

Active Learning

For Middle Years Math

5th - 8th Grades

Ft Worth Math Camp

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Presented by
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Number Combinations For Easy Adding

$$1 \quad 2 \quad 3 \quad 4 = 10$$

$$2 \quad 4 \quad 6 \quad 8 = 20$$

$$8 \quad 12 = 20$$

$$9 \quad 11 = 20$$

$$6 \quad 7 \quad 8 \quad 9 = 30$$

Hundred Board

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

Addition Tic Tac Toe

	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9	10
2	2	3	4	5	6	7	8	9	10	11
3	3	4	5	6	7	8	9	10	11	12
4	4	5	6	7	8	9	10	11	12	13
5	5	6	7	8	9	10	11	12	13	14
6	6	7	8	9	10	11	12	13	14	15
7	7	8	9	10	11	12	13	14	15	16
8	8	9	10	11	12	13	14	15	16	17
9	9	10	11	12	13	14	15	16	17	18

Multiplication Board

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Fractions, Decimals, Percents

1 Whole Number											
1/1	1.0	100%									
One half											
1/2	.5	50%									
One Third											
1/3	.333	33.3%	2/3								
One Fourth											
1/4	.25	25%	3/4								
One Fifth											
1/5	.2	20%	2/5	3/5	4/5						
One Sixth											
1/6	.166	16.6%	2/6	3/6	4/6	5/6					
One Seventh											
1/7	.142	14.2%	2/7	3/7	4/7	5/7	6/7				
One Eighth											
1/8	.125	12.5%	2/8	3/8	4/8	5/8	6/8	7/8			
One Ninth											
1/9	.111	11.1%	2/9	3/9	4/9	5/9	6/9	7/9	8/9	9/9	
One Tenth											
1/10	.1	10%	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
One Eleventh											
1/11	.0909	9%	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	
One Twelfth											
1/12	.083	8.3%	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	
			10/12	11/12	12/12						

"Fetch" Games

Fetch style of games involve students in groups with each group having their own "home base". Typically, one student at a time runs to a central location, retrieves an object and then returns to the home base. Once back at the home base, the whole group does a set of an exercise before the next student from the group goes to retrieve the next object. Once all of the objects have been collected or when time has been called by the teacher/instructor, the group then uses the pieces retrieved to complete the task at hand.

"Relay" Games

Relays are typically organized with roughly equal groups. Each runner runs the course, does the activity, returns to the group and then the next runner is sent out. Teams continue to send out runners until time is called by the teacher/instructor (this means students will usually run the course more than once). Typically, there is an ongoing task that has to be completed as each runner returns to the team. In some cases the task is not ongoing but is completed once the relay has been completed.

"Circuit" Activities

Stations are set up around the area. Students travel to each station and complete the task or perform the exercise (sometimes both) before moving to the next location. Sometimes the stations are done only once, other times, the circuit may be completed several times before time is called.

Activity _____

Concept _____

Equipment _____

Goal/Object of the Game _____

Set Up and Play

Variations:

Activity _____

Concept _____

Equipment _____

Goal/Object of the Game _____

Set Up and Play

Variations:

Activity _____

Concept _____

Equipment _____

Goal/Object of the Game _____

Set Up and Play

Variations:

Activity _____

Concept _____

Equipment _____

Goal/Object of the Game _____

Set Up and Play

Variations:

Activity _____

Concept _____

Equipment _____

Goal/Object of the Game _____

Set Up and Play

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Goal/Object of the Game _____

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Equipment _____

Goal/Object of the Game _____

Set Up and Play

Variations:

Activity _____

Concept _____

Equipment _____

Goal/Object of the Game _____

Set Up and Play

Variations:

Activity _____

Concept _____

Equipment _____

Goal/Object of the Game _____

Set Up and Play

Variations:

General Notes: