ALBERTA DISTANCE LEARNING CENTRE

Science 10 Online SCN1270

Unit B: Section 3
Assignment B3: Part B

Student's Questions and Comments	FOR STUDENT USE ONLY
	Student ID:
L	

FOR ADLC USE ONLY
Assigned to:
Marked by:
Date received:

	Total	Total Possible
Lesson 12		14
Lesson 13		7
TOTAL		21

Teacher's Comments:	
	Teacher's Signature
	ieacher 5 Signature

CANADIAN CATALOGUING IN PUBLICATION DATA

SCN1270 Science 10 Unit B: Section 3 Assignment B3: Part B

Copyright 2018 Alberta Distance Learning Centre, a subsidiary of The Board of Trustees of Pembina Hills Regional Division No. 7. All rights reserved.

4601 - 63 Avenue Barrhead, Alberta Canada T7N 1P4

All rights reserved. No part of this courseware may be reproduced, stored in a retrieval system, or transmitted in any form or by any means – electronic, mechanical, photocopying, recording, or otherwise – without written permission from Alberta Distance Learning Centre.

Printed in Canada.

Alberta Distance Learning Centre has made every effort to acknowledge original sources and to comply with copyright law. If errors or omissions are noted, please contact Alberta Distance Learning Centre so that necessary amendments can be made.

For Users of Alberta Distance Learning Centre Courseware

Much time and effort is involved in preparing learning materials and activities that meet curricular expectations as determined by Alberta Education. We ask that you respect our work by honouring copyright regulations.



Alberta Distance Learning Centre website:

http://www.adlc.ca

The Internet can be a valuable source of information. However, because publishing to the Internet is neither controlled nor censored, some content may be inaccurate or inappropriate. Students are encouraged to evaluate websites for validity and to consult multiple sources.



Unit B: Section 3 Assignment B3: Part B

Unit B: Section 3: Lessons 10 to 13

Energy and Matter in Chemical Change

Assignment B3: Part B

Instructions:

Complete the following assignment. This assignment will count toward your final mark in this course, and you will be allowed to submit this assignment only once. Make sure you answer all the questions. Blank or incomplete assignments will not be accepted for marks.

Remember, the number of marks each question is worth gives you a hint about how detailed you need to make your answers. Calculation questions require you to show all your work. This includes formula, substitution, and answer with correct significant digits and units.

Your online course will provide you with instructions on how to submit this assignment when it is time to submit it.

ADLC | Science 10

Total 14

Lesson 12: Writing Chemical Equations



1. Balance the following chemical reaction equations using the lowest whole number coefficients.

a.
$$\underline{\hspace{1cm}} O_2(g) \longrightarrow \underline{\hspace{1cm}} Na_2O(s)$$

b.
$$NCl_3(I) \longrightarrow N_2(g) + Cl_2(g)$$

c.
$$C_2H_4(g) + CO_2(g) \longrightarrow CO_2(g) + H_2O(g)$$

d. ____TiCl₄(aq) + ____H₂O(l)
$$\longrightarrow$$
 ____TiO₂(s) + ____HCl(aq)

- 4
- 2. Write a word equation and a balanced chemical reaction equation for when aqueous magnesium chloride reacts with liquid bromine.

(5)

3. Predict the products and write a word equation and a balanced chemical reaction equation for when aqueous lithium sulfate reacts with aqueous calcium iodide.

2 ADLC | Science 10

Unit B: Section 3 Assignment B3: Part B

Total

7

Lesson 13: The Mole



4. What is the amount in moles of a 61 g sample of zinc fluoride, ZnF₂? Show all your work.



5. What is the mass in grams of a 2.10 mol sample of litium nitride, Li₃N? Show all your work.

ADLC | Science 10



adlc.ca 1-866-774-5333 info@adlc.ca Alberta Distance Learning Centre Box 4000 4601 - 63 Avenue Barrhead, Alberta T7N 1P4

New September 2018