



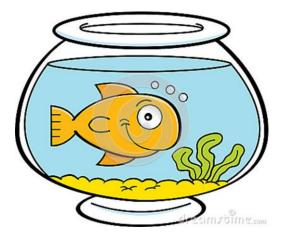
Resource Sheet 1 – Fishbowl Multiplication Directions



Number of Players: 2 Materials:

Fishbowl Multiplication game board, addition and multiplication sentences, bowl with 30 "fish" (paper clips or small objects)

- 1. Place the addition sentences face down in a pile. Spread out the multiplication sentences face up on the table.
- 2. Decide who is Partner A and who is Partner B. Partner A chooses an addition sentences and places it face up in the box at the bottom of the page. Partner A uses the number on the card to fill the fishbowls with equal groups of fish.
- 3. Partner B finds the matching multiplication sentence and places it face up in the other box. Partner B then counts to find the total number of fish and announce it to Partner A.
- 4. If Partner A agrees, remove both cards and set them aside. Put all the fish back in the bowl. If not, recount the fish.
- 5. Repeat steps 1 4 with Partner B choosing the addition sentence and Partner A finding the multiplication sentence and counting the fish.
- 6. Continue taking turns until all the cards have been used or the time runs out.



Fishbowl Multiplication Game Board

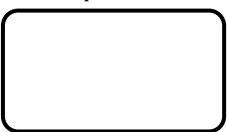
What is the total number of fish?

=

Addition Sentence

Multiplication Sentence





3+3+3+3+3	5 × 3
7 + 7 + 7	3 × 7
2 + 2 + 2 + 2 + 2	5×2
5 + 5 + 5 + 5	4 × 5
8 + 8 + 8	3 × 8
7 + 7 + 7 + 7	4 × 7
4+4+4+4+4	5×4
9 + 9	2 × 9

Addition and Multiplication Sentence

Resource Sheet 2 – Create Sets to determine Whole (Arrange Tiles in Rows and Column)

Describe the following scenario to the class:

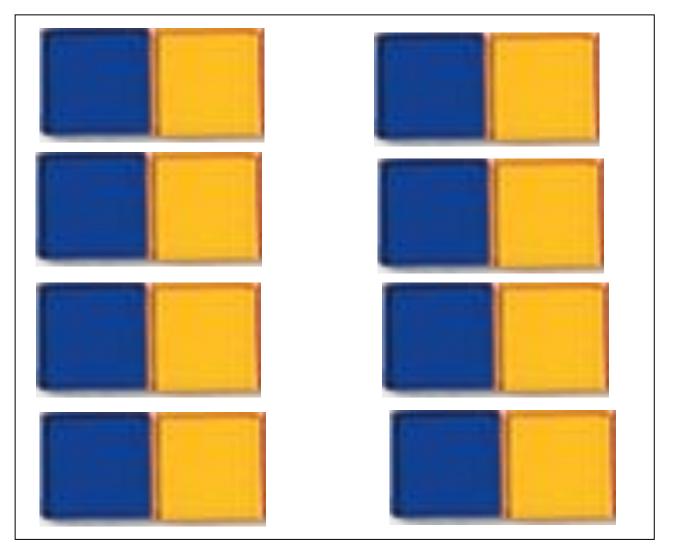
"The principal at your school needs to set up chairs in the auditorium for a parents" meeting. He plans to arrange the chairs in 7 rows with 24 chairs in each row. He is wondering, though, whether there will be enough chairs for 150 parents. How many chairs will there be altogether? Will there be enough chairs?"

