Lesson Plan Reports

Subject: Computers

Semester: 2 / Year: 2025

Teacher: Richard Daw

English Program

Strisuksa School

Topic: Python	**Unit: 1**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Learn about python as a programming language

Objective/Expectations:

- Students to identify the python user interface.
- Students to identify what a python expression is.
- Students to identify what a variable is

Process of learning:

Warm-up

a) Ask students to define what is programming.

b) Discuss why we teach python as a language.

c) Introduce the vocabulary we will be using for this unit.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 4 about how we use the python idle and the difference between the interactive and script windows.

c) Show slides 5 – 9 about python expressions and their operators Introduce the Python "Input" Programming command

d) Show slides 10 – 14 about variables.

e) Discus with the students about variables and how python is case sensitive when variables are created and how the names need to match between the variables and the programming commands.

Practice

a) Students open the idle shell to create their first program "Hello World".

b) Students explore syntax by typing several statements into idle shell.

c) Students create a simple program with variables, print and input commands to ask questions, store the response and then print the responses to screen.

Wrap-up

a) Students should complete the plenary quiz.

Extension

Issue the Clever Calculations Sheet for students to complete at home and bring in next week. This activity is designed to be completed without the need for access to a computer.

Materials:

- Python Lesson 1PowerPoint presentation
- Lesson 1 Plenary quiz worksheets
- Clever Calculations worksheets
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

Skills	**Exceptional 5points**	**Acceptable 4 points**	**Amateur 3 points**	**Unsatisfactory 2 points**
Specifications Whether the student's work evidences ability to make meaning being able to define and recognize with the code	The program works and meets all of the specifications.	The program works and produces the correct results and displays them correctly. It also meets most of the other specifications	The program produces correct results but does not display them correctly.	The program is producing incorrect results.
Readability Whether the student's work shows the ability to organize his experiences	The code is exceptionally well organized and very easy to follow.	The code is fairly easy to read.	The code is readable only by someone who knows what it is supposed to do.	The code is poorly organized and very difficult to read.
Reusability Whether the student's work evidences ability to be used in future programs	The code could be reused as a whole or each routine could be reused.	Most of the code could be reused in other programs.	Some parts of the code could be reused in other programs.	The code is not organized for reusability
Efficiency Whether the student's work evidences ability to apply logical and critical analysis	The code is extremely efficient without sacrificing readability and understanding.	The code is fairly efficient without sacrificing readability and understanding.	The code is brute force and unnecessarily long.	The code is huge and appears to be patched together.

Topic: Python	**Unit: 2**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Learn about data types, editor and IF statements

Objective/Expectations:

- Students to identify different data types used in the python.
- Students to be able to use the idle editor to save programs.
- Students to identify if statement and indentation.

Process of learning:

Warm-up

a)Recap python expressions from last lesson.

b) Ask some short questions on variables and their use.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 4 about data types used in python.

d) Explain how data types can be changed from one type to another using 'type casting'.

c) Show slides 5 – 10 about IF statements and the importance of indentation.

d) Explain how IF statements are used in computer programs to make decisions.

e) Show how you can have many different decisions by using multiple else if commands in a program.

f) Go over the different type of operators used in selections.

Practice

a) Students type in the random game program and run it.

b) Students modify the random game program to ask more questions.

c) Students use IF commands and operators to try and correct the un-working programs from the differentiated programming challenge activity worksheet.

Wrap-up

a)Students give a definition for each of the key words: variables, data types, string, integer, float, Boolean, concatenation, type casting.

Materials:

- Python Lesson 2PowerPoint presentation
- Pythondifferentiated programming challenge activity worksheets
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

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Topic: Python	**Unit: 3**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Learn about functions and comments

Objective/Expectations:

- Students to understand about the benefits of functions.
- Students to be able to write and call a function from inside a program.
- Students to learn how and why we should use comments in our code.

Process of learning:

Warm-up

a)Data Type Derby: A quiz using the PowerPoint slides, ask the class to suggest which data type each value belongs to.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 5 about functions and their use in python.

c) Show how they have already used some functions and how to create a simple function.

d) Show slides 5 – 10 about comments and why they are used in programming.

Practice

a) Students create their own simple function in Python.

b) Students create a second function and add comments to their code.

c) Snakes Alive: Using the snakes' alive sheet. The challenge is to write a Python program that inputs a person's age (in years) and then displays the number of days, hours, minutes and seconds they've been alive.

Wrap-up

a)Students give a definition for each of the key words: variables, data types, string, integer, float, Boolean, concatenation, type casting.

Extension

a) Issue the Type Functions Sheet for students to complete at home and bring in next week. This activity is designed to be completed without the need for access to a computer.

Materials:

- Data Type Derby PowerPoint quiz
- Python Lesson 3PowerPoint presentation
- Lesson 3'Snakes Alive!' activity sheets
- Type Functions sheets
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

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Topic: Python	**Unit: 4**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Learn about function return values and Boolean expressions

Objective/Expectations:

- Students to understand about branching statements.
- Students to use Boolean Logic statements.
- Students to learn about truth tables.

Process of learning:

Warm-up

a) Students use the Python Payphone sheet and type in the given Python program into the IDLE. Students should then run and test their programs. They will receive a syntax error and are to try and use the inbuilt debugger to fix the problems.

Presentation

a) Teacher led discussion.

b) Recap comparative operators from a previous lesson.

c) Show power point slides 1 – 3 and explain the differences between assignment and equality operatives.

d) Show slides 4 – 7 about Boolean operators and how it is more than just True/False.

e) Show slides 8 – 12 about Boolean truth tables and their use with operators.

Practice

a) Students create a grades calculator program to apply knowledge of selection, comparative operators and Boolean operators.

Wrap-up

a)Boolean Bonanza: Using the PowerPoint slides conclude this section with a whole-class quick quiz on Boolean logic statements and truth tables.

Materials:

- Python Lesson 4PowerPoint presentation
- Lesson 4‘Python Payphone’ activity sheets
- Boolean Bonanza PowerPoint quiz
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

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Topic: Python	**Unit: 5**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Learn about Python lists and iteration

Objective/Expectations:

- Students to lists as a data structure.
- Students to use iteration in a program to repeat blocks of code.
- Students to use for, in and range in loops.

Process of learning:

Warm-up

a)Outstanding Operators: Using the slides on the PowerPoint, ask students to identify the type and form of various operators (comparative and Boolean).

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 4 and explain how in python a list is a special type of variable that can hold multiple values as a data structure.

c) Explain how when creating a new list, we use [square brackets], but for other list operations we tend to use (curved brackets).

d) Show slides 5 – 10and explain how there are many situations in programming when we need to repeat a section of code and in computing this is called iteration.

e) Explain how For-loops in particular are designed to work very well with lists and show how a list can be used to run a loop.

f) Show slides 11 – 15 and explain how a for loop is a count-controlled loop and can be used when you know how many times you want the block of code to repeat.

Practice

a) Students use the Monty's Menu worksheet to create a list called "ingredients" which contains some of the things needed to make a margarita pizza.

b) Students demonstrate how to append, delete and change items to complete the ingredients.

c) Students use the Fabulous for Loops Worksheet to create counter programs that will run countdowns in different sequences and ranges

Wrap-up

a) Ask students to give a definition for each of the key words: list, append, sort, iteration, for-loop, starting value, stopping value, stepping value.

Extension
a) Issue the Terrific Times-Tables Worksheet for students to complete at home and bring in next week. This activity is designed to be completed without the need for access to a computer.

Materials:

- Python Lesson 5 PowerPoint presentation
- Lesson 5 'Monty's Menu' activity worksheets
- Lesson 5 'Fabulous For-Loops' activity worksheets
- Lesson 5 'Terrific Times-Tables' activity worksheets
- Outstanding Operators PowerPoint quiz
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

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Topic: Python	**Unit: 6**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Learn about while loops and the development process using pseudo code

Objective/Expectations:

- Students to use while-loops in Python to iterate blocks of code.
- Students to understand the difference between validation and verification.
- Students to import the random module and generate random numbers.

