has a **title** and that all sides (axies) are **labelled.**



11. Analyzing Data

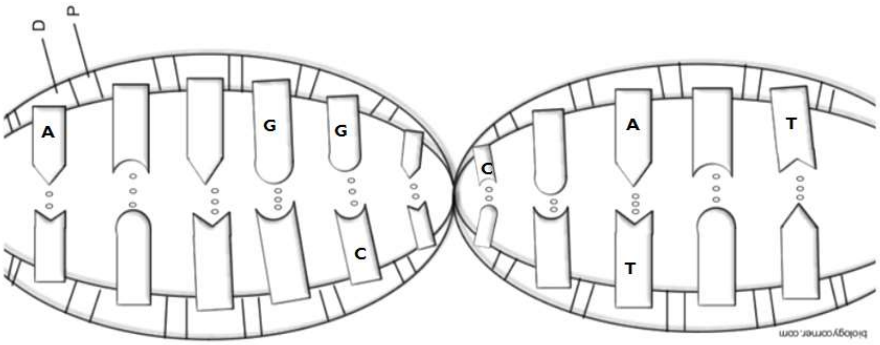
1. What do you notice when comparing the **vertical columns**? Which bases are similar? Which are different?

2. Add up the percentages across each **horizontal row**. What do you notice?

3. Based on the trends you noticed, fill in this table with possible percentage values:

Nitrogenous Bases (%)				
Source of DNA	**A**	**T**	**G**	**C**
Chicken DNA	28.8%			21.5%
Yeast DNA	30%		20%	
Frog DNA		17%		

4.



12. Drawing Conclusions

Part 1

i) _____ ii) _____ iii) _____ iv) _____ v) _____

Part 2

_____:

_____:

_____: