Cover

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Contents

System Requirements

To install eBase you will need:

- a Windows, Macintosh or Acorn RISC OS computer
- an eMate with Newton Operating System 2.1
- a serial cable
- the eBase software

Note: *If you have a demo version of eBase, delete it from your eMate before starting to install the full version. If you experience any problems immediately after installation, pressing the Reset button should resolve them.*

Macintosh Installation

- Ensure that the Newton Connection Utilities (NCU) application which came with your eMate or MessagePad has previously been installed.
- Insert one end of the serial cable into a serial port on the computer and connect the other end of the cable to the eMate.
- At the Macintosh, insert the eBase CD into the CD-ROM drive. Double-click the CD icon. A window will appear with the eBase package.
- Launch the Newton Package Installer which is on the CD.
- Choose Install package from the file menu. Choose eBase.pkg from the list.
- When the installation is done, eBase becomes an integrated part of NewtonWorks so, to create a new database, make sure you're in NewtonWorks, then tap New and select Database from the list of options.

Windows Installation

- Insert one end of the serial cable into a serial port on the computer and connect the other end of the cable to the eMate.
- Insert the eBase CD into the CD-ROM drive. Double-click the CD icon. A window will appear with the eBase package.
- Launch the Newton Package Installer which is on the CD.
- Choose Install package from the file menu. Choose eBase.pkg from the list.
- When the installation is done, eBase becomes an integrated part of NewtonWorks so, to create a new database, make sure you're in NewtonWorks, then tap New and select Database from the list of options.

Acorn RiscOS Installation

Read the READ ME file in the ACORN folder on the CD for full instructions on how to install the package from an Acorn RiscOS computer.

eBase User's Guide

eBase is a simple database which allows pupils to store, organise and display information. Pupils can enter their own collected information and have it displayed on screen quickly. Anything from data about the weather to information about their classmates can be entered, and the results can be displayed on a bar graph or pie chart.
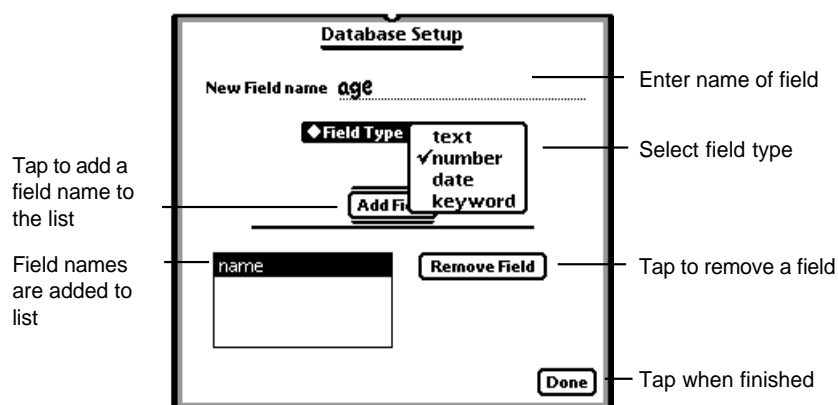
Starting Your Own Database

1. In Newton Works, tap **New**. To create a new database, select **Database** from the pop-up menu.


Select Database
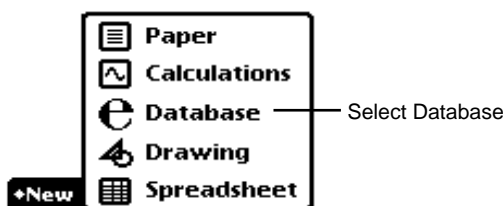
2. A title slip appears. Type in the name of your database. Tap ☒ or press return key to close the slip.

Creating Fields

1. A slip appears giving you two choices:

   a) **Create a custom file** or

   b) **Use a pre-defined file**.

   Tap **Create a custom file.**

2. Tap **Next** to start your database.

3. A database setup slip appears. Enter a field name.

Enter name of field

Select field type

Tap to add a field name to the list

Field names are added to list

Tap to remove a field

Tap when finished

4. Tap **Field Type** and select the appropriate word to match the field name. For example, **text** would be used for entering names, **number** for ages or amounts, **dates** for headings such as birthdays, and **keywords** where the field requires information in a list form, for example pets would be listed as dog, cat, fish, etc.

