Name	(print)	Name		_(sign)
Please show work for partial creditave no partial credit. Please wit. (1 pts print AND sign exam) Part I MULTIPLE CHOICE. Che Partial Credit for MC) (3 pts per centre)	rite anything you want g RK EVA CN e cose the one alternative	raded legibly. If I cannot red dit exam that best completes the state	ead your work, I obv	iously cannot gr
1) Solutions are	1			1)
A) homogeneous mix C) non uniform mixt		B) none of the above D) heterogeneous mixtu	ıre	
Diamond and graphite: A) have the same cry C) similar in physical	stalline structure	B) the same element D) bonded in the same	way	2)
3) The metric prefix that A) milli	t means one-hundredth B) centi	n (1/100) is C) kilo	D) mega	3)
4) An example of an eleme A) NO ₂	ent which exists normally B) N ₂	in its most stable form as diat C) CO	tomic molecules is:	4)
5) Expressed in standard significant figures, the	l powers-of-10 notation ne number 0.00023648	n and rounded to four is		5)
A) 2.365 × 104	B) 2.365 × 10-4.	C) 2.364 × 10 ³ .	D) 236.4 × 10-6.	
Density describes A) weight per mass C) volume per liter		B) mass per unit volume D) length per unit time.	÷	6)
7) Rounding the number		ficant figures		7)
A) gives 201	B) gives 200.601	C) gives 199	D) gives 200.	·

Part II: Short Answers (48 pts) Show work on all questions for partial and full credit even on questions which do not specify. 1. Metric conversions 1 kilograms = grams (4 pts) 2. Significant Figures: (4 pts) How many significant figures is in the following number? 2.30002 3 Identify the following as (A) element (B) compound (by filling in the blank with the letters. (6 pts, 3 pts each) In Cl₃ 4. Fill in the blank with one of the letters. (A) heterogeneous mixture (B) homogeneous mixture Wet sand salty sea water (no sand) 5. Match the following with the definition or example below. (8 pts, 2 pts each) a. solute b. solvent c. solution d. saturated solution ____ (1) The substance which you have less of in a solution.. (2) The substance which you have more of in a solution. (3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker. (4) Homogeneous mixture Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each) 6. (A) period (B) group (C) main group (representative elements) (D) transition metal elements (E) lanthanide/actinide Dr. Hahn Physical Science Lecture

Exam I

Fall 2018

		ne following list of che pt each)	emical formula	as, circle all w	hich are covaler	nt compound	s (8 pts
K Cl	CO_2	Sr_3P_2	MgF_2	SO_2	Li ₂ O	CCl ₄	CaCl ₂
8. pts)	Name the b	inary compound show	n. Ba F ₂ g	iven the name	of the elements	(barium, flu	orine) (4
_	ons which do	Answers (31 pts) Shoot specify. Remem	ber "attempt"	-	or partial and ful	l credit even	on
1.	Convert the f	following. Show work.	(15 pts)				
Irom	18.22 pounds	to milligrams (453.6 gra	ims = 1 pound	, 100 centigram	is = 1 gram, 1000	milligram =	I gram)
2.	Complete the	following for the elem-	ent symbols N	a (16 pts, 2 pt	s each)		
	a [(metal) or	(nonmetal)] (circle one)					
	b. What	is the atomic number?	c.	What is the ato	omic mass ?		
		many protons ?					
		is the group number?					
		is the period number?		·			
	Dr. Hahn	Physical Science L	ecture Exar	mi Fall 2018	9am Form A		page 3

Name	(print) Name				(sign)
have no pa	w work for partial credit on artial credit. Please write rint AND sign exam) · OY	anything you want g		read your work, I obv	riously cannot gr
	ULTIPLE CHOICE. Choose edit for MC) (3 pts per ques	e the one alternative	that best completes the sta		
1)	The metric prefix that me	eans one-hundredth	n (1/100) is		1)
	A) mega	B) milli	C) centi	D) kilo	
2)	Diamond and graphite are: A) have the same crystall C) bonded in the same w		B) the same element D) similar in physica		2)
3)	Expressed in standard posignificant figures, the n				3)
	A) 2.364×10^3 .	B) 2.365 × 10 ⁴	C) 236.4 × 10 ⁻⁶ .	D) 2.365 × 10 ⁻⁴ .	
4)	Density describes A) volume per liter C) mass per unit volume		B) weight per mass D) length per unit tim	e.	4)
5)	Solutions are				5)
	A) non uniform mixture C) none of the above		B) homogeneous mix D) heterogeneous mix		,
6)	Rounding the number 20	0.601 to three sign	ificant figures		6)
	A) gives 201	B) gives 200.601	C) gives 199	D) gives 200.	
7) .	An example of an element v A) P ₄	vhich exists normally B) CO	in its most stable form as c	diatomic molecules is:	7)

