

## **Science – Mr. Croft**

Snow Day 1 – Complete Metrics warm up

Snow Day 2 – Complete Plant vs. Animal Cells

Snow Day 3 – Mitosis and Meiosis Crossword

Snow Day 4 – Scientific Method Warm Up

Snow Day 5 – Cell Theory Warm Up

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Metrics Warm-Up

Define the following key terms in your own words.

Metric System - \_\_\_\_\_

Meter - \_\_\_\_\_

Gram - \_\_\_\_\_

Liter - \_\_\_\_\_

Second - \_\_\_\_\_

Mark "T" for True and "F" for False for the following statements.

1. \_\_\_\_\_ A centimeter is greater than a millimeter.
2. \_\_\_\_\_ 30 milliliters is equal to 3 liters.
3. \_\_\_\_\_ The metric system is based on powers of 10.
4. \_\_\_\_\_ The metric volume of a liquid is measured in milliliters.
5. \_\_\_\_\_ The metric mass of an object is measured in pounds.
6. \_\_\_\_\_ The prefix "kilo" means thousand.
7. \_\_\_\_\_ A kilometer is longer than a mile.
8. \_\_\_\_\_ The prefix "centi" means one-thousandth.
9. \_\_\_\_\_ A centigram is equal to 10 grams.
10. \_\_\_\_\_ A meter is longer than a yard.
11. \_\_\_\_\_ Milliliters are the metric unit for mass.
12. \_\_\_\_\_ The prefix "milli" means one-thousandth.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Plant vs. Animal Cells

## Warm-Up

Describe each of the following key vocabulary terms using your own words.

