

Matching Multiplication Facts

This card matching game can be used in a number of different ways: to learn, reinforce or assess multiplication facts.

The first two pages are Entry 3 and the second two pages Level 1.

Multiplication facts are deliberately presented randomly so that solutions cannot be found by pattern alone. Discussion and trial and error will be involved in fitting all the pairs together as some solutions are interchangeable.

Emphasis is on mathematical facts and the relationship between the numbers. E.g. Which numbers are factors/multiples of others? Which are square numbers? What does that mean? If the answer is 35 could there be any pair other than 7×5 ? The intention is to encourage learners to view tables and number relationships in a broader context.

Core Curriculum references

N1/E3.5 Recall multiplication facts (e.g. multiples of 2, 3, 4, 5, 10).

N1/L1.5 Recall multiplication facts up to 10×10 and make connections with division facts.

N1/L1.6 Recognise numerical relationships (e.g. multiples and squares).

Print off the pages. Print Entry level on one colour, Level 1 on another. Laminate the pages. Cut the pages into 3 columns so that the first number and the times sign are together and the = sign and the answer are together leaving the middle number on its own. Now cut the columns into rows to form separate cards.

Ideas for use

As an ice breaker

Distribute all the cards around the room. Split learners into two groups (differentiate here for E3 and L1). First the groups have to find the pieces of their puzzles (i.e. two different colours, one for each group), then put them together. They can start putting them together as soon as they have them rather than waiting until the end. Discussion is a very important part of this activity.

Individually / Group

Use as a follow on after discussion on multiples, factors, squares:

Give the cards to the learner or group of learners. (Differentiate appropriately). Supply table squares to scaffold the activity if it is primarily a learning activity rather than part of assessment. Learner(s) have to arrange the cards to make multiplication facts.

Use to show progression

Learners could carry out the activity against the clock and record the time it takes them to complete the matching.

Times could be recorded in a table and a graph drawn of the results over a couple of weeks perhaps.

Use to collect data

All learners could carry out the activity and record the time it took to do it. Results could then be used to find mean time of completion, mode, median, range etc. If the group is big enough is there a normal distribution displayed? Obviously this would have to be done sensitively in the light of individual's abilities.

1	x	5	=	5
2	x	3	=	<u>6</u>
3	x	4	=	12
4	x	3	=	12
5	x	4	=	20
<u>6</u>	x	10	=	60
7	x	5	=	35
8	x	2	=	16
<u>9</u>	x	3	=	27
10	x	5	=	50

1	x	<u>6</u>	=	<u>6</u>
2	x	<u>9</u>	=	18
3	x	7	=	21
4	x	8	=	32
5	x	<u>6</u>	=	30
<u>6</u>	x	<u>6</u>	=	36
7	x	<u>9</u>	=	63
8	x	7	=	56
<u>9</u>	x	<u>9</u>	=	81
10	x	7	=	70

$$1 \times 3 = 3$$

$$2 \times 10 = 20$$

$$3 \times 5 = 15$$

$$4 \times 10 = 40$$

$$5 \times 5 = 25$$

$$\underline{6} \times 4 = 24$$

$$7 \times 3 = 21$$

$$8 \times 4 = 32$$

$$\underline{9} \times 2 = 18$$

$$10 \times 10 = 100$$

1	x	<u>9</u>	=	<u>9</u>
2	x	7	=	14
3	x	8	=	24
4	x	<u>6</u>	=	24
5	x	8	=	40
<u>6</u>	x	7	=	42
7	x	<u>9</u>	=	63
8	x	8	=	64
<u>9</u>	x	<u>6</u>	=	54
10	x	<u>9</u>	=	90