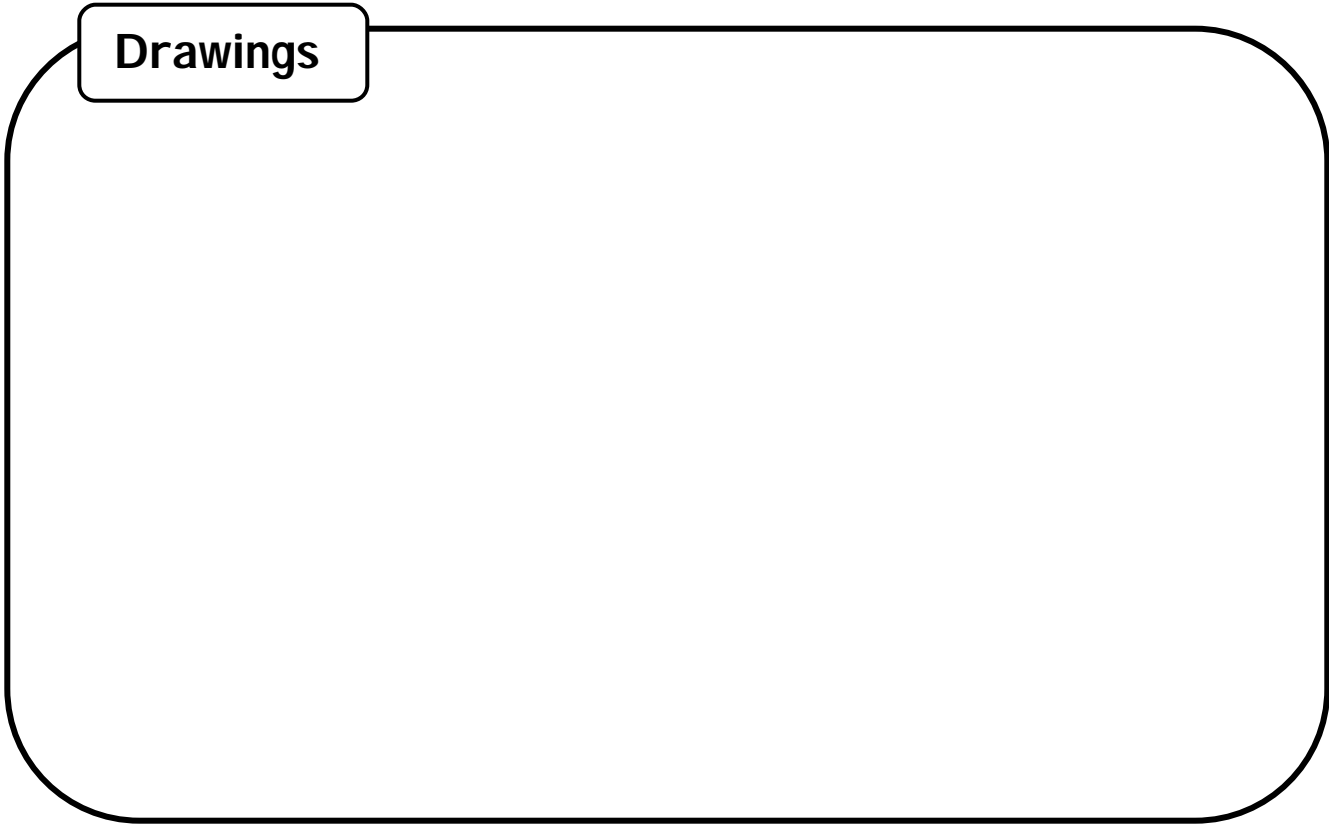


Drawings



Reading Notes

Definitions

Date _____

Experiment Name _____

**What have you learned about this subject?
(observation/research)**

**What question are you trying to answer?
(question)**

**What things do you need?
(materials)**

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

What will you do to answer the question? (experiment/test)

What do you think will happen? (hypothesis/prediction)

What happened? (results)

Why do you think this happened? (conclusion)

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CHEMISTRY II: ATOMS TO ALLOYS, AND BEYOND!

The following is a complete list of items that will be used for the required experiments over the entire 36-week course. This list includes many items that are common in most homes. The list does not include the items that are provided in *The Young Scientists Club* kits.

Master Supply List	
Item needed:	Week(s) used:
Food coloring	1, 3, 23, 29, 30, 32
Balloons	2, 3, 4
Vanilla (or almond, or lemon) extract	2
Masking tape	3
Sugar	3, 7, 25
Bottles of soda (2, unopened)	3
Empty soda bottle	4
Felt pen	3
Baking soda	4, 24, 26, 27
White vinegar	4, 23, 24, 26, 27
Plastic pail	4
Meter stick	4
Grocery bags	4
String	4
Paper cups	5, 32
Cooking oil (vegetable)	5, 29, 30
Wax paper	5
Rubber band (approx. ¼" wide)	7
Yeast	7
Paper towels	23
Apple cider vinegar	23
Full juice box with straw	24
Needle or pin	24
Matches	24
Red cabbage	26, 27
Cola (canned)	26, 27
Empty cola can	28
Lemon (or lemon juice)	26, 27
Pennies	27
Salt	27, 29
Liquid dishwashing soap	30
Cornstarch	32
Acetone (nail polish remover)	32

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CHEMISTRY II: ATOMS TO ALLOYS, AND BEYOND!

Week 1				
	Day 1	Day 2	Day 3	Day 4
Usborne Science Encyclopedia		Pp. 10-11		
Usborne Mysteries and Marvels of Science	Pp. 6-7			
Adventures with Atoms and Molecules			Pp. 1-5 (Intro.)	Pp. 6-7 Experiment 1
Optional: Internet Links	Mysteries and Marvels pg. 7	Science Encyclopedia pg. 11		

Supply List: food coloring

Assignments:

Day 1 – read the assigned pages and describe and/or sketch what you learned in your science notebook.

Day 2 – draw an atom (like the one on the bottom left corner of page 10 of the Science Encyclopedia) in your science notebook. Label the **nucleus**, **protons**, **neutrons**, and the **electron shells**. Color the different parts and label the correct electrical charge of each subatomic particle (see pg. 11 in the Science Encyclopedia).

Day 3 – Read the assigned pages and describe and/or sketch what you learned in your science notebook. Define **atom**, **subatomic**, **chemical reaction**, and **molecule** (see pp. 418-435 in the Science Encyclopedia).

Day 4 – complete the experiment and record your observations in your lab notebook.