modified:
Brannock
Copes
Royse
6th grade

NTI DAY #2

(weather-closed school day)

PACKET TWO

(Math)

General Directions:
Due to weather, Harrison County Schools are closed. In an effort to utilize this day on the school calendar, your child is assigned and should work on this "packet" of school work today. It will count as a grade for this subject. The work attached is specific to the subject listed above. Please contact your child's teacher of this subject at 234-7123 in the event you/your student have questions on this packet. Staff and teachers reported to HCMS today and are available should you have questions.
While this is DUE no later than the last school day before the 3rd nine-weeks ends, we ***strongly encourage*** students to turn it in to their teacher as soon as it's complete (soon after the NTI day) to avoid it being lost, eaten by the family pet, burned to keep warm, etc

Choice Board Activities
Math NTI

Choose one activity from each column to complete in addition to the math packet.

Prime Time	One-step Equations	Ratios
Find all the factors of 16 and 20. What is the GCF? Find the first 10 multiples of 16 and 20. What is the LCM?	Bob solved this one-step equation: $Y - 8 = 15$ $\underline{\quad - 8} = \underline{-8}$ $y = 7$ Write a detailed explanation of what Bob did wrong.	Look at the weekly shopper and find an example of a unit rate problem and solve it. Here is an example: The cost is $9.94 for 60 pieces of candy. How much does each piece of candy cost? $9.94 \div 60 = 0.165$ or 0.17 Approximately 17 cents for each piece.
Choose two square numbers between 10 and 30. Draw arrays to prove that your numbers are square. Choose two prime numbers between 10 and 30. Draw arrays to prove your numbers are prime.	Create a poster explaining the steps to follow to solve one-step equations. Make sure your poster is neat and colorful.	The ratio of tulips to daisies in a bouquet is 3:2. A.) If there are 8 daisies in the bouquet, how many tulips are there? B.)What if there are 9 tulips? How many daisies? Draw bar models to prove your answers. Remember to label.
Go to www.studyjams.com. and select Math. Then "See all Topics" and choose "Multiplication and Division". Next choose "Prime and Composite Numbers". Watch the Step by Step video. Then view "Watch Out" video. Last complete the "Try It" problems. Print or email me your results.	Go to wordart.com. Use the following words to create your word art: **Equation, inverse operation, isolate, variable, solution** Once you have "visualized" your art, you may print or email me a copy. Please define the vocabulary words on the back of your art or in your email to me.	Go to www.mathgames.com/ratios. Select two or more of the following: 6.122 Describe Ratios as Pictures; 6.63 Ratios; 6.66 Ratio Tables; and 6.67 Equivalent Ratios and play. Record your total stars out of 480 (Your number/480) on a post it note or email me your total.

Finding Ratios and Unit Rate

Name:

Find the ratio and unit rate for each problem.

		Ratio	Rate	
Ex)	9 boxes can hold 54 books	54:9	6	books per box
1)	4 pints of juice in 2 containers			pints per container
2)	24 centimeters of snow in 3 hours			centimeters per hour
3)	36 customers in 6 checkout lanes			customers per lane
4)	96 cherry pieces in 8 bags of candy			pieces per bag
5)	90 dollars for mowing 6 lawns			dollars per lawn
6)	84 dollars for 42 TV channels			dollars per channel
7)	378 points for defeating 54 enemies			points per enemy
8)	56 copies in 8 minutes			copies per minute
9)	90 customers over 3 days			customers per day
10)	21 pies eaten in 3 minutes			pies per minute
11)	8 bags with 104 cans			cans per bag
12)	6 minutes to type 624 words			words per minute
13)	4 hours to drive 252 miles			miles per hour
14)	3 trays with 18 ice cubes			ice cubes per tray
15)	18 CDs with 252 songs			songs per CD

Answers

Ex.	54:9	6
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

1-10	93	87	80	73	67	60	53	47	40	33
11-15	27	20	13	7	0					

Name _____ Date _____

GCF and LCM Word Problems

Solve each word problem by finding GCF or LCM.

1. Pencils come in packages of 10. Erasers come in packages of 12. Phillip wants to purchase the **smallest number of pencils and erasers** so that he will have exactly **1 eraser per pencil**. How many packages of pencils and erasers should Phillip buy?

