2Investigate is a database for use in primary schools.

- There are pre-populated databases or you can create your own.
- It is designed to be very simple for the children to create their own database or enter information on a collaborative database.
- Information can be sorted visually by fields.
- Information can be search using key words.
- 2Investigate can produce a range of graphs.

- There are teacher resources and lesson plans available in the Computing Scheme of Work and in the Resources area for 2Investigate.

The video guides within 2Investigate give some further ideas about how to use the tools. Click on the Video Guide button at the top right to access it.
2 Menu bar

New File: use this to open a new blank database or new example database.

Open: to open 2Investigate files from your saved work or device.

Save.

Export: Allows the user to export the database in graphic form as an image. See Exporting Databases.

Export as csv: this download the data from your database in .csv format which can be imported into other programs such as spreadsheets. See Exporting Databases.

Print: Generates a pdf showing the selected records for printing formatted as record cards. When in table view, you can print a table of the records.

Share button: this will give you various options for sharing your file. See the Sharing Guide for more details.
Collaborate: Indicates whether a database is collaborative or not. When a database becomes collaborative, the button turns green. See Collaborative Databases.

Design Database: Allows the user to design a new database or amend the fields in an existing open database. See Designing a Database.

Add record: Allows the user to add a record to the open database. See Adding Records.

Table view: See Table View for more information.

See Searching the Database for more information.

See Sorting, Grouping and Arranging for more information.

See Statistics and Reports.

See Charts for more information.
3 Sample Databases

There are the following example databases pre-populated in 2Investigate.

Once opened, the user can save the database in their work folders to edit the database.

There are teacher resources that use these databases available in the 2Investigate Resources area of Purple Mash.
3.1 Automatically Create a Class Database

It is possible for a teacher to automatically create a class database with real pupil names and avatars. From the example databases, choose 'Select a Class'. You will then be offered a choice of the classes for whom you are allocated as a teacher.

Select the class and a database will be created with each child’s name and their avatar image.

To create avatars, pupils can click on the black outline beside their name when they login to Purple Mash.
4 Designing a Database

There are two ways to start a new database. The user can either click on ‘Blank’ when 2Investigate opens or by clicking on on the toolbar at the top of the screen.

The Database Design screen will open. This is where you add the fields for the database.

Click on the Pencil icon to insert the details of the first field. You can enter a name for the field, decide whether the contents are letters or numbers and allocate a list which will present the user with choices to select from. The example below shows a field called 'Continent' being added, the user will have a choice of the continents when adding records.

Once the fields have been added, click OK and then click at the top of the screen and give the database a title.

To further edit the fields, click on the Design Database icon.

Save the database then you can begin to add records.
Adding Records

To add a record click on add record at the top of the screen. The ‘Add record’ card appears with the correct field headings.

Complete the fields using letters, numbers or answers from the drop down menu.

You can also add sounds and pictures. The picture can be a piece of clip-art, a photograph or an image from a web-cam (use the button to take this). Once complete press ‘OK' to add the record to the database.

It is possible to create records that children cannot change by clicking the lock icon on the record. This is useful in a collaborative database to prevent children changing records for the whole class.

Note that the web-cam access can be turned off for an individual school if desired for security and privacy reasons.
6 Table View

When the user loads a database the information is portrayed in graphical form.

The ‘Table view’ icon at the top of the screen allows the user to sort the information in the database into a table.

Clicking on the column headings will sort the information alphabetically or in numerical order.

The ‘Find’ icon allows the user to search for information in a record. See Searching the Database for further information.

Selecting the ‘Show All’ icon resets the information in the table after you have completed a search.

Clicking the print icon will print your database in table view.
7 Searching the Database

When the user loads a database the information is portrayed in graphical form. All the records are displayed.

The ‘Find’ icon allows the user to search the information in a database. Here we are searching records for all aliens with 2 eyes.

Now all the records showing aliens with 2 eyes are displayed in the middle of the screen with the remaining records at the bottom of the screen.

It is possible to include one, two or three search criteria. For example, the following search would find
all aliens from the planet Boaz with 3 or more eyes who have laser eye rays.

Where appropriate you can select to display the results in a Venn diagram. For example, aliens from the planet Zorg with strength equal to or greater than 100:

Use the Constrain Search tick box when you have already performed a search and want to perform a further search on only the records that met the criteria of the first search rather than on all of the records.