5. Tap **Add field** or press return.

6. If you have chosen **keyword** for a field such as hair colour, a new slip appears when you tap **Add Field**. Enter your keywords here and tap **Add Keyword** or press return.
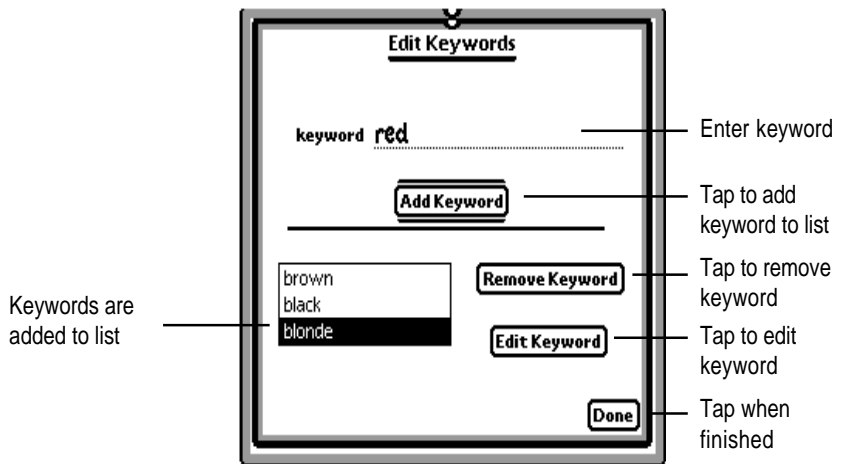
7. If you want to delete a word, highlight it and tap **Remove Keyword**.

8. If you want to make changes to the word, highlight it and tap **Edit Keyword**. Make the changes and tap **Update**.

9. Tap **Done** when you have finished entering keywords.

10. You can remove a field name by highlighting the name and tapping **Remove Field**.

11. If you want to edit a keyword from the database setup, highlight the field name and tap **Edit Keyword**. Follow step 8.

12. Tap **Done** when you have finished creating fields.

Entering data

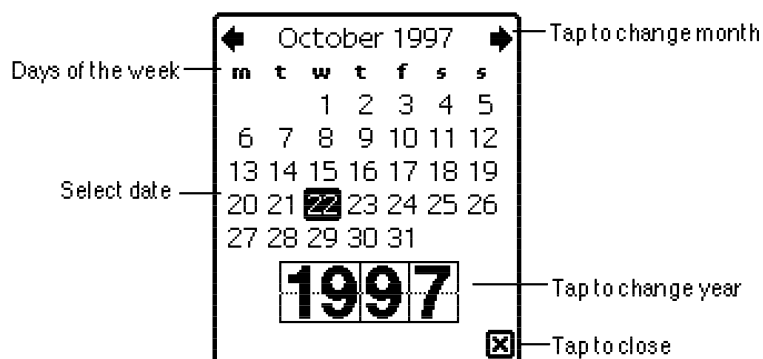1. A screen appears showing a tool bar and a card for entering your data.
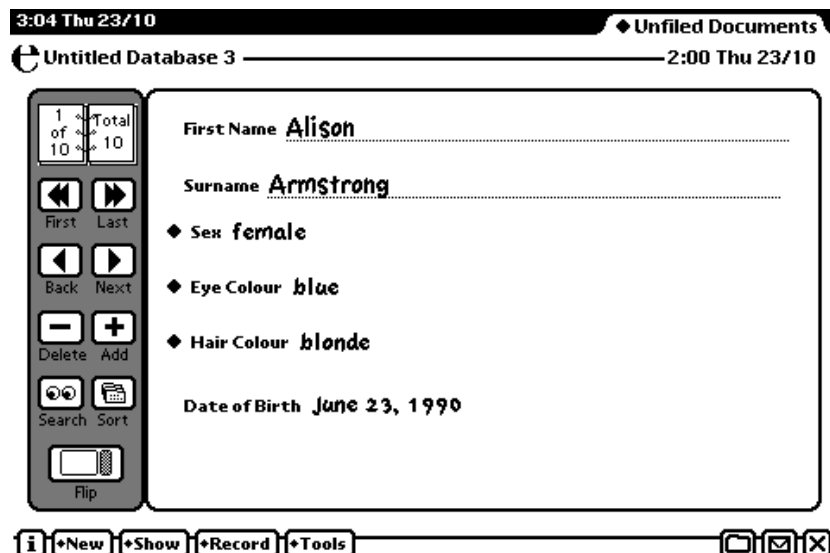
2. Enter your data for the text and number fields. To move from one field to the next press tab on the keyboard.

