

	0	1	2	3	4	5	6	7	8	9
0	0x0	0x1	0x2	0x3	0x4	0x5	0x6	0x7	0x8	0x9
1	1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9
2	2x0	2x1	2x2	2x3	2x4	2x5	2x6	2x7	2x8	2x9
3	3x0	3x1	3x2	3x3	3x4	3x5	3x6	3x7	3x8	3x9
4	4x0	4x1	4x2	4x3	4x4	4x5	4x6	4x7	4x8	4x9
5	5x0	5x1	5x2	5x3	5x4	5x5	5x6	5x7	5x8	5x9
6	6x0	6x1	6x2	6x3	6x4	6x5	6x6	6x7	6x8	6x9
7	7x0	7x1	7x2	7x3	7x4	7x5	7x6	7x7	7x8	7x9
8	8x0	8x1	8x2	8x3	8x4	8x5	8x6	8x7	8x8	8x9
9	9x0	9x1	9x2	9x3	9x4	9x5	9x6	9x7	9x8	9x9

Multiplication Math Facts

X	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	36	40	45
6	0	6	12	18	24	30	36	42	48	54
7	0	7	14	21	28	35	42	49	56	63
8	0	8	16	24	32	40	48	56	64	72
9	0	9	18	27	36	45	54	63	72	81

Multiplication Math Facts

X	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

Instructions:

Materials:

Printout of worksheet pages:

Page 1: this page becomes the flaps that you lift--you will cut up this page

Page 2 or 3: This is the base of the project--what you lift the flaps to see.

Scissors

Glue stick

Tape

Optional:

Pencil

Felt tip pens or highlighters

1. Using Page 1, cut the rows out as strips so there is a line of "short boxes" that are blank above a row of boxes with beginning of the math fact equations on them. (They aren't really "equations" without an =, just part of the equation or a statement.) Cut out the whole strip together (eg, 0, 0+0, 0+1...); don't cut out each individual statement.

Tip: Don't trim the margin so you will have additional space to glue down the strip.

You should end up with ten strips of paper such as this one (remember to leave the margin in place):

0	0x0	0x1	0x2	0x3	0x4	0x5	0x6	0x7	0x8	0x9

2. Cut along the lines between the statements up to the "small box line". Leave the part of the strip with the small boxes uncut (you will glue down the "small box line" and the statements will be the flaps). Leave the strips flat until you have glued them down.

3. Put Page 2 in front of you. Line up header number and the "small box line" of a cut out from Page 1 with the appropriate Page 2 line. Glue or tape down the "small box line", the header row, and the margins of the Page 1 line onto the Page 2 line.

4. When all the strips are in place tape the edges for more support.

5. Lift the equation flap to see the answer underneath.

Page 3 is a blank version of the base with blank boxes for students to fill in for extra reinforcement.

I chose to make this worksheet with 0 – 9 instead of 1 – 10 as many children seem to have difficulty remembering that zero times anything still equals zero but seem to grasp the reasons behind “putting a zero at the end” for ten times a number as long as they have already learned the concept of place value.

If desired, students can color fact families using light colored felt tip markers or highlighters to emphasize the “turn around facts” or the commutative property of multiplication. Students could choose either to color just the base or the flaps and the base. I recommend doing the coloring before the gluing and allowing it a chance to dry. The finished product will look something like this:

X	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	35	40	45
6	0	6	12	18	24	30	36	42	48	54
7	0	7	14	21	28	35	42	49	56	63
8	0	8	16	24	32	40	48	56	64	72
9	0	9	18	27	36	45	54	63	72	81

A wonderful method for learning multiplications is to insist upon the memorization of one row of facts, then show the student that then now have memorized a part of a column thanks to the commutative property of multiplication. My son still needs to remember all of his 4's, 6's, 7's, 8's and 9's, but he is quite happy that he only has to memorize fifteen more multiplication facts thanks to this approach—it seems far less intimidating than having to learn fifty more.

Above all, have fun with this project!