The Find icon can also be used in Table View to present the results in the table.
The ‘Sort, Group, arrange’ icon allows the user to sort the information in a number of different ways:

**Sort**

Allows the user to sort by different fields. The information can be displayed in ascending or descending order. Here the user is sorting by number of eyes.

The information is displayed from the smallest number of eyes to the most.

**Group**

Group allows the user to group records together according to shared information. Here the user is grouping the aliens according to the planet they come from.

**Arrange**

The arrange icon allows the user to show the information in a number of different ways.
The Chart icon allows the user to show the information in graph form. Here the user is going to show a graph according to the planet the alien comes from.

The information can be displayed in a range of different charts. Click on the different charts at the top of the screen to choose the appropriate format.

When making a graph the colours of the bars or segments are coloured coded when the value of a field is a coloured piece of text.
10 Statistics and Reports

The ‘Statistics and Report’ icon allows the user to find statistical information in a database. The information the user can display will depend in the type of field. The results are cumulative in the window, so you can accumulate various results unless you click on the Clear button.

In this instance the user is finding statistical information about eyes. This information can then be copied using the Copy button.

![Calculate Statistics](image)

The user can also print a report showing specific information from the database.

![Reports](image)

In this example, the report will show alien names and planet. Press view to see the report. This information can then be copied using the Copy button.
11 Collaborative Database

Creating a Collaborative Database

Save a database in a shared folder and click the ‘Collaboration’ button to make the database collaborative, the button will turn green.

Only the database creator will be able to edit the design of the database.

It is possible for the teacher to lock records in collaboration mode so pupils can’t mess with example records that may have been set up by a teacher.

Users with access to the shared folder can now add their own records and the record will appear on all collaborators screens.

The creator of the database is the only one who can save over it.

All collaborators are able to save a copy of the database.

Opening a collaborative database

To open a collaborative database, click ‘Open’ and select the shared folder.

All the databases in the folder will appear. Click on the one you want to open.

Users can then create their own records. Each record will be added to the collaborative database.
12 Exporting Databases

There are two ways to export database details, see the following sections for information:

- To export in a graphical format; as a picture.
- To export as data to open with a spreadsheet or text editor.

12.1 Exporting in a graphical format

The user can export the image on their screen in graphic format. This image can then be used in other resources inside and outside of Purple Mash.

To export the image click on ‘Export’.

The image that is to be exported will appear on the screen. Click Download and the image will then be saved to your device.

On a PC, the image will normally save to the ‘Downloads’ folder.

This image can then be used in other Purple Mash tools. Here a Planet database is being used in a newspaper report in 2Publish Plus.
12.2 Exporting a .csv file

A .csv is a 'comma separated values' file, which allows data to be saved in a table structured format. The user can export all the data in a database into a CSV file.

To export the database as a CSV file click on ‘Export CSV’.

The file will then save. On a PC this is normally in the ‘Downloads’ folder.

This file can be imported into 2Calculate or other spreadsheet programs. In the example below, the Numbers example database has been exported and then opened with 2Calculate.

<table>
<thead>
<tr>
<th>Number</th>
<th>Odd or Even</th>
<th>Double?</th>
<th>Multiply?</th>
<th>Divide?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Odd</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>Odd</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Even</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>11</td>
<td>Odd</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>12</td>
<td>Even</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>13</td>
<td>Odd</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>14</td>
<td>Even</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>15</td>
<td>Odd</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>16</td>
<td>Even</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>17</td>
<td>Odd</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>18</td>
<td>Even</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>19</td>
<td>Odd</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>20</td>
<td>Even</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Odd</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Even</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Odd</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Even</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
13 Additional Teacher Resources

Databases are included in the Purple Mash Computing Scheme of Work and are included as a resource in other units.

Data handling work in the Scheme of Work covers a variety of areas including general sorting, grouping and graphing skills, spreadsheet work, branching databases and 2Investigate.

See specifically the following units:

- **Unit 1.2** - Grouping and Sorting
- **Unit 1.3** - Pictograms
- **Unit 2.4** - Questioning
- **Unit 3.6** - Branching Databases
- **Unit 3.8** - Graphing
- **Unit 5.4** - Databases

As well as spreadsheet units in each year group.

There are additional teacher resources in the 2Investigate Resources area in Purple Mash with lesson plans and worksheets for each of the example databases.