   The tab button does not take you to the keywords.

3. Tap your keyword heading and select a word from the list.

4. Tap your date heading and a calendar appears. Enter the correct date.

5. Tap ✚ to move on to the next card or choose **Add** from the record menu.

6. Tap ▬ if you want to delete the current record or select **Delete** from the record menu.

```
┌──────────────┐
│ Add          │
│ Delete       │
│ Next         │
│ Previous     │
│ ◆Record Show All │
└──────────────┘
```

Once you have entered all your data you can move around the database and make changes if necessary.

To do this you can locate your record in a number of ways.

1. Tap ◀◀ to return to the first record and move from record to record by tapping ▶ .

2. Or tap **Record** on the toolbar menu along the bottom of the screen and select **Next** from the menu.

3. Tap ▶▶ to go to the last record and work backwards by tapping ◀ .

4. Or tap **Record** on the toolbar menu along the bottom of the screen and select Pr**evious** from the menu.

5. Search for a record. See Searching.

6. Sort your records. See Sorting.

Searching

1. Tap 👓 or select **search** from the tool menu.

```
┌──────────────┐
│ Bar Chart    │
│ Pie Chart    │
│ ............ │
│ Sort         │
│ Search       │
│ ............ │
│ Database Setup │
│ ◆Tools Export Data │
└──────────────┘
```

2. Tap **Search** and select the field you want to look in.

3. Type in a word beside **contains** to assist in your search.

4. Tap **Search** or press return.

5. At the top of the toolbar the number of records found by the search is displayed, e.g. 1 of 5 means you are looking at the first record of five that match your search.
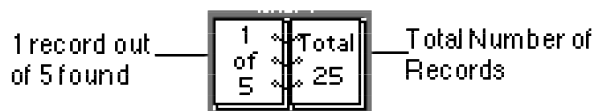
6. To return to the full list of records tap **Record** and select **Show All** from the menu.

Sorting

1. Tap ▦ or select **Sort** from the toolbar.

2. Tap **Field** and select which field you want to sort by.

3. Tap **Sort by** and choose how you want to sort your fields either alphabetically, chronologically or numerically.
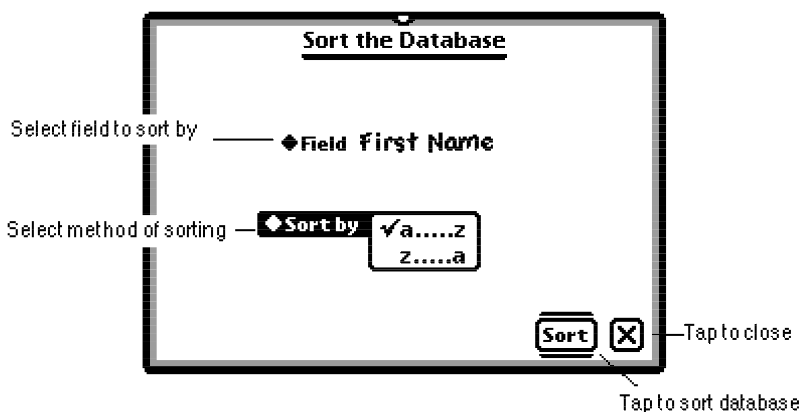
4. Tap **Sort** or press return.

Editing Records

You can add a field, delete a field and edit your keywords at any time.

Adding Fields

1. Tap **Tools**.

2. Select **Database Setup** from the menu.

3. Tap **Add fields**.

4. The database setup slip appears. Refer to **Creating fields**.

Deleting Fields

1. Tap **Tools**.

2. Select **Database Setup** from the menu.

3. Tap **Delete fields**.

4. Select field to delete.

You do not have to close this slip; the changes will be made automatically after you have chosen the field to delete.