Cell - \_\_\_\_\_

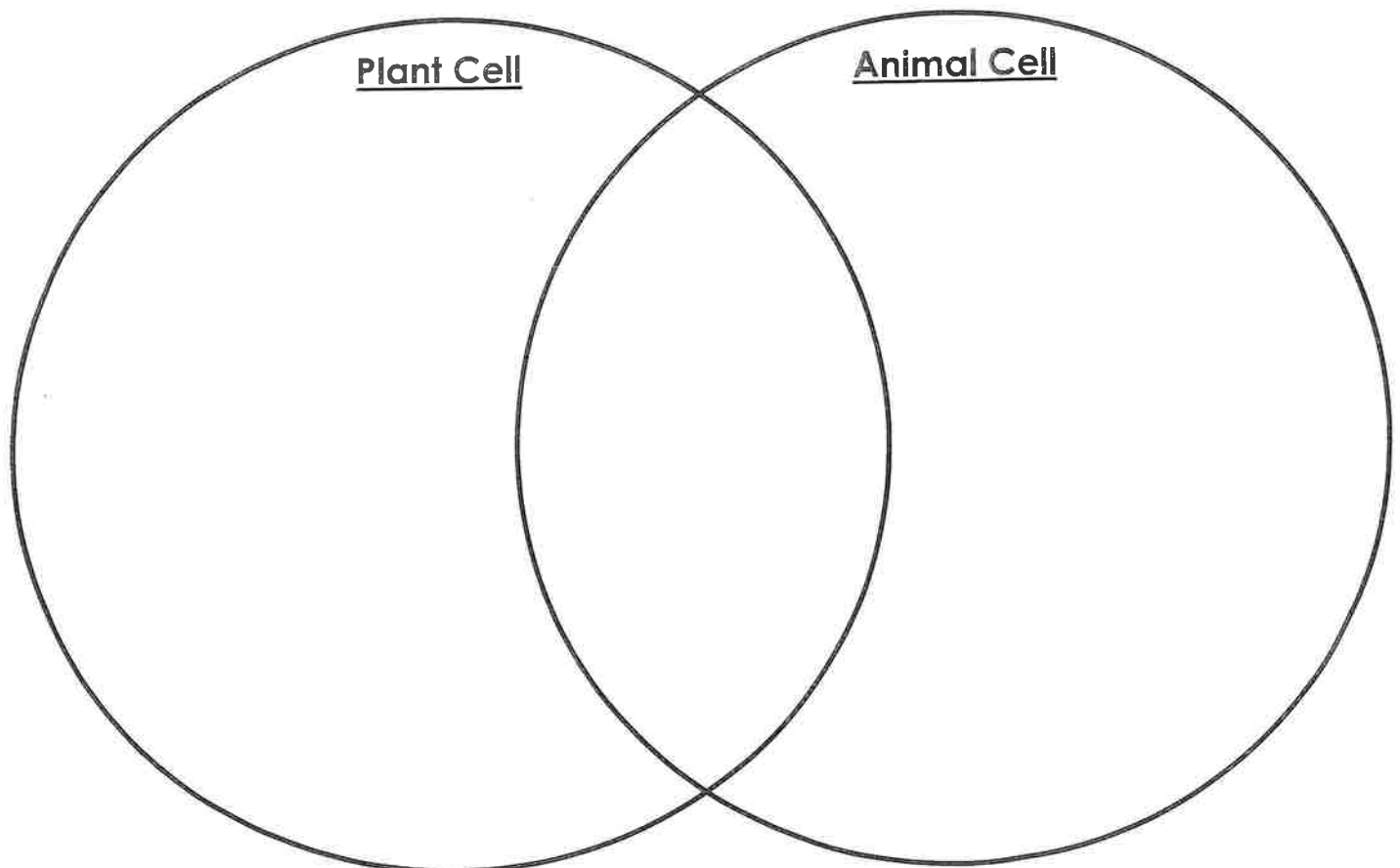
Organelle - \_\_\_\_\_

Animal - \_\_\_\_\_

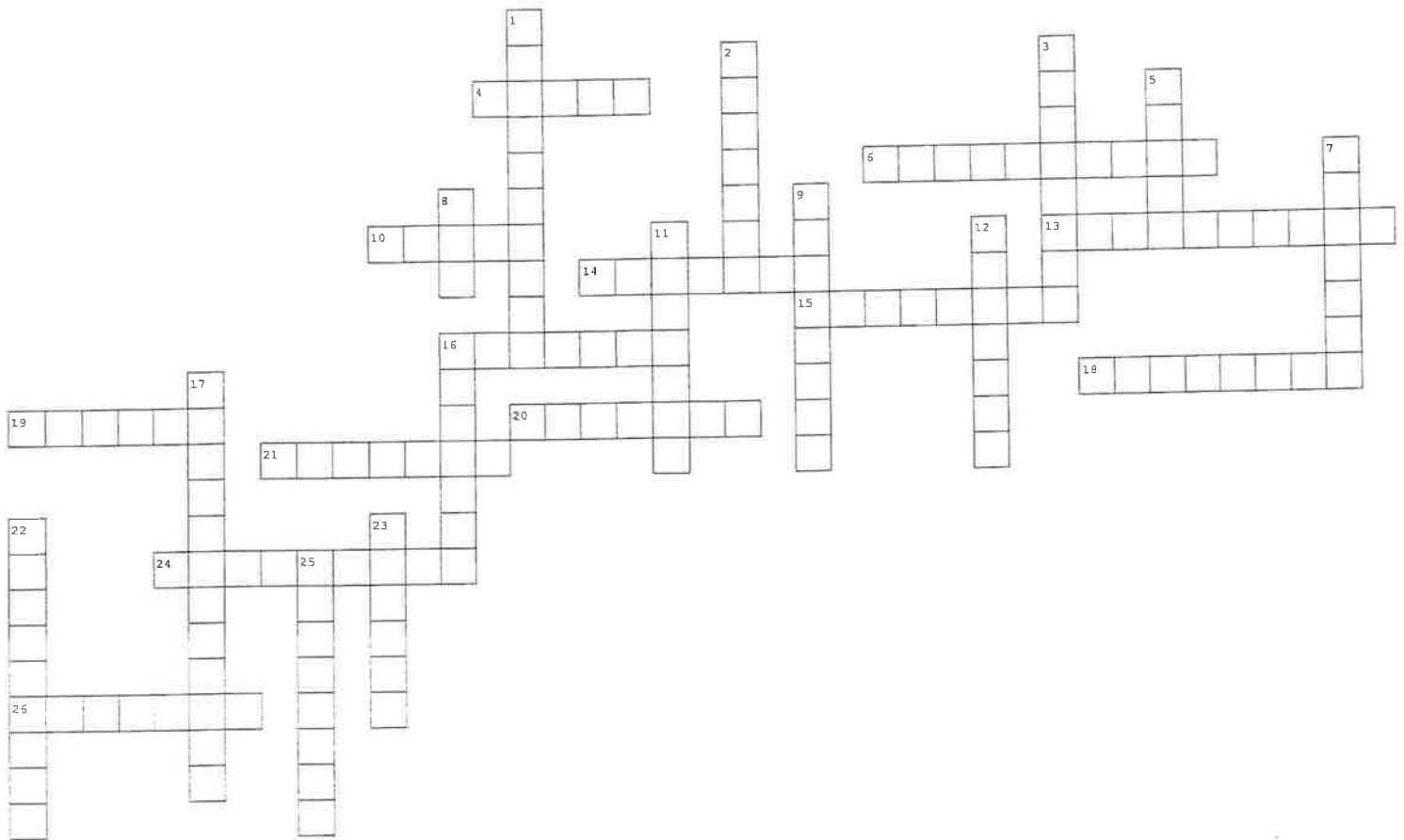
Plant - \_\_\_\_\_

Photosynthesis - \_\_\_\_\_

Compare and contrast Plant and Animal cells using the Venn Diagram below.



# Mitosis and Meiosis Crossword



## Across

4. One of the creators of the 1st DNA model.
6. Holds chromosomes together.
10. A section of DNA on chromosomes that codes for traits.
13. Nucleus can be seen, chromosomes duplicating themselves.
14. When the nucleus divides to make sex cells.
15. Strands of chromosomes pulled apart and move to opposite ends of each other.
16. A type of reproduction where new organisms are produced by one parent.
18. Any permanent change in the DNA sequence.
19. When egg and sperm combine (start of life).
20. New organism grows from the parent.
21. 1 of the 4 nitrogen bases of DNA.
24. The cytoplasm of both cells begins to separate.
26. Sex Cells that has 23 chromosomes.

## Down

1. Structure in the nucleus that contains DNA.
2. When the nucleus of a cell divides to form 2 identical cells.
3. 1 of the 4 nitrogen bases of DNA.
5. How many steps are involved with DNA copying itself?
7. Division of organism into 2 equal parts.
8. Deoxyribonucleic acid, it has a double helix shape.
9. \_\_\_\_\_ Franklin was the first person to discover DNA.
11. Body cells that has 46 chromosomes.
12. 1 of the 4 nitrogen bases of DNA.
16. 1 of the 4 nitrogen bases of DNA.
17. Making new body parts.
22. Chromosome pairs line up across center and attach to spindle fibers.
23. One of the creators of the 1st DNA model.
25. Chromosome pairs are visible, centrioles move to opposite ends.

# Scientific Method Warm-Up

1

Define the following key terms in your own words.

Scientific Method – a way of problem solving by making a hypothesis and testing it