   A. 4 packages of pencils and 3 packages of erasers
   B. 5 packages of pencils and 4 packages of erasers
   C. 6 packages of pencils and 5 packages of erasers
   D. 12 packages of pencils and 10 packages of erasers

2. Kiara baked 30 oatmeal cookies and 48 chocolate chip cookies to package in plastic containers for her friends at school. She wants to divide the cookies into identical containers so that each container has the **same number of each kind of cookie**. If she wants each container to have the **greatest number of cookies possible**, how many plastic containers does she need?

3. Boxes that are 12 inches tall are being stacked next to boxes that are 18 inches tall. What is the **shortest height** at which the two stacks will be the **same height**?

4. Beginning at 8:30 A.M., tours of the National Capitol and the White House begin at a tour agency. Tours for the National Capitol leave every 15 minutes. Tours for the White House leave every 20 minutes. How often do the tours **leave at the same time**?

   A. Every 15 minutes
   B. Every 30 minutes
   C. Every 45 minutes
   D. Every 60 minutes

5. Two neon lights are turned on at the same time. One blinks every 4 seconds and the other blinks every 6 seconds. In 60 seconds, how many times will they **blink at the same time**?

6. The table below shows the number of students in the school choir.

School Choir

Students	Number
Girls	48
Boys	64

The choir teacher plans to arrange the students in equal rows. Only girls or boys will be in each row. What is the **greatest number of students** that could be in each row?

A. 16 B. 12 C. 8 D. 4

7. At a display booth at an amusement park, every visitor gets a gift bag. Some of the bags have items in them as shown in the table below.

Items in the Gift Bags

Items	Bags
Hat	Every 2nd visitor
T-shirt	Every 7th visitor
Backpack	Every 10th visitor

How often will a bag **contain all three items**?

A. Every 14 bags
B. Every 19 bags
C. Every 70 bags
D. Every 140 bags

8. Bridget has swimming lessons every fifth day and diving lessons every third day. If she had a swimming lesson and a diving lesson on May 5, when will be the next date on which she has **both swimming and diving lessons**?

Multiplication Table to 30s

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	104	108	112	116	120
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	147	154	161	168	175	182	189	196	203	210
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180	189	198	207	216	225	234	243	252	261	270
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	187	198	209	220	231	242	253	264	275	286	297	308	319	330
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221	234	247	260	273	286	299	312	325	338	351	364	377	390
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238	252	266	280	294	308	322	336	350	364	378	392	406	420
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360	375	390	405	420	435	450
16	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464	480
17	17	34	51	68	85	102	119	136	153	170	187	204	221	238	255	272	289	306	323	340	357	374	391	408	425	442	459	476	493	510
18	18	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306	324	342	360	378	396	414	432	450	468	486	504	522	540
19	19	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380	399	418	437	456	475	494	513	532	551	570
20	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500	520	540	560	580	600
21	21	42	63	84	105	126	147	168	189	210	231	252	273	294	315	336	357	378	399	420	441	462	483	504	525	546	567	588	609	630
22	22	44	66	88	110	132	154	176	198	220	242	264	286	308	330	352	374	396	418	440	462	484	506	528	550	572	594	616	638	660
23	23	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391	414	437	460	483	506	529	552	575	598	621	644	667	690
24	24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	408	432	456	480	504	528	552	576	600	624	648	672	696	720
25	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	700	725	750
26	26	52	78	104	130	156	182	208	234	260	286	312	338	364	390	416	442	468	494	520	546	572	598	624	650	676	702	728	754	780
27	27	54	81	108	135	162	189	216	243	270	297	324	351	378	405	432	459	486	513	540	567	594	621	648	675	702	729	756	783	810
28	28	56	84	112	140	168	196	224	252	280	308	336	364	392	420	448	476	504	532	560	588	616	644	672	700	728	756	784	812	840
29	29	58	87	116	145	174	203	232	261	290	319	348	377	406	435	464	493	522	551	580	609	638	667	696	725	754	783	812	841	870
30	30	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480	510	540	570	600	630	660	690	720	750	780	810	840	870	900