Editing Keywords

1. Tap **Tools**.

2. Select **Database setup** from the menu.

3. Tap **Edit Keywords**.

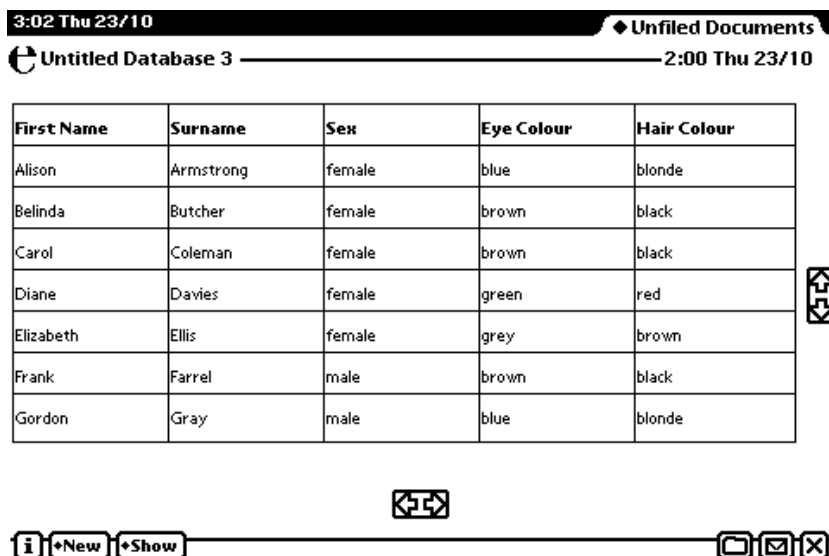4. Select which keyword to edit

5. Follow steps in **Adding Fields**.

Table View

All the data entered can be shown in two ways:

    a) with the toolbar and the current record or

    b) in table format.

1. To show your data in a table tap **Show**.

2. Select **Table** from the menu.

You cannot edit the data in table format, therefore you have to return to viewing the data as individual records.

3. Tap **Show** and select **Database** from the menu.

Handling Information

Now that the data has been entered you can display it in graphical form on screen.

Note: *You cannot display in graph format if you only have text fields entered.*
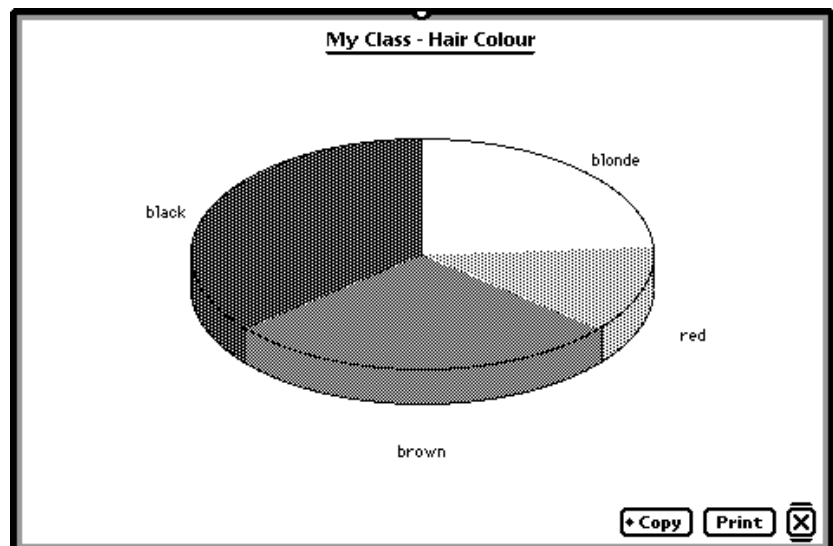
Bar Graph

1. Tap **Tools**.
2. Select **Bar graph**.
3. Tap **Label** and select field.
4. Tap **3D effect** if desired.
5. Select vertical or horizontal bars for display.
6. Tap **Draw bar graph**.
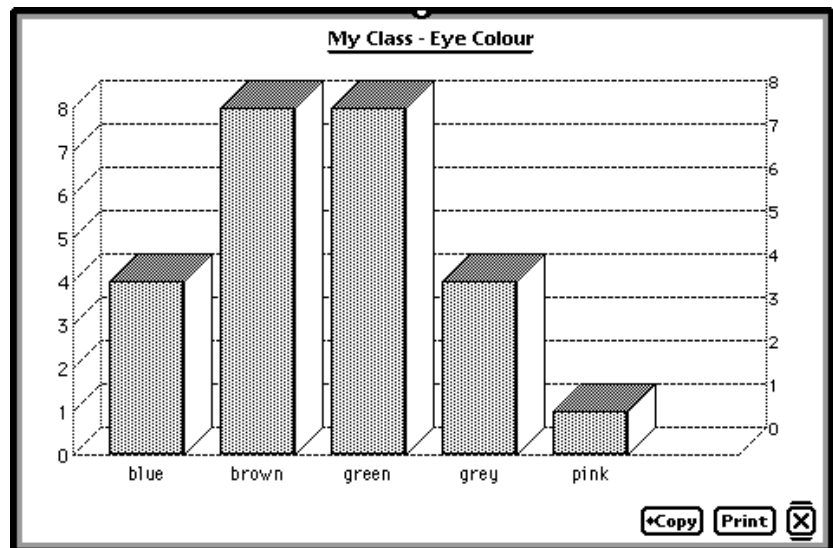
Pie Chart