With the following guided information allow students to record important information about the problem:

- 7 rows
- 24 chairs in each row
- How many chairs altogether would be needed?
- Are there enough chairs for 150 parents? Justify your response

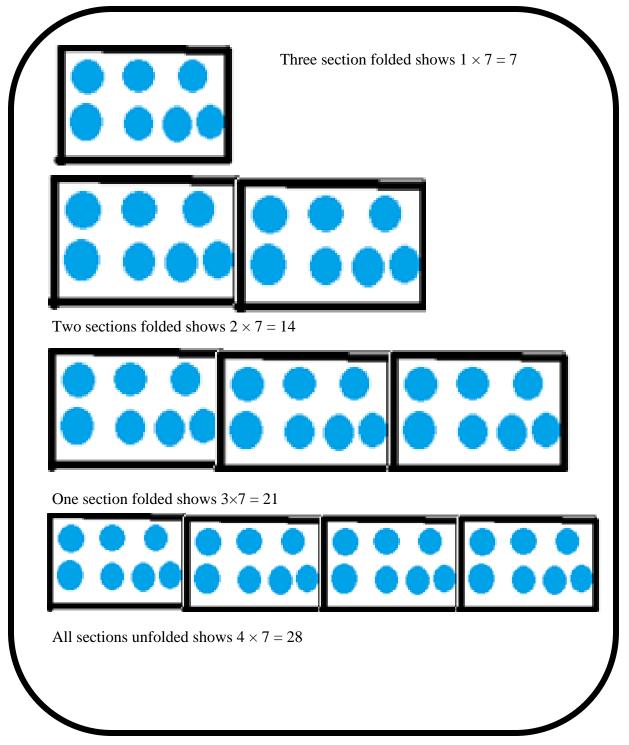
Allow students use square tiles or grid paper to solve the problem. Provide each group with a sheet of paper on which students can record their work.

NB: USE ONE SQUARE TILE TO REPRESENT ONE CHAIR



Resource sheet 3 – Use the folded cards to show one-more set strategy

Using a series of folded cards, starting with one group of 7, two groups three groups and so on. Show one more group of 7 and ask, "If 3 sevens is 21, what will one more group of 4 sevens be? You may create folded card sets to illustrate at least 9 or 10 different multiplication facts to allow students lots of experiences.



Resource sheet 4 – Blank Hundred Chart

In order that students can become very proficient with multiplication and skip counting, have the students play a games in pairs to fill the hundred chart. Allow students to take turn as they place the number 2 in its correct position then count every two places to find the next multiple of two. Starting at 3, they should count every 3 numbers to find multiples of three. Four, five, six and so on could be done in a similar way. This can be colour coded or different hundred chart can be used for each set. **NB: Hundred charts can be laminated or protected with cellophane tape (clear tape) for re-use**.

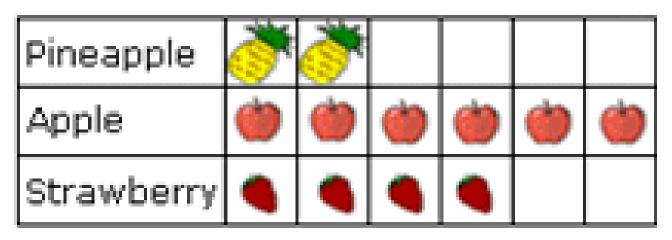
BLANK HUNDRED CHART

HUNDRED CHART

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
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Resource Sheet 5 – Use the pictograph below to answer the questions which follow

The pictograph below represents the different types and the number of fruits that Joseph has in a basket.



Questions

- 1. How can you use a multiplication sentence to represent the total number of fruits Joseph has in the baskets?
- 2. Joseph has 2 pineapples and 3 times as many apples as pineapples. How many apples does he have? Justify your response
- 3. If he has 2 times the number of strawberries to pineapples, how many strawberries does he have? Justify your response.

NB: Have students write mathematical sentences for each response.

FACT SHEET

Use the strips of paper to determine the value of the units below:

1.	number of millimetre make 1 centimetre
2.	number of centimetre make 1 decimetre
3.	number of decimetre make 1 metre

