LAB REPORT PROTOCOL

4 WHAT SHOULD A LAB REPORT LOOK LIKE?

LAB REPORTS

- Lab reports have 5 basic parts:
  - 1. Problem
  - 2. Materials needed
  - 3. Procedure
  - 4. Results
  - 5. Conclusions

1. The Problem

- The problem is the question that is to be answered by doing the lab

- examples:
  - How much sugar is in a can of Coca-cola?
  - What is the pH level of the aquarium water?
  - What types of insects are found in a forest?

2. Materials Needed List

- This is a list of all materials that are needed to conduct the experiment or lab

- these should be in a numbered order like so:
  - 1. Magnifying glass
  - 2. pH test paper
  - 3. Net
  - 4. Graphic calculator

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3. Procedure

- The procedure is a numbered list of instructions to help you do the lab

- the procedures (or steps) should be numbered in the order in which they are to be done

3. Procedure

4 Here is an example of an acceptable procedure:

- 1. Tear a piece of pH testing strip off of the roll
- 2. Dip the pH testing strip into the water to be tested
- 3. Compare the color of the strip to the pH guides on the side of the test strip box
- 4. Record the tested pH value on your observation sheet *

3. Procedure

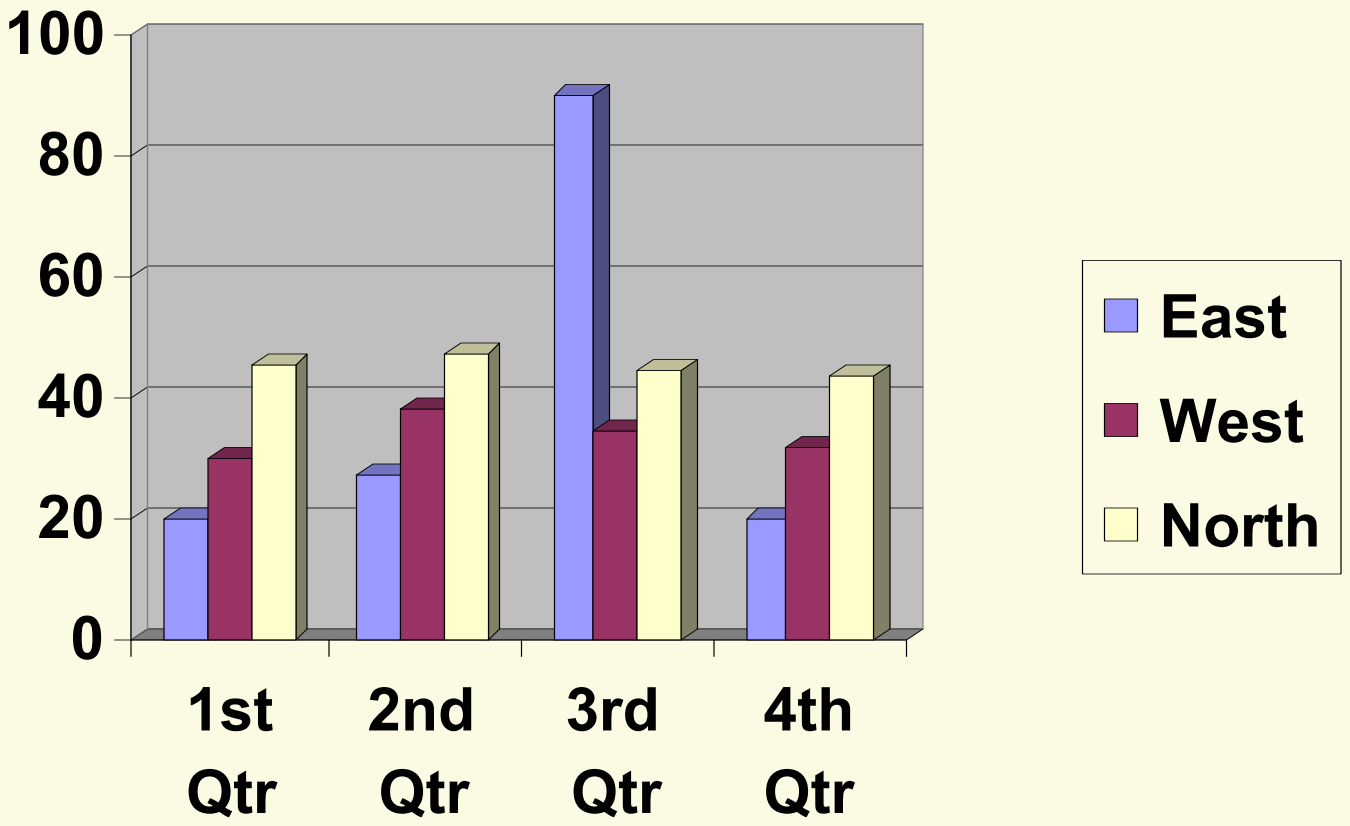
- Here is an example of an unacceptable procedure:
  - first take piece of pH paper
  - next put the pH paper into the water
  - look at the color of the pH test strip

- there are several things wrong with this...