Process of learning:

Warm-up

a) Recap iteration and for-loops from last lesson.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 6 about how while loops are constructed using the while statement.

c) Explain how for-loops are 'count-controlled' loops (when we want to repeat things a fixed number of times), but while-loops are 'condition-controlled' loops that will keep repeating the block of code while the condition is true.

d) Show slides 7 – 10and explain the difference between verification and validation.

e) Show slides 11 – 13 on how to import the random number module and use the module to generate some random numbers between 2 different integers.

f) Explain that a computer follows its instructions blindly and is therefore completely predictable, so pseudo-random numbers are not random in the way you might expect. Essentially, algorithms that use pre-calculated tables to produce sequences of numbers that appear random.

Practice

a) Students use the Are We There Yet worksheet to create a program that uses iteration to keep on repeating while the answer is 'no'.

b) Students create the email program and use it to answer the types of validation and verifying used in the program.

c) Students create a guess the number program using the random number module.

Wrap-up

a) Students have to write down 6 questions about Python to ask the class.

Materials:

- Python Lesson 6PowerPoint presentation
- Lesson 6'Are We There Yet' activity worksheets
- Lesson 6 'Validation and Verification' activity worksheets
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

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Topic: Python	**Unit: 7**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Learn about the Python turtle

Objective/Expectations:

- Students to understand how to import the Python turtle.
- Students to use thePython turtle to draw on the screen.
- Students to write simple programs using loops to create shapes.

Process of learning:

Warm-up

a) Open the Ask monty file and call on students to explain what each code in the shown box does.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 6 about the python turtle explain that you need to use the turtle before it can be used in a program.

c) Show how the turtle can be used to draw on the screen and the shapes can be coloured and filled.

d) Show slides 7 – 10and explain how you can use both for and while loops with the turtle to draw more complex patterns.

e) Show slides 11 – 13 and explain how you can have multiple turtles on screen.

Practice

a) Students use the Draw Wars worksheet to complete the programs to draw the required shapes.

b) Students use the Turtle Strikes Back worksheets to complete the programs with different types of loops to create required complex patterns.

c) Students have to create a program using two turtles to draw two different shapes.

Wrap-up

a) Students have to create a program that will ask a user for the number of sides, the length of the sides and the angle of turns to then draw the shape on the screen.

Materials:

- Python Lesson 7PowerPoint presentation
- Lesson 7‘Draw Wars’ activity worksheets
- Lesson 7 ‘The Turtle Strikes Back’ activity worksheets
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

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Topic: Python	**Unit: 8**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to start creating a GUI

Objective/Expectations:

- Students will make learn the benefits of a GUI interface.
- Students will make a simple GUI.

Process of learning:

Warm-up

a) Recap using the turtle from last lesson.

Presentation

a) Teacher led discussion.

b) Discuss how all the application we have created till now have been in the console and interacted with the keyboard. Now we are going to start interacting with the mouse by creating a GUI.

c) Show slides 1 to 6 about various GUI in games.

d) Brainstorm where students have come across these and in which programs.

e) Show slides 7 to 17 about GUI usage in games and applications and see if these were any that the students have previously identified.

Practice

a) Students create a simple click counter.

b) Students will create an 8-ball guessing game, to click on the picture of the ball and use the magic 8-ball to answer the typed in questions.

Wrap-up

a) Students will try out each other's applications and discuss ways to improve them.

Extension

a) Students to brainstorm and create a mind map of all that we have learnt over the last 8 weeks in Python for revision.

Materials:

- Python Lesson 8 PowerPoint presentation
- Python 3.4.2 Software

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

Skills	**Exceptional** **5points**	**Acceptable** **4 points**	**Amateur** **3 points**	**Unsatisfactory** **2 points**
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Topic: Python	**Unit: 9**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to review for their Exam

Objective/Expectations:

- Students will Review and revise knowledge of Python programming.

Process of learning:

Warm-up

a) Hand out the Memory Map worksheet. Have students use a few minutes to try and fill in al the information that they can remember about Python.

Presentation

a) Teacher led discussion.

b) Show slides 1 to 6 about terms used in the previous Python lessons.

c) Using the PowerPoint begin the revision with Quick Quiz 1: matching up the key terms and data types with their definitions.

d) Show slides 7 to 12 about other terms used in previous Python lessons.

e) Using the PowerPoint continue revision with Quick Quiz 2: matching up the programming terms, operators and logic statements with their definitions.