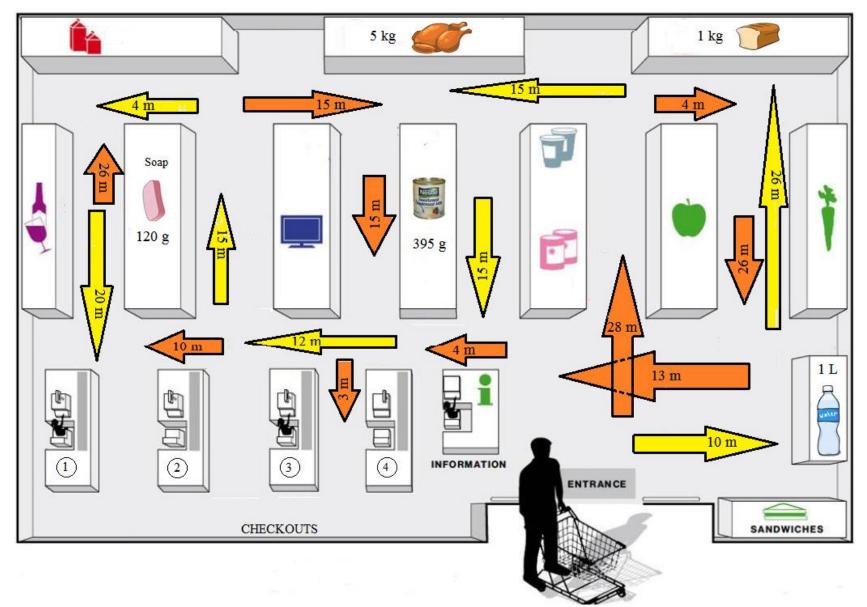
What other relationship can you make?

TV GUIDE

In the table below name your favourite shows, write the day, channel, and duration. Then colour the clock showing the duration of the show.

Favourite Show and Channel	Day and Time	Duration	Duration Shown on Clock
			11 12 1 2^{2} 10 2^{2} 9 $318 4_{9}18 4_{9}18 4_{9}19$ 6 510 10 10 10 10 10 10 10
			9 • 3 ************************************
			11 12 1 $29 • 38 • 4• 7 • 6 • 5$

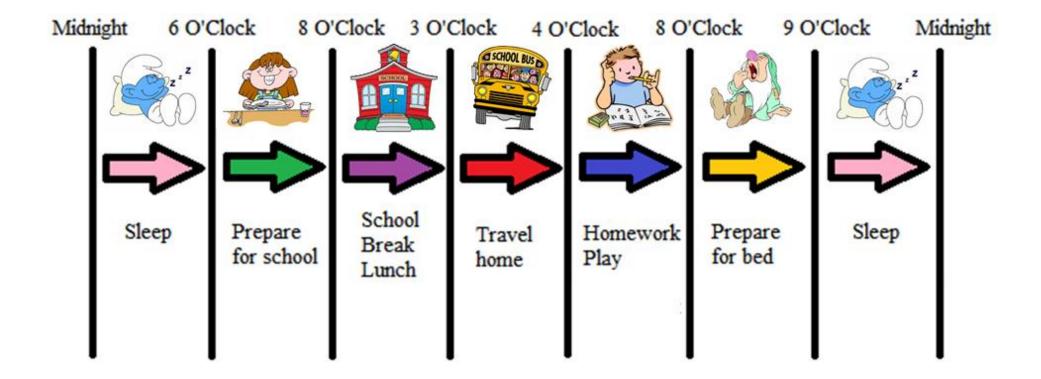
THE SUPERMARKET



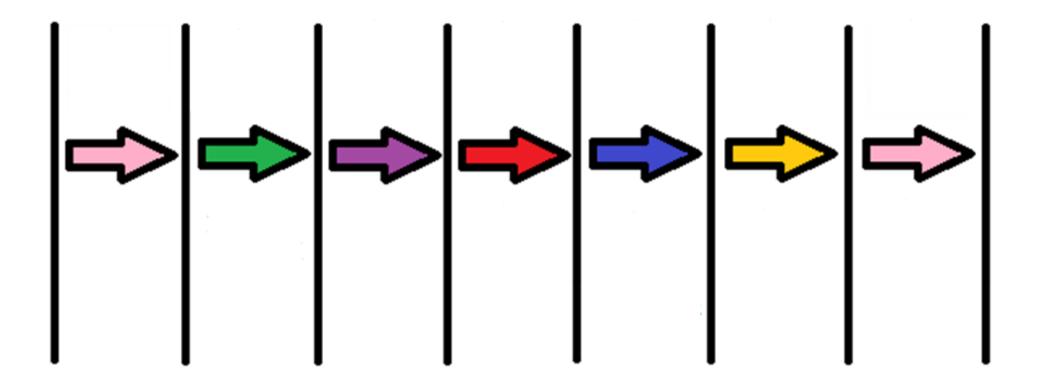
Leon's	Month
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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Time Lime 1







