

# Normalisation dominoes

## Instructions

This activity is based upon the game of dominoes. You will need to first print this document and cut out each of the dominoes provided in this document.

<h2>Field</h2>	<p>A single field used as the unique identifier for a record</p>
----------------	--

### A domino

Divide your learners into groups of two players and give them a full set of dominoes. Ask the groups to choose a dealer who shuffles and mixes up the dominoes with the dominoes face down so that neither player can see what each domino has written on it. The dealer then shares the dominoes out (still face down) so that each player has ten dominoes. The remaining dominoes should be left face down in a pile on the table. Learners are then ready to play the game.

The rules of dominoes are as follows:

1. The non-dealing player is first to lay a domino. They can choose any domino they wish from their set of dominoes. They place the domino on the middle of the table.
2. The other player then lays a domino from their set of dominoes. They have to choose a domino that matches either end of the domino on the table. Therefore, if one end of the domino has a definition on it, it must be matched with the appropriate term. Alternatively, if one end of the domino has a term on it, the player must match it with the appropriate definition.
3. Players continue to lay down matching dominoes at either end of the line of dominoes as it grows.
4. If a player cannot find a matching domino in their set of dominoes, they must pick up a domino from the pile of dominoes on the table and play passes to their opponent.
5. If a player places an incorrect match on the table they have to remove the domino and also pick another domino up from the pile on the table. Play passes to their opponent.
6. The winner is the first player to successfully match their set of dominoes on the table so that they have no more dominoes in their set.

You can play dominoes in larger groups by giving the players a larger set of dominoes (two or three sets for example) to play with and still sharing out ten dominoes each, leaving the rest in the pile on the table.

## Normalisation dominoes

<b>Field</b>	A single field used as the unique identifier for a record
--------------	---

<b>Field</b>	Multiple fields that are used together to create a unique identifier for a record
--------------	---

<b>Primary Key</b>	<b>Field</b>
--------------------	--------------

<b>Primary Key</b>	A database that has repeating fields and data, with little structure
--------------------	--

## Normalisation dominoes

<b>Primary Key</b>	A category of data in a database
--------------------	----------------------------------

A database that has repeating fields and data, with little structure	A single field used as the unique identifier for a record
--	---

<b>Compound Key</b>	A database that does not have any repeating fields and all the fields in the database are atomic. The database has little structure.
---------------------	--

<b>Compound Key</b>	A database that has had repeating entries removed and all data is atomic. Fields that are related are separated into different tables, dependent on the primary key of the table.
---------------------	---

## Normalisation dominoes

<b>Relationship</b>	<b>Compound key</b>
---------------------	---------------------

A category of data in a database	A single field used as the unique identifier for a record
----------------------------------	---

<b>Unnormalised Database</b>	Multiple fields that are used together to create a unique identifier for a record
------------------------------	---

<b>Unnormalised Database</b>	A database that has atomic fields, and has had all repeating entries removed. Related fields are separated into different tables. Any fields that are not directly related to each other are further separated into tables that only contain fields that are directly related.
------------------------------	--

## Normalisation dominoes

<p>Multiple fields that are used together to create a unique identifier for a record</p>	<p>A database that does not have any repeating fields and all the fields in the database are atomic. The database has little structure.</p>
<p>A database that has atomic fields and has had all repeating entries removed. Related fields are separated into different tables. Any fields that are not directly related to each other are further separated into tables that only contain fields that are directly related.</p>	<h3>Unnormalised Database</h3>
<h3>Database in 1NF</h3>	<p>A database that has repeating fields and data, with little structure</p>
<h3>Database in 1NF</h3>	<p>A collection of data about a person or item in a database</p>

## Normalisation dominoes

<b>Relationship</b>	<b>Database in 1NF</b>
---------------------	------------------------

<p>A database that does not have any repeating fields and all the fields in the database are atomic. The database has little structure.</p>	<p>Data in a field that cannot be broken down any further</p>
---	---

<b>Database in 2NF</b>	<p>A category of data in a database</p>
------------------------	---

<b>Database in 2NF</b>	<p>A collection of data about a person or item in a database</p>
------------------------	--

## Normalisation dominoes

<b>Relationship</b>	<b>Database in 2NF</b>
---------------------	------------------------

<b>Database in 3NF</b>	A database that has had repeating entries removed and all data is atomic. Fields that are related are separated into different tables, dependent on the primary key of the table.
------------------------	---

<b>Database in 3NF</b>	These are built between tables as part of the normalisation process
------------------------	---

<b>Atomic Data</b>	<b>Database in 3NF</b>
--------------------	------------------------

## Normalisation dominoes

<p>A database that has had repeating entries removed and all data is atomic. Fields that are related are separated into different tables, dependent on the primary key of the table.</p>	<p>A collection of data about a person or item in a database</p>
--	--

<p><b>Record</b></p>	<p>A database that has atomic fields, and has had all repeating entries removed. Related fields are separated into different tables. Any fields that are not directly related to each other are further separated into tables that only contain fields that are directly related.</p>
----------------------	---

<p>A database that has had repeating entries removed and all data is atomic. Fields that are related are separated into different tables, dependent on the primary key of the table.</p>	<p><b>Record</b></p>
--	----------------------

<p><b>Atomic data</b></p>	<p><b>Record</b></p>
---------------------------	----------------------

## Normalisation dominoes

<h3>Atomic Data</h3>	<p>These are built between tables as part of the normalisation process</p>
----------------------	--

<p>These are built between tables as part of the normalisation process</p>	<p>Data in a field that cannot be broken down any further</p>
--	---