4. The Results

- This part of the lab report is where you indicate the results of your experiment
- you can report your results in the form of a graph, chart, picture, or by writing a paragraph explaining the outcome of the lab
- this does not have to be numbered

Example of an acceptable graph



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4. The Results

- If you have a diagram that you have to label or if you draw you own diagram here are few rules for the diagrams:
  - 1. All labels should be printed in capital letters such as: A B C D E F G
  - 2. All lines drawn to specific areas on the diagram will be drawn by using a ruler or other straight edge

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4. The Results

- The following WILL NOT BE ACCEPTED on diagrams:
  - 1. Lower case letters or penmanship letters
  - 2. Wavy or sloppily drawn labeling lines

- No credit will be given for labels not done correctly! No exceptions or second chances!

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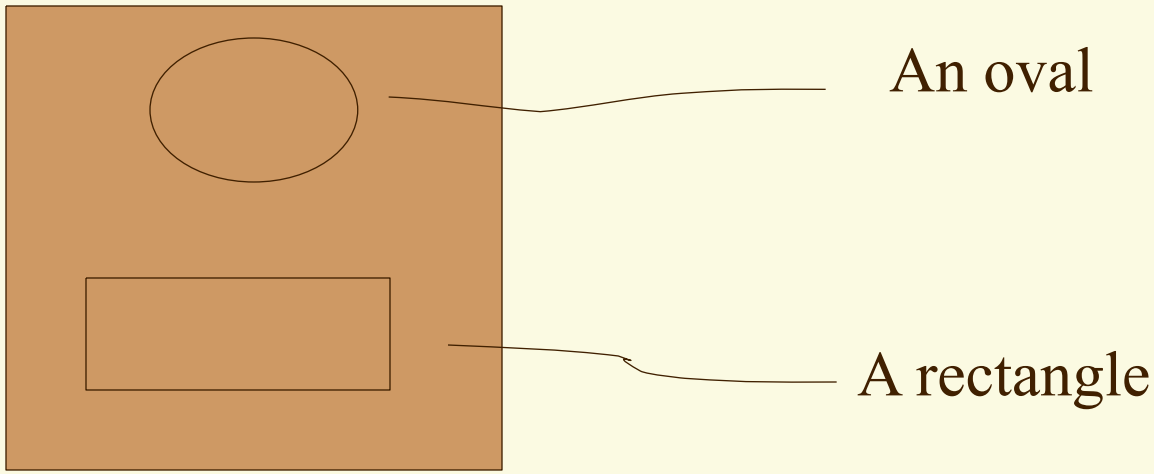
4. The Results

- The next two slides will contain acceptable and unacceptable diagrams and labels.

4. The Results

4 An unacceptable diagram:



Unacceptable because of wavy lines and lower case letters

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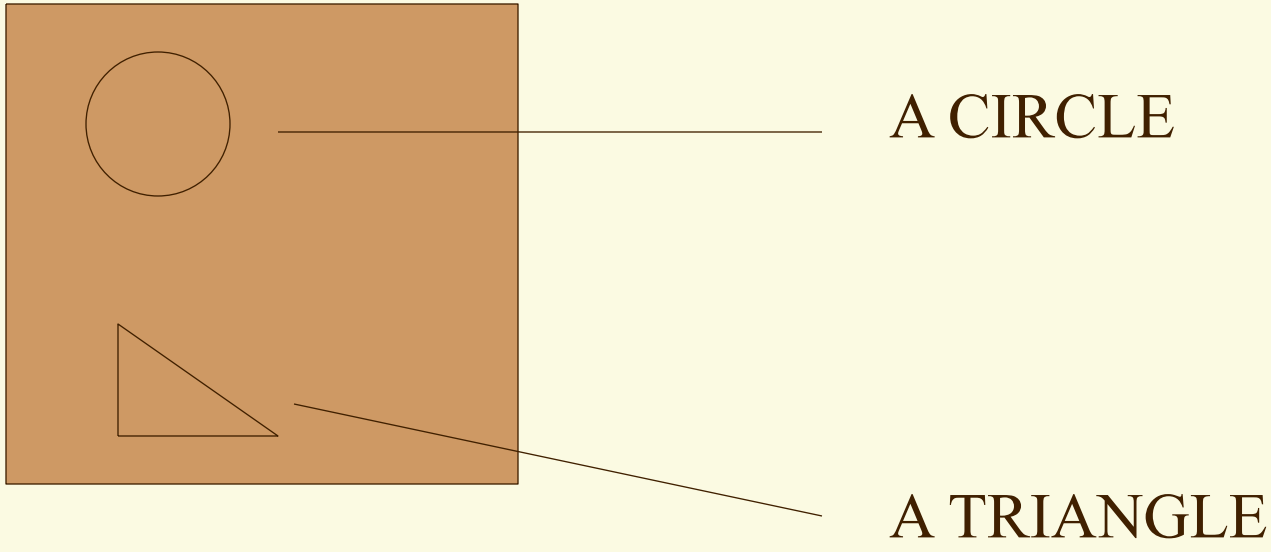
4. The Results

4 An acceptable diagram:



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The Conclusion

- This is the part of the lab that will answer the question that you proposed at the very beginning
- sometimes an experiment will give you a clear-cut answer…sometimes not
- the conclusion is the part of the lab in which you get to EXPLAIN your results…and compare them to the question you asked

Lab Report Guidelines

- All lab reports must be typed or computer generated

- All graphs, charts, etc. must be computer generated using Excel, Microsoft graphics, or some other form of graphic generating program…unless it is a diagram that you had to draw yourself

Lab Report Guidelines

- At the top of the lab report you must center these titles:

- Name of the class (Biology 1 or Biology 2)
- Title of the lab (given by instructor)
- Your name (given by your parents)
- Date (the due date)