



KS2-2 Database 1

lesson plans 

Learning Objectives

Design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Learning Outcomes

All children: will collect and present data and information.

Most children: will collect, present and analyse data and information.

Some children: will collect, present, analyse and evaluate data and information.

Cross curricular links

Key Stage 2 - Maths

Solve one-step and two-step questions [for example, 'How much more is this item?' and 'How much less is that item?'] using information presented in scaled bar charts and pictograms and tables. Interpret and present data using bar charts, pictograms and tables.

Upper Key Stage 2

Complete, read and interpret information in tables.

Begin to decide which representations of data are most appropriate and why.

Vocabulary

(see glossary j2e.com/data/glossary).

Resources

Starter Cards:

j2e.com/data/countrycards

Template:

j2e.com/data/examples/countries



Introduction

Print out the starter cards (enough for one set per small group) and ask them the following questions. Which country has the largest population?

Which country covers the smallest area?

Which 3 countries have the smallest population?

Prior to the lesson, open the counties template (see Resources above) and save a copy in your own area. Then share the file with the class by clicking on the blue share button at the top. Click on the blue arrows at the end of the box. This will give a list of users to share with. Select your class.

Main Activities

Using the blank starter cards create fact files for the following countries (or choose your own)

- Portugal
- New Zealand
- Austria
- Australia

You can use <https://en.wikipedia.org> (but remember that the pupils will need to double check the information).

Recap what a database is, explaining the meaning of field, datatype and record. Use the starter video as appropriate.

Load the database template and show the information. Draw attention to the fields and datatypes. Transfer information from one of the new data cards, to the database. Pupils will be able to add data in a later lesson.

Task 1

Load the database template.

Stop the class

Explain to the pupils that we can use a database to find information quickly. Ask the question "which country has the largest population?". Find the answer by first clicking on the table tab of the database. Then click the relevant field and use the up or down arrows.

Task 2

Use the database to answer the following questions:-

Which country has the smallest population?

Which country covers the largest area?

Which 3 countries are the largest in population?



Stop the class

Show the pupils how to use a query to answer more complex questions (see starter video). For example, which countries have the Euro as their currency.

Task 3

Use the database to answer the following questions:-

Which countries have an area less than 50,000?

Which countries speak English as their first language?

Which country uses the Yen as it's currency?

Which country uses the Euro as it's currency and has an area less than 50,000?

Challenge

Make a database for the European Union. Pupils can define their own records.

Follow up activities

Learning can be reinforced using the minibeast cards and database. This would link well to science work on animals and their habitats.

Starter Cards:

j2e.com/data/minibeastscards

Database:

j2e.com/data/examples/minibeasts



Assessment

Children can save their work enabling the teacher to assess what they have produced after the lesson.