Practice

a) Students will fill in the Memory Map worksheet and then compare it with the slide in the PowerPoint.

Wrap-up

a) Students use the Flashcards worksheet in pairs to test their partners' knowledge of the review.

Materials:

- Python Lesson 9PowerPoint presentation
- Python Memory Map Worksheet
- Python Flashcards Worksheet

Evaluation:

Criteria for assessing quality of work

Python Programming Rubric

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Topic: Database	**Unit: 1**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- To understand what a database is

Objective/Expectations:

- Students to identify the difference between data and information.
- Students to identify what a database is.
- Students to identify the parts of a database.

Process of learning:

Warm-up

a) Ask students what is 'information'. Write the suggestions on the board.

b) Ask students where can the information be stored and how it is useful.

c) Introduce the vocabulary we will be using for this unit.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 4 about how information is collected and can be used as data.

c) Show slides 5 – 9 about databases and their uses.

d) Explain that you can get paper-based databases for example: phone directories, address books, and that the internet is one huge database.

e) Show slides 10 – 14 about database structure.

f) Explain each part of what a simple database is made from, tables, fields, and records.

Practice

a) Students complete the data and information worksheets.

Wrap-up

a) Students should explain the following terms to their partners: Information, Database, tables.

Materials:

- Data and information PowerPoint presentation
- Lesson 1 data and information worksheets

Evaluation:

Criteria for assessing quality of work

Access Database Rubric

Skills	**Exceptional** **5points**	**Amateur** **3 points**	**Unsatisfactory** **1points**
Setup Database	Database has the relevant fields	Database lacks the number of fields	Database is not organized, lacks the appropriate number of fields
Fields-structure3 different field types	Fields are of 3 different types/structure showing students overall understanding of data types and the best way to capture various types of data in a database.	Fields are of 2-3 different types, but choice of data type does not demonstrate an overall understanding of data types in a database.	Field structure/type is not varied, does not demonstrate any understanding of types of data and matching it to the appropriate data type in a database.
Data entry 9 records	Database has 9 records the appear complete and accurate.	Database has 9 records however the data is mismatched or appears incorrect.	Database does not have 9 records, there is mismatched data and incorrect data.
Search/Query Navigate database and demonstrate search capability.	Student demonstrated ability to navigate the DB and showed competence in creating search within database.	Student had some difficulty navigating the DB but was able create a search within database.	Student was unable to navigate the DB or unable to create a search within database.

Topic: Database **Unit: 2** **Subject: Computers**

Level: M5 **Times: 1 hour** **Teacher: Richard Daw**

Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- To show the functions of Access

Objective/Expectations:

- Students to identify DBMS and RDBMS software.
- Students to identify the basic functions of MS Access.

Process of learning:

Warm-up

a) Recap the differences between information and data from last lesson.

b) Recap what a database is.

c) Call on different students to name the parts of a database.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 4 and discus with the students the types of computer software that can be used to create and manage databases.

c) Show slides 5 – 9 about the differences between DBMS and RDBMS software.

d) Demonstrate MS Access Software.

Practice

a) Students complete MS Access Screen worksheets while the teacher is demonstrating the features of Access.

Wrap-up

a) Students should explain the parts of the Access screen to their partners.

Materials:

- Lesson 2Database PowerPoint presentation
- Lesson 2Access screen worksheets
- MS Access software

Evaluation:

Criteria for assessing quality of work

Access Database Rubric

Skills	**Exceptional** **5points**	**Amateur** **3 points**	**Unsatisfactory** **1points**
Setup Database	Database has the relevant fields	Database lacks the number of fields	Database is not organized, lacks the appropriate number of fields
Fields-structure3 different field types	Fields are of 3 different types/structure showing students overall understanding of data types and the best way to capture various types of data in a database.	Fields are of 2-3 different types, but choice of data type does not demonstrate an overall understanding of data types in a database.	Field structure/type is not varied, does not demonstrate any understanding of types of data and matching it to the appropriate data type in a database.
Data entry 9 records	Database has 9 records the appear complete and accurate.	Database has 9 records however the data is mismatched or appears incorrect.	Database does not have 9 records, there is mismatched data and incorrect data.
Search/Query Navigate database and demonstrate search capability.	Student demonstrated ability to navigate the DB and showed competence in creating search within database.	Student had some difficulty navigating the DB but was able create a search within database.	Student was unable to navigate the DB or unable to create a search within database.