1. Tap **Tools**.
2. Select **Pie chart**.
3. Tap **Label** and select field.
4. Tap **3D effect** if desired.
5. Tap **Draw Pie chart**.

Overview

To view all your documents press the overview button . This displays a list of documents in Newton Works.

Printing and Copying

Once you have created your graph you can print it out or transfer it to another package for presentation purposes. Before you print you must have your eMate connected to a printer. Plug one end of the serial cable into the printer and the other into communication port at the side of the eMate.

You can also print using AppleTalk.

1. To print tap **Print**.

2. To transfer graph to another document tap **Copy**.

3. Select size for copying. The copied chart will be highlighted at the left-hand side of the screen on a clipboard.

4. Tap or press return.

5. Tap **New** to create a new drawing or paper or open an existing document.

6. If you are opening a new one enter the title in the title slip.

8. Tap or press close.

9. Tap **Edit** and choose **Paste** from the menu or

10. Simply drag the clipboard to where you want it in the document.

Exporting data

You need the application eBase Connection Utility to export your data. This is provided on the CD.

1. Tap **Tools**.

2. Select **Export Data**.

3. Select the fields you want to export.

4. Choose how you want your data displayed.
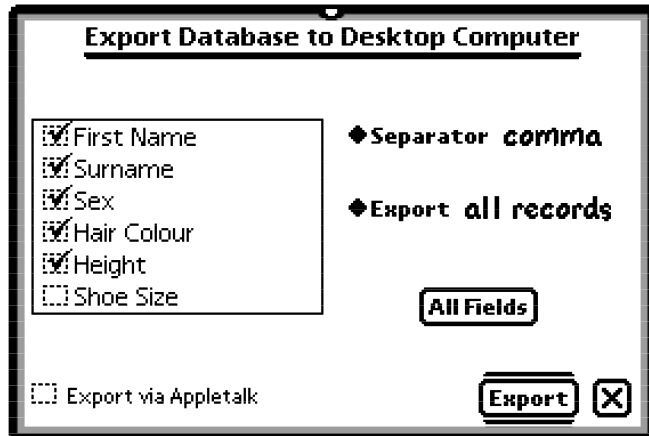
5. Tap **Export**.

The data you have exported can be used within another database package on the desktop computer such as Clarisworks. You must create the same fields on your desktop database before you can insert your exported data.

Filing

You can file your databases into folders that you can create and name.

Note: If you are using the eMate in classroom mode, documents are automatically stored in your folder.

1. Select the database you want to file from the overview menu.

2. Tap the folder button ☐ .

A folder slip appears.

3. Tap the name of the folder for storing the database in and tap **File**.

Duplicating

To duplicate an existing database open it and select **Duplicate** from the Routing button ✉ . (The Routing button allows you to send items in a variety of ways.) An identical database will be created. The name of the database will have the word 'copy' at the end and this will appear on the overview list.

Deleting Databases

To delete a whole database, open it or highlight it on the overview list and select delete from the Routing button ✉ menu.

Beaming

You can beam databases from one eMate to another. Select the database you want to beam. Point the eMate at another and be at least within three feet of each other. Do one of the following.

1. Press Send [send] on the keyboard.

2. Tap the Routing Button and select **Beam**.

   A slip appears showing the status of the beam.

Faxing

If a modem is available you can fax your databases.

1. To fax a single item, go to that item.

2. To fax several items, press overview [overview]. Tap the checkbox next to the items for faxing.

3. Tap the Routing button ✉ and select **fax**.

   The fax slip appears

4. Press return or tap **fax**.

   A slip appears showing the status.

Information button

The information button provides immediate access to on-screen help and works preferences.

