

Dougherty Valley HS Chemistry
“Quick Lab”
Balancing Equations Using Models

Name:
Date:
Period:

Directions: Use gumdrops and toothpicks to create models of the equations to help you balance and predict products. You may want to draw Lewis Structures to help you figure out which atom is bonded to which. Draw a colored picture of your “Gumdrop Equation.” Assign each type of atom a specific color for each equation (example: Hydrogen atoms = orange, Chlorine atoms = green)

HINT: Don’t forget about balancing your charges to make neutral molecules, which elements form diatomic molecules, and H₂O can be written as HOH with H⁺ and OH⁻

Worth 50 Lab Points – Graded for Accuracy

- Put name date and period on paper (1pt) _____ x 1/3pt each = _____pt
- Fill out each box correctly (35pts) _____ x 1 pt each = _____pts
- Draw your gumdrop equations nicely (5pt) _____ x 1 pt each = _____pts
- “On Task” & “Clean Up” points (9pts) _____ = _____pts

TOTAL POINTS = _____ / 50 points

GROUP ONE		Type of Reactions:
a.	<i>Balance the equation</i>	H ₂ + Cl ₂ → HCl
Picture of gumdrop equation:		
b.	<i>Predict the products and then balance</i>	Mg + O ₂ →
Picture of gumdrop equation:		
c.	<i>Predict the products and then balance</i>	BaO + H ₂ O →
Picture of gumdrop equation:		
GROUP TWO		Type of Reactions
a.	<i>Balance the equation</i>	H ₂ CO ₃ → CO ₂ + H ₂ O
Picture of gumdrop equation:		
b.	<i>Balance the equation</i>	KClO ₃ → KCl + O ₂
Picture of gumdrop equation:		
c.	<i>Predict the products and then balance</i>	H ₂ O →
Picture of gumdrop equation:		

GROUP THREE		Type of Reactions:
a.	Predict the products and then balance	Ca + HOH →
Picture of gumdrop equation:		
b.	Balance the equation	KI + Br ₂ → KBr + I ₂
Picture of gumdrop equation:		
c.	Predict the products and then balance	Zn + HCl →
Picture of gumdrop equation:		
GROUP FOUR		Type of Reactions:
a.	Balance the equation	AgNO ₃ + NaCl → AgCl + NaNO ₃
Picture of gumdrop equation:		
b.	Predict the products and then balance	FeS + HCl →
Picture of gumdrop equation:		
c.	Predict the products and then balance	H ₂ SO ₄ + KOH →
Picture of gumdrop equation:		
GROUP FIVE		Type of Reactions:
a.	Balance the equation	H ₂ + Cl ₂ → HCl
Picture of gumdrop equation:		
b.	Predict the products and then balance	____Mg + ____O ₂ → ____MgO
Picture of gumdrop equation:		
c.	Predict the products and then balance	BaO + H ₂ O → _____
Picture of gumdrop equation:		

Put in "Labs" section of your notebook