Short Answers (48 pts) Show work on all questions for partial and full credit even on questions which do not specify. centiliter = one Liter (4 pts) 1. Metric conversions Significant Figures: (4 pts) 2. How many significant figures is in the following numbers? Identify the following as (A) element (B) compound (by filling in the blank with the letters. (6 pts, 3 pts 3 each) $C O_2$ CFill in the blank with one of the letters. (A) heterogeneous mixture (B) homogeneous mixture 4. Solid salt mixed with sold sugar salt and sugar dissolved in water _____ 5. Match the following with the definition or example below. (8 pts, 2 pts each) a. solution b. saturated solution c. solute ____ d. solvent (1) The substance which you have less of in a solution.. (2) The substance which you have more of in a solution. (3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker. (4) Homogeneous mixture 6. Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each) (A) period (B) group (C) main group (representative elements) (D) transition metal elements (E) lanthanide/actinide

Fall 2018

Exam I

9am

Form B

Part II:

Dr. Hahn

Physical Science Lecture

	7. Given the following list of chemical formulas, circle all which are obtainn (ionic) compounds (8 pts total, 1 pt each)								
SO_2		Li ₂ O	CCl ₄	CaCl ₂	K Cl		CO ₂	Sr_3P_2	MgF_2
8.	Nar	ne the binary com	pound sh	own. Ca	a I ₂ giver	n the nam	ne of the eler	ments (calcium,	iodine) (4 pts)
Part III: Long Answers (31 pts) Show work on all questions for partial and full credit even on questions which do not specify. Remember "attempt" points.									
1. Convert the following. Show work. (15 pts)									
from 72.5 meters to feet (12 inches = 1 foot, $2.54 \text{ cm} = 1$ inch, $100 \text{ cm} = 1$ meter)									
2.	Con	aplete the following	g for the el	lement sym	bols <u>F</u>	(16 pts, 2	pts each)		
	a [(1	netal) or (nonmetal)] (circle o	one) (answ	er the follo	owing for	the element g	given).	
	b.	What is the ato	mic numbe	er ?	c. W	/hat is the	atomic mass	?	
	b.	How many pro	tons ?	How	many tota	ıl electrons	s (for a neutra	al atom)?	
	c.	What is the gro	oup number	r?	_ d. H	Iow many	valence elect	rons?	
	e.	What is the pe	riod numb	er ?	_				

Exam! Fall 2018 9am Form B

Physical Science Lecture

Dr. Hahn

Exam	I Physical Science (PSC 102) Form A 9/12/18W 11 A	A am MWF Dr. Hahn	Exam #	
Name		(print)	Name		_(sign)
have r grade Part I	show work for partial creding partial credit. Please wit. (1 pts print AND sign example CHOICE. Choice Choi	rite anything you want gra am) CX — C oose the one alternative t	aded legibly. If I cannot	read your work, 1 obv	iously cannot
	Expressed in standard significant figures, the	d powers-of-10 notation ne number 0.00023648			1)
	A) 2.365 × 10 ⁴	B) 2.365 × 10 ⁻⁴ .	C) 2.364 × 10 ³ .	D) 236.4 × 10 ⁻⁶ .	
	2) An example of an element A) N ₂	ent which exists normally B) ${ m P_4}$	in its most stable form as o C) CO	diatomic molecules is: D) NO ₂	2)
	3) The metric prefix that	t means one-hundredth	(1/100) is		3)
	A) milli	B) kilo	C) centi	D) mega	
	Diamond and graphite A) have the same cry C) bonded in the same	stalline structure	B) the same element D) similar in physica		4)
	5) Rounding the number A) gives 201	er 200.601 to three signi B) gives 200.	ficant figures C) gives 200.601	D) gives 199	5)
	Solutions are A) homogeneous mi C) heterogeneous mi		B) none of the above D) non uniform mixt		6)
	7) Density describes A) volume per liter C) length per unit tin	ne.	B) weight per mass D) mass per unit volu	ume	7)

Short Answers (48 pts) Show work on all questions for partial and full credit even on Part II: questions which do not specify. 1. Metric conversions ____ milligrams = 1 gram. (4 pts) 2. Significant Figures: (4 pts) How many significant figures is in the following numbers? 2.002 Identify the following as (A) element (B) compound (by filling in the blank with the letters. (6 pts, 3 pts 3 each) SO₂ _____ S ____ Fill in the blank with one of the letters. (A) heterogeneous mixture (B) homogeneous mixture 4. coffee with sugar and cream _____ Iron filing mixed with sand 5. Match the following with the definition or example below. (8 pts, 2 pts each) a. solvent b. solution c. solute d. saturated solution ____ (1) The substance which you have less of in a solution.. (2) The substance which you have more of in a solution. (3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker. (4) Homogeneous mixture 6. Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each) (A) period (B) group (C) main group (representative elements) (D) transition metal elements (E) lanthanide/actinide