Calendar for year 2015 (Jamaica)

Jan	uary						Feb	ruary						Mar	ch					
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28
25	26	27	28	29	30	31								29	30	31				
Apr	il						May	7						June	•					
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4						1	2		1	2	3	4	5	6
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30				
							31													
July	7						Aug	ust						Sept	ember	•				
	Mo	Tu	We	Th	Fr	Sa	-	Мо	Tu	We	Th	Fr	Sa	-	Мо	Tu	We	Th	Fr	Sa
			1	2	3	4							1			1	2	3	4	5
5	6	7	8	9	10	11	2	3	4	5	6	7	8	6	7	8	9	10	11	12
12	13	14	15	16	17	18	9	10	11	12	13	14	15	13	14	15	16	17	18	19
19	20	21	22	23	24	25	16	17	18	19	20	21	22	20	21	22	23	24	25	26
26	27	28	29	30	31		23	24	25	26	27	28	29	27	28	29	30			
0.4							30	31												
	ober													Dec	ember					
	ober Mo	Tu	We	Th	Fr	Sa	Nov	ember		We	Th	Fr	Sa		ember Mo	Tu	We	Th	Fr	Sa
	ober Mo	Tu	We	Th 1			Nov Su	ember Mo	Tu	We 4					ember Mo			Th 3		
Su	Mo			1	2	3	Nov Su 1	ember Mo 2	Tu 3	4	5	6	7	Su	Mo	1	2	3	4	5
Su 4	Mo 5	6	7	1 8	2 9	3 10	Nov Su 1 8	ember Mo 2 9	Tu 3 10	4 11	5 12	6 13	7 14	Su 6	Mo 7	1 8	2 9	3 10	4 11	5 12
Su	Mo			1	2 9 16	3	Nov Su 1	ember Mo 2	Tu 3 10 17	4	5 12 19	6 13	7 14 21	Su	Mo	1	2	3	4 11	5 12 19



Calendar for year 2016 (Jamaica)

Janu	ary						Febr	ruary						Mar	ch					
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
					1	2		1	2	3	4	5	6			1	2	3	4	5
3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12
10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19
17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26
24	25	26	27	28	29	30	28	29						27	28	29	30	31		
31																				
Apr	il						May	7						June	•					
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
					1	2	1	2	3	4	5	6	7				1	2	3	4
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30		
July	r						Aug	ust						Sept	ember					
Jury																				
-	Mo	Tu	We	Th	Fr	Sa	-	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
-		Tu	We	Th	Fr 1	Sa 2	-	Mo 1	Tu 2	We 3	Th 4	Fr 5	Sa 6	Su	Mo	Tu	We	Th 1	Fr 2	Sa 3
-		Tu 5	We 6	Th 7			-							Su 4	Мо 5	Tu 6	We 7			
Su	Mo				1	2	Su	1	2	3	4	5	6					1	2	3
Su 3	Mo 4	5	6	7	1 8	2 9	Su 7	1 8	2 9	3 10	4 11	5 12	6 13	4	5	6	7	1 8	2 9	3 10
Su 3 10	Mo 4 11	5 12	6 13	7 14	1 8 15	2 9 16	Su 7 14	1 8 15	2 9 16	3 10 17	4 11 18	5 12 19	6 13 20	4 11	5 12	6 13	7 14	1 8 15	2 9 16	3 10 17
Su 3 10 17	Mo 4 11 18	5 12 19	6 13 20	7 14 21	1 8 15 22	2 9 16 23	Su 7 14 21	1 8 15 22	2 9 16 23	3 10 17 24	4 11 18	5 12 19	6 13 20	4 11 18	5 12 19	6 13 20	7 14 21	1 8 15 22	2 9 16 23	3 10 17
Su 3 10 17 24	Mo 4 11 18 25	5 12 19	6 13 20	7 14 21	1 8 15 22	2 9 16 23	Su 7 14 21 28	1 8 15 22	2 9 16 23 30	3 10 17 24	4 11 18	5 12 19	6 13 20	4 11 18 25	5 12 19	6 13 20	7 14 21	1 8 15 22	2 9 16 23	3 10 17
Su 3 10 17 24 31 Octo	Mo 4 11 18 25	5 12 19 26	6 13 20	7 14 21	1 8 15 22 29	2 9 16 23 30	Su 7 14 21 28 Nov	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18	5 12 19 26	6 13 20 27	4 11 18 25 Dec	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22	2 9 16 23 30	3 10 17
Su 3 10 17 24 31 Octo	Mo 4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	Su 7 14 21 28 Nov	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18 25	5 12 19 26	6 13 20 27	4 11 18 25 Dec	5 12 19 26 ember	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24
Su 3 10 17 24 31 Octo	Mo 4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30 Sa	Su 7 14 21 28 Nov	1 8 15 22 29	2 9 16 23 30 Tu	3 10 17 24 31 We	4 11 18 25 Th	5 12 19 26 Fr	6 13 20 27 Sa	4 11 18 25 Dec	5 12 19 26 ember	6 13 20 27	7 14 21 28	1 8 15 22 29 Th	2 9 16 23 30 Fr	3 10 17 24 Sa
Su 3 10 17 24 31 Octa Su	Mo 4 11 18 25 ober Mo	5 12 19 26 Tu	6 13 20 27 We	7 14 21 28 Th	1 8 15 22 29 Fr	2 9 16 23 30 Sa 1	Su 7 14 21 28 Nov Su	1 8 15 22 29 ember Mo	2 9 16 23 30 Tu 1	3 10 17 24 31 We 2	4 11 18 25 Th 3	5 12 19 26 Fr	6 13 20 27 Sa 5	4 11 18 25 Dec Su	5 12 19 26 ember Mo	6 13 20 27 Tu	7 14 21 28 We	1 8 15 22 29 Th 1	2 9 16 23 30 Fr 2 9	3 10 17 24 Sa 3
Su 3 10 17 24 31 Octo Su 2	Mo 4 11 18 25 Ober Mo 3	5 12 19 26 Tu	6 13 20 27 We	7 14 21 28 Th	1 8 15 22 29 Fr 7 14	2 9 16 23 30 Sa 1 8	Su 7 14 21 28 Nov Su 6	1 8 15 22 29 ember Mo 7 14	2 9 16 23 30 Tu 1 8	3 10 17 24 31 We 2 9	4 11 18 25 Th 3 10 17	5 12 19 26 Fr 4 11	6 13 20 27 Sa 5 12 19	4 11 18 25 Dec Su 4 11	5 12 19 26 ember Mo 5	6 13 20 27 Tu	7 14 21 28 We	1 8 15 22 29 Th 1 8	2 9 16 23 30 Fr 2 9	3 10 17 24 Sa 3 10 17
Su 3 10 17 24 31 Octo Su 2 9	Mo 4 11 18 25 Ober Mo 3 10	5 12 19 26 Tu 4 11	6 13 20 27 We 5 12	7 14 21 28 Th 6 13	1 8 15 22 29 Fr 7 14 21	2 9 16 23 30 Sa 1 8 15	Su 7 14 21 28 Nov Su 6 13	1 8 15 22 29 ember Mo 7 14	2 9 16 23 30 Tu 1 8 15	3 10 17 24 31 We 2 9 16	4 11 18 25 Th 3 10 17	5 12 19 26 Fr 4 11 18	6 13 20 27 Sa 5 12 19	4 11 18 25 Dec Su 4 11	5 12 19 26 ember Mo 5 12	6 13 20 27 Tu 6 13	7 14 21 28 We 7 14	1 8 15 22 29 Th 1 8 15	2 9 16 23 30 Fr 2 9 16	3 10 17 24 Sa 3 10 17 24



POEM

Remember:

30 days have September,

April, June, and November:

All the rest have 31,

Except February,

Which has 28 days clear,

And 29 in each leap year.