Topic: Database **Unit: 3** **Subject: Computers**

Level: M5 **Times: 1 hour** **Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to create a database

Objective/Expectations:

- Students will identify different data types.
- Students will create a basic database structure.

Process of learning:

Warm-up

a) Ask students what do they think certain types of data could be stored as. Write the suggestions on the board.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 5 and discus with the students the structure of a database and the reasons for defining data types.

c) Show slides 6 – 10about how to create a database in RDBMS Software.

d) Explain what a key field is and why it has to be unique to each record in a database.

e) Ask if the students can think of some examples of unique key fields and where they might be needed.

Practice

a) Students begin to create their database using the Data Structure Worksheets.

b) Students begin to enter the information into their newly created databases from the Record Information worksheets.

Wrap-up

a) Write some different types of data on the board and then get the students to come and write the correct data type on the board.

Materials:

- Lesson 3 Database PowerPoint presentation
- Lesson 3 Data Structure worksheets
- Lesson 3 Record Information worksheets
- MS Access software

Evaluation:

Criteria for assessing quality of work

Access Database Rubric

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Topic: Database	**Unit: 4**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to create a 2nd table for a relational database

Objective/Expectations:

- Students will create a 2nddatabase table.
- Students will join the database tables together to create relationships.

Process of learning:

Warm-up

a) Give students the data type worksheet and have them match the data types to the correct fields.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 5 and discus how a relational database works by sharing information between tables.

c) Explain how this can be beneficial when creating databases as it reduces the amount of data that the user needs to enter.

d) Show slides 6 – 10 about how to create a database relationship in RDBMS Software.

Practice

a) Students begin to create their 2nddatabase table using the Database Table Structure Worksheets.

b) Students enter the information into their newly created 2nddatabases from the Record Information worksheets.

c) Students join their two tables together and create a one-to-one relationship between them.

Wrap-up

a) Write some different types of data on the board and then get the students to come and write the correct data type on the board.

Materials:

- Lesson 4 Database PowerPoint presentation
- Lesson 4 Data Types worksheets
- Lesson 4 Database Table Structure worksheets
- Lesson 4 Record Information worksheets
- MS Access software

Evaluation:

Criteria for assessing quality of work

Access Database Rubric

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Topic: Database	**Unit: 5**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to create a form to help with data entry

Objective/Expectations:

- Students will create a database entry form.
- Students will edit and add controls to the form.

Process of learning:

Warm-up

a) Ask students questions about data types, database structure and relationships between tables as a recap from past lessons.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 5asking students to think back to the last few lessons and how difficult and cumbersome it has been to enter information into their databases.

c) Explain how this can be made easier if the database had a simple entry screen and we can do this through the use of a database form.

d) Show slides 6 – 10 about how to create a database entry form in RDBMS Software.

e) Demonstrate how to edit the form by hiding parts of the information you don't want changed.

f) Demonstrate how to add controls to the form.

Practice

a) Students create their database form.

b) Students edit the form and hide parts and change the look and colours of the form.

c) Students add controls to their created forms.

Wrap-up

a) Students use the New Bookings worksheets to edit the information in the database.

Materials:

- Lesson 5Database PowerPoint presentation
- Lesson 5New Bookings worksheets
- MS Access software

Evaluation:

Criteria for assessing quality of work

Access Database Rubric

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Topic: Database **Unit: 6** **Subject: Computers**

Level: M5 **Times: 1 hour** **Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to edit the database and run a query

Objective/Expectations:

- Students will edit and sort the database.
- Students will create database queries.

Process of learning:

Warm-up

a)Handout to students the Database Table worksheet.They must give an example for each field.