1. Tap the information button.

2. Tap **help** to view on screen help.

3. Tap **Works prefs** to set preferences for the application.

eBase Lesson plans

To open up a pre-defined file:

1. Tap **New** and select **Database** from the menu.

2. Enter a title in the title slip and press return or tap ☒.

3. Tap '**Use a pre-defined file**'.

4. Tap the file you want to use, eg **classmates**, **pets**, **settlements**.

5. The database setup slip appears with the field names already entered. You can add or remove any field names and make changes where necessary. (See eBase Guide.)

6. Tap done.

Classmates

Using the pre-defined file, Classmates, pupils can enter data about other children in the class. Information such as name, hair colour, eye colour and shoe size can be entered. This data can then be accessed to answer various questions about the pupils in the class.

Activity

- Pupils must first collect the necessary data to go into the database. Have the pupils work in groups. Get them to compile a simple questionnaire asking questions that correspond with the fields, eg hair colour, eye colour, shoe size.

or

- Have the pupils enter their own data into the database.

- Once the data is entered give each group a question to investigate.

Sample questions

1. How many more people in the class have brown eyes than those with blue eyes?

2. What is the most common colour of hair?

3. Are there more boys or girls in the class?

4. How many children are smaller than/taller than a certain height?

5. Who is the tallest in the class?

- Pupils will have to decide how best to get this information. They will need to choose a graph that best displays their results.

- Print the graphs out and let the children label them.

Learning Outcomes

Information handling

- Collect information by gathering it themselves.

- Organise by entering data in a database where the headings / fields are already defined.

- Display by constructing a bar graph, line graph or pie chart with discrete categories of information.

- Interpret from the display and database to retrieve specific records or information.

Tuckshop

If the school has a tuckshop pupils can collate information regarding the price of items, the number sold on each day, the date they were sold on and so on. The information could be gathered in the form of a survey. Each day a pupil from the class can go to the tuckshop and collect the necessary data. This can be obtained in the form of a simple table. It can be filled out every day over a period of say a week and at the end of the week after all the information has been entered into the database pupils can display and interpret their findings.

Activity

- Have the children work in groups. Allow them to devise a way of collecting the information from the tuckshop.

For example:

Day 1 – Monday 12th June			
Item	**Price**	**Number Sold**	**Total**
Crisps	12p	10	120p
Mars Bar	20p	5	100p
Opal Fruits	21p	7	147p
Twix	21p	2	42p
Juice	15p	12	180p
Cola	30p	8	240p
Kit Kat	10p	14	140p

- Once they have compiled a chart or questionnaire select one person from the group to go and collect the information. This can be done on a weekly or a daily basis depending on the teacher's preference.

- Gather all the information at the end of the day/week and select a group (take it in turns) to enter the information.

- Give each group a question to investigate.

Sample questions

1. What was the most common item sold in the tuck shop?

2. What item made the most money?

3. Which day had the highest number of sales?

Learning Outcomes

Information handling

- Collect information by gathering it themselves.

- Organise by entering data in a database where the headings/fields are already defined.

- Display by constructing a bar graph, line graph or pie chart with discrete categories of information.

- Interpret from the display and database to retrieve specific records or information.

As well as taking a day to day or weekly account of the tuckshop sales, it can also be narrowed down to what was sold at break time and lunch time.

Space

This pre-defined file can be used in Understanding Earth and Space where pupils can enter information about the planets.

Pupils will have to collect information about the planets to enter data in the records under the appropriate headings.

Activity

- Have children work in groups. Give each group or each child in the group a planet that they have to research. They will have to find this information in the library, other computer databases, CD-ROMs and other sources available in the school.

- Let the pupils enter their own information or select one person from the group to enter their findings. Each group could possibly have a database each.

- Give each group a selection of questions to investigate.

Sample questions

1. Which planet is furthest from the sun?

2. Which planet has most moons?

3. What is the largest/smallest planet in the solar system?

Learning Outcomes

Science

- Collect evidence by extracting specific information from a variety of sources available in the school and local community such as the library, CD-ROMs and possibly other databases.

- Record collected evidence in the form of a simple table or database and present it in the form of a bar chart or pie chart.

Settlements

Pupils can study different types of settlements in the UK or other countries. They could look at the type of settlement, for example whether it is a city, town or village, the population, what landmarks it has and what type of industry the town is dominated by. To gather this information children will have to source it in various ways. They can refer to an atlas to find out the type of the settlement; they might also obtain the population from this source. For landmarks, pupils should look up information in books or encyclopaedias, electronic if available. The type of industry can also be obtained from this source. If possible they might wish to interview people who live in different places to gain the relevant information.