	7.	Given the follopts total, 1 pt		hemical formu	las, circle all w	hich are dø l/ble r	nt (ionic) cor Lypo	npounds (8
Sr ₃ P ₂		MgF_2	SO_2	K Cl	CO_2	Li ₂ O	CCl ₄	CaCl ₂
8. chlorin			ompound sho	wn. K Cl	given the name	e of the element	s (potassium	l ₂
Part I		Long Answe				or partial and ful	l credit even	on
1.	Co	nvert the followi	ng. Show wor	k. (15 pts)				
from 2	5.7 c	cups to milliLiter	(4 cups = 1 qu	art, 1 liter = 1.0	6 quart, 1000 mL	. = 1 Liter)		
		· ·						
2.	Со	mplete the follow	wing for the el	ement symbols	<u>Ca</u> (16 pts,	2 pts each)		
	a [(metal) or (nonm	etal)] (circle o	one) (answer the	following for th	e element given).		
	b.		,	, ,	_	omic mass ?		
	b.					for a neutral aton		
	c.	What is the	group number	·? d.	How many va	alence electrons?)	
	e.		period numbe		·			

Physical Science Lecture Exam I Fall 2018 11am Form A

Dr. Hahn

Exam	I Physical Science (PSC 102	2) Form B 9/12/18W 11	am MWF Dr. Hahn	Exam #				
Name	me(print) Name							
have 1	e show work for partial cred no partial credit. Please w pts print AND sign exam)	rite anything you want gi	aded legibly. If I cannot	read your work, I ob	iple choice viously ca	e questi nnot gr		
Part I	MULTIPLE CHOICE. Ch Il Credit for MC) (3 pts per	noose the one alternative			question	. (No		
	1) Density describes				1)	· 		
	A) mass per unit vol C) weight per mass	ume	B) length per unit tim D) volume per liter	ie.				
	2) An example of an elem	ent which exists normally	in its most stable form as o	diatomic molecules is:	2)			
	A) N ₂	B) NO ₂	C) P ₄	D) CO	,			
	3) Diamond and graphite	are:			3)			
	A) bonded in the sar		B) the same element					
	C) have the same cry		D) similar in physica	l properties				
	4) Rounding the number	er 200.601 to three sign	ificant figures		4)			
	A) gives 200.	B) gives 201	C) gives 200.601	D) gives 199				
	5) The metric prefix that	at means one-hundredth	ı (1/100) is		5)			
	A) kilo	B) mega	C) centi	D) milli				
	6) Expressed in standar significant figures, t	rd powers-of-10 notation the number 0.00023648			6) _			
	A) 2.364×10^3 .	B) 2.365 × 10 ⁴	C) 2.365 × 10-4.	D) 236.4 × 10 ⁻⁶ .				
	7) Solutions are				7) _			
	A) none of the above	2	B) non uniform mixt	ture				
	C) homogeneous mi	xtures	D) heterogeneous mixture					

Short Answers (48 pts) Show work on all questions for partial and full credit even on Part II: questions which do not specify. decimeter = one meter (4 pts) 1. Metric conversions Significant Figures: (4 pts) 2. How many significant figures is in the following numbers? 782.03 Identify the following as (A) element (B) compound (by filling in the blank with the letters. (6 pts, 3 pts each) PCl₃ Fill in the blank with one of the letters. (A) heterogeneous mixture (B) homogeneous mixture 4. tea leaves with dry instant coffee, no water Sweet tea _____ 5. Match the following with the definition or example below. (8 pts, 2 pts each) a. solute ____ b. saturated solution c. solution d. solvent (1) The substance which you have less of in a solution.. (2) The substance which you have more of in a solution. (3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker. (4) Homogeneous mixture 6. Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each) (A) period (B) group (C) main group (representative elements) (D) transition metal elements (E) lanthanide/actinide

Exam I

Fall 2018

11am Form B

Dr. Hahn

Physical Science Lecture

	7. Given the following list of chemical form pts total, 1 pt each)					nulas, circle all which are covalent (forte) compounds (
SO_2		Li ₂ O	K Cl	CO_2	N	IgF ₂	CCl ₄	CaCl ₂	Sr_3P_2	
8.	Name	the binary con	npound shown.	Ag	Br given t	he name of	the eleme	ents (silver,	bromine)(4 pts)	
Part I		Long Answers ich do not spec					artial and	full credit e	ven on	
1.	Conve	ert the following.	Show work.	(15 pts)						
from	262 fe	et to meters (12 i	nches = 1 foot, 2	2.54 cm =	= 1 inch, 10	0 cm = 1 me	eter)			
2.	. Comj	plete the following	ng for the elemen	nt symbo	ols <u>N</u> (1	6 pts, 2 pts e	each)			
	a [(m	etal) or (nonmeta	al)] (circle one)	(answer	the followi	ng for the el	ement giv	en).		
	b.	What is the at	omic number?		c. What	t is the atom	ic mass?			
	b.	How many pr	otons ?	How m	nany total el	ectrons (for	a neutral a	tom)?	_	
	c.	What is the gr	oup number?		d. How	many valen	ice electro	ns ?	_	
	e.	What is the p	eriod number ? _							
	[Or. Hahn Phy	sical Science Le	cture	Exam l	Fall 2018	11am Fo	orm B	page 3	