




---



# Databases

© www.teach-ict.com All Rights Reserved




---

## Databases

What do you think the word 'database' means?


© www.teach-ict.com All Rights Reserved



---

## Databases

What do you think the word 'database' means?



**DEFINITION:**  
 A database is a collection of data or information which is stored in a logical and structured way

© www.teach-ict.com All Rights Reserved




---

## Paper-based databases



© www.teach-ict.com All Rights Reserved




---

## Paper-based databases

Think of some advantages for paper-based databases

© www.teach-ict.com All Rights Reserved



---

## Paper-based databases

Think of some advantages for paper-based databases

- Cheap to set up
- Don't need electricity, so will work if you have a power-cut
- Don't need a computer – which is expensive
- Can carry them around with you
- Don't need training to learn how to use them

© www.teach-ict.com All Rights Reserved

## Paper-based databases



Think of some disadvantages for paper-based databases

## Paper-based databases



Think of some disadvantages for paper-based databases

- Can be lost
- Can't easily make back-up copies
- Hard to update or make changes
- Card systems can get in a muddle if cards not replaced in the correct order
- Can take a while to search for a particular record

## Computer-based databases



## Computerised databases



Think of some advantages for computerised databases

## Computerised databases



Think of some advantages for computerised databases

- Can easily make back-up copies
- Can easily make changes
- Can easily sort data into order e.g. alphabetic
- Can search for particular records very quickly
- Can import or export data to/from other packages

## Computerised databases



Think of some disadvantages for computerised databases

## Computerised databases

Think of some disadvantages for computerised databases

- Can be expensive to set up if you have to get a professional to make it
- If there is a power-cut, you can't use it
- You need to have a computer
- Cannot carry it around with you – unless you take a computer
- You often need training to learn how to use them

© www.teach-ict.com All Rights Reserved

## Database Terms

Your school keeps a lot of information about every student.

Think of some of the information they keep about you.

© www.teach-ict.com All Rights Reserved

## Database Terms

Your school keeps a lot of information about every student.

Think of some of the information they keep about you.

name address allergies parent's names  
d.o.b. address illnesses phone number  
doctor's name

© www.teach-ict.com All Rights Reserved

## Field

Each of these is **one** piece of information about you.

Each of these different types of information is called a '**Field**'

name  
address  
d.o.b.  
doctor's name  
parent's names  
phone number  
illnesses  
allergies

© www.teach-ict.com All Rights Reserved

## Field

field field field

Student number	Surname	First name	D.O.B.	Address	Phone number	Illnesses	Allergies	Doctor
1042	Jones	Emma	05/04/95	123 High Street	01234 765555		Nuts	Dr. Brown
1043	Smith	Louise	12/08/95	45 Low Road	01234 688674	Diabetes		Dr. Green
1044	White	Simon	26/06/95	67 Middle Lane	01234 984532		Wasp stings	Dr. Yellow

© www.teach-ict.com All Rights Reserved

## Field

A shop selling DVDs has a database.  
What would be the field names in their database?



© www.teach-ict.com All Rights Reserved

## Field

A shop selling DVDs has a database.  
What would be the field names in their database?

title of DVD  
price  
actors  
genre  
Running time  
how many in stock



© www.teach-ict.com All Rights Reserved

## Record

All of the 'fields' are put together to make a 'record'

A 'record' is all of the data about one person or one thing.

© www.teach-ict.com All Rights Reserved

## Record

record

Student number	Surname	First name	D.O.B.	Address	Phone number	Illnesses	Allergies	Doctor
1042	Jones	Emma	05/04/95	123 High Street	01234 765555		Nuts	Dr. Brown
1043	Smith	Louise	12/08/95	45 Low Road	01234 688674	Diabetes		Dr. Green
1044	White	Simon	26/06/95	67 Middle Lane	01234 984532		Wasp stings	Dr. Yellow

record

© www.teach-ict.com All Rights Reserved

## Record

field

Student number	Surname	First name	D.O.B.	Address	Phone number	Illnesses	Allergies	Doctor
1042	Jones	Emma	05/04/95	123 High Street	01234 765555		Nuts	Dr. Brown
1043	Smith	Louise	12/08/95	45 Low Road	01234 688674	Diabetes		Dr. Green
1044	White	Simon	26/06/95	67 Middle Lane	01234 984532		Wasp stings	Dr. Yellow

record

© www.teach-ict.com All Rights Reserved

## File

All of the 'records' are stored together as a 'file'

file

Student number	Surname	First name	D.O.B.	Address	Phone number	Illnesses	Allergies	Doctor
1042	Jones	Emma	05/04/95	123 High Street	01234 765555		Nuts	Dr. Brown
1043	Smith	Louise	12/08/95	45 Low Road	01234 688674	Diabetes		Dr. Green
1044	White	Simon	26/06/95	67 Middle Lane	01234 984532		Wasp stings	Dr. Yellow
1045	Wood	James	14/05/95	89 Uphill Drive	01234 927347			Dr. Black
1046	Wythe	Hannah	18/04/95	101 Down Avenue	01234 836475	Asthma	Plasters	Dr. Blue

© www.teach-ict.com All Rights Reserved

## Database Terms

A 'database' is a collection of data or information which is stored in a logical and structured way

A 'field' is one type or piece of information

A 'record' is all of the information about one person or one thing

A 'file' is the collection of all the database records on one topic or subject

© www.teach-ict.com All Rights Reserved

## Copyright



This resource is covered by copyright legislation.

*You may:*

- Guide teachers or students to access this resource from the teach-ict.com site
- Print out enough copies to use during the lesson

*You may not:*

- Save this resource to a school network or VLE
- Adapt or build on this work

**A subscription will enable you to access an editable version and save it on your network or VLE**