From this information pupils can investigate ways in which places have affected people and the ways in which people have used and affected places.

They will also use maps to find information.

Learning Outcomes

Collect evidence

- Extract specific information from a variety of sources available in the school and local community, eg maps, encyclopaedias, census data etc.

Record and Present

- Record evidence in the database and present information on a graph.

Interpret and Evaluate

- From the recorded evidence identify simple relationships, including cause and effect.
- Draw conclusions and give reasons.

Sample questions

1. What is the relationship between the type of town and the population?
2. How many settlements share the same industry?
3. What is the most common landmark?
4. Is there a relationship between the industry of the settlement and the population?

Weather

Using the pre-defined file, Weather, pupils can record information about day-to-day weather. They can collect information on the hours of sunshine, the amount of rainfall, the cloud cover, the temperature, etc.

Activity

- Pupils can work in groups to collect specific pieces of information about the weather. Their data can be recorded using simple tables and written information.

- At the end of the day or the week, depending on how regularly the pupils are recording the weather, a child from each group can enter the appropriate information in the database.

- Pupils can then investigate the information to find out answers to specific questions.

Sample questions

1. Which day of the week/month was the sunniest?
2. Which day had the highest rainfall?
3. What was the highest temperature taken all week?
4. What was the cloud cover like on Monday?

Learning Outcomes

Geography

Aspects of the built and physical environment

- different kinds of weather and simple weather recording
- ways of measuring and recording the weather
- maintenance and uses of systematic weather records over time and the evaluation of forecasting.

Pets

Using the pre-defined file, Pets, pupils can gather information about animals in general or domestic pets. This could be an extension to the topic on classmates. Once they have found out how many children own pets and what they are, they can enter them into the database and research additional information on them. For example, what kind of skin do they have? Is it furry, scaly, etc? What type of food do they eat?

Activity

- Pupils can compile a short questionnaire to find who in the class owns a pet and what that pet is.

- The answers can then be collated and entered into the database by one or several children.

- A range of questions can then be investigated from the charts the pupils select to display their information on.

Sample questions

1. Make a list of animals that have fur covering their body.

2. How many animals eat meat, seeds, vegetation?

3. Are there any animals that hibernate?

4. What is the most common type of home lived in by domestic animals?

Learning Outcomes

Science

Variety and Characteristic Features

- sorting living things into broad groups according to easily observable characteristics.

- recognising and naming common animals in the classroom and local environment.

Key Stages for Information Technology

Key Stage 1

Communicating and handling information

a) Generate and communicate their ideas in different forms, using text, tables, pictures and sound.

b) Enter and store information.

c) Retrieve, process and display information that has been stored.

Key Stage 2

Communicating and handling information

a) Use IT equipment and software to communicate ideas and information in a variety of forms, incorporating text, graphs, pictures and sound, as appropriate, showing sensitivity to the needs of their audience.

b) Use IT equipment and software to organise, reorganise, and analyse ideas and information.

c) Select suitable information and media and classify and prepare information for processing with IT, checking for accuracy.

d) Interpret, analyse and check the plausibility of information held on IT systems, and select the elements required for particular purposes, considering the consequences of any errors.

Key Stage 3

Communicating and handling information

a) Use a range of IT equipment and software efficiently to create good quality presentations for particular audiences, integrating several forms of information.

b) Be systematic in their use of appropriate search methods to obtain accurate and relevant information from a range of sources.

c) Collect and amend quantitative and qualitative information for a particular purpose, and enter it into a data-handling package for processing and analysis.

d) Interpret, analyse and display information, checking its accuracy and questioning its plausibility.

Glossary of Terms

Bar Graph	a graph that uses bars of different heights to show and compare information.
Data	facts and numbers that will be entered into the database.
Field	the headings given to the types of information that will be entered.
Field Type	a word given that will tell how the data is to be interpreted and displayed, eg text, number etc.
Graph	a drawing used to show and compare information.
Keyword	a special word used when the pupil can select a field entry from a list of options.
Pie Chart	a circular graph showing information as fractions, percentages or parts of a whole.
Record	where information is entered and stored.
Search	to find a specific record or records to retrieve certain information.
Sort	to rearrange the records into groups based on entries in a field.
Title	the main heading that describes the graph.
Tool Bar	a collection of icons grouped in a line that offer options to move around the database quickly and easily.