Problem – the question in an experiment that is being tested

Hypothesis – an educated guess or statement about what is going to happen

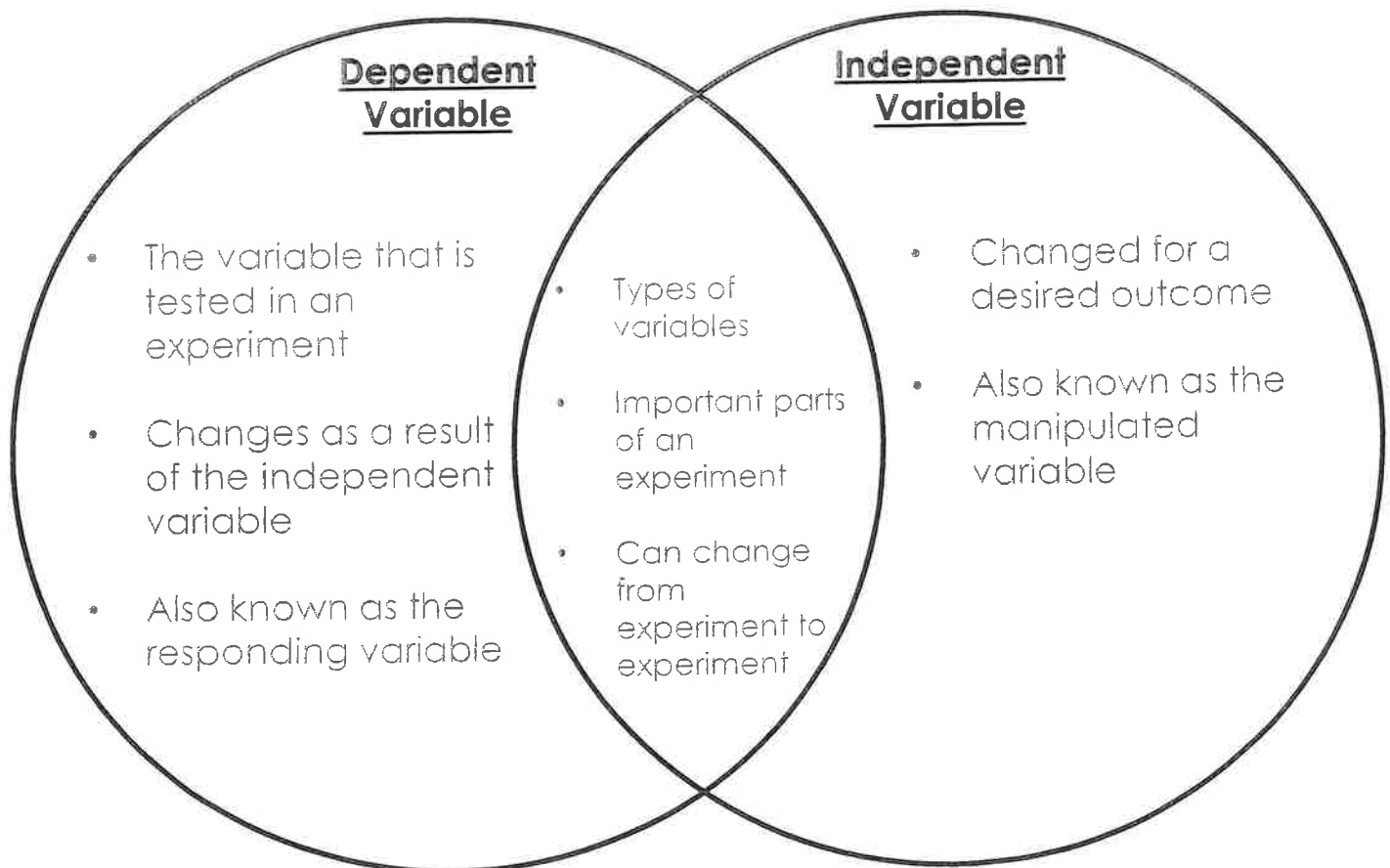
Procedure – a set of steps to follow in order during an experiment

Variable – a factor in an experiment that can exist in different amounts

Conclusion – the final summary of the data and results

2

Compare and contrast Dependent and Independent Variables using the Venn Diagram below.



Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Cell Theory and Levels of Organization Warm-Up

1. \_\_\_\_\_

Describe the following scientist's contributions to Cell Theory using your own words.

Robert Hooke - \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Francesco Redi - \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Anton van Leeuwenhoek - \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. \_\_\_\_\_

Briefly list and describe the three major parts of Cell Theory.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

3. \_\_\_\_\_

Match the following vocabulary terms to the correct definition.

- |                       |   |
|-----------------------|---|
| 1. _____ Cell         | A. groups of organs working together                      |
| 2. _____ Tissue       | B. groups of similar tissues performing the same function |
| 3. _____ Organ        | C. the most basic unit of life                            |
| 4. _____ Organ System | D. groups of organ systems working together               |
| 5. _____ Organism     | E. groups of similar cells performing the same function   |