Presentation

a) Teacher led discussion.

b) Show power point slides 1 – 5showing how databases can be sorted in a number of ways.

c) Demonstrate how to sort and edit the database.

d) Show slides 6 – 10 about how to ask questions of the database using queries.

e) Explain how you can ask multiple queries and different kinds by using operators.

f) Demonstrate how to create and run a database query.

Practice

a) Students create their database form.

b) Students use the Database Questions worksheet to create and run different queries on their databases.

c) Students add controls to their created forms.

Wrap-up

a) Ask students what they think about the advantages of using a database now after all they have learnt.

Materials:

- Lesson 6Database PowerPoint presentation
- Lesson 6Database Table worksheets
- Lesson 6 Database Questions worksheets
- MS Access software

Evaluation:

Criteria for assessing quality of work

Access Database Rubric

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Topic: Database **Unit: 7** **Subject: Computers**

Level: M5 **Times: 1 hour** **Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to setup and run a mail merge

Objective/Expectations:

- Students will make more advanced database queries.
- Students will make mail merge.

Process of learning:

Warm-up

a)Handout to students the query worksheet. They answer the questions by running the query.

Presentation

a) Teacher led discussion.

b) Discuss with the students what if you wish to send a letter to certain people from the database, you can run a query and then use this data to import into a setup letter.

c) Show power point slides 1 – 5 showing how databases can run a query and use this as the results for using in a letter.

d) Show slides 6 – 10 about how to setup mail merging in a database.

e) Demonstrate how to use a mail merge.

Practice

a) Students create their letter.

b) Students run a query on the database.

c) Students import the query results into the letter.

Wrap-up

a) Students discuss with partner what else you could use mail merge for. (Some Ideas: large advertising campaigns, letters home to parents.).

Materials:

- Lesson 7 Database PowerPoint presentation
- Lesson 7 Database query worksheets
- Lesson 7 Database Mail merge Letter worksheets
- MS Access software

Evaluation:

Criteria for assessing quality of work

Access Database Rubric

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Topic: Database	**Unit: 8**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to setup and run reports on the database

Objective/Expectations:

- Students will create a database report.
- Students will edit the database reports.

Process of learning:

Warm-up

a) Recap Database queries from the last few lessons.

Presentation

a) Teacher led discussion.

b) Discuss with the students how with reports you can print out information from select queries or from related tables.

c) Show power point slides 1 – 5 showing how databases can run a query and use this as the results for using in a letter.

d) Demonstrate how to run and generate a report from a query.

e) Show slides 6 – 10 about how to edit a report in a database.

Practice

a) Students use the Database Query worksheet to create queries.

b) Students will generate reports from the query answers.

c) Students will edit the reports to make them more presentable.

Wrap-up

a) Give the students the following problem. A teacher has a mark book with all the predicted and actual grades of all her students.

b) What sort of report could the teacher create?

Materials:

- Lesson 8 Database PowerPoint presentation
- Lesson 8 Database query worksheets
- MS Access software

Evaluation:

Criteria for assessing quality of work

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Topic: Database	**Unit: 9**	**Subject: Computers**
Level: M5	**Times: 1 hour**	**Teacher: Richard Daw**

Learning Strands: O2.1, O3.1, F1.1, F1.3

Important Concept

- Students are going to review for their Exam

Objective/Expectations:

- Students will Review and revise knowledge of Databases.

Process of learning:

Warm-up

a) Hand out the Memory Map worksheet. Have students use a few minutes to try and fill in all the information that they can remember about Databases.

Presentation

a) Teacher led discussion.

b) Show slides 1 to 6 about terms used in the previous Database lessons.

c) Using the PowerPoint begin revision with Quick Quiz 1: matching up the key terms and data types with their definitions.

d) Show slides 7 to 12 about other terms used in previous Database lessons.

e) Using the PowerPoint continue revision with Quick Quiz 2: matching up the structure terms, queries and reports with their definitions.

Practice

a) Students will fill in the Memory Map worksheet and then compare it with the slide in the PowerPoint.

Wrap-up

a) Students use the Flashcards worksheet in pairs to test their partners knowledge of the review.

Materials:

- Database Lesson 9 PowerPoint presentation
- Database Memory Map Worksheet
- Database Flashcards Worksheet

Evaluation:

Criteria for assessing quality of work

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