Waste Audit Follow Up Activity – Mathematics Year 6

Teachers' Notes

For this activity, use the Waste Audit Report Excel 2007 spreadsheet; but make sure you use the data contained on the relevant Waste Audit tab. The activity uses data handling and percentage knowledge to find the answers to relevant questions.

National Curriculum links:
Mathematics—Statistics

Pupils should be taught to:

- Interpret and construct pie charts and line graphs, and use these to solve problems.

Learning Objective:

Solve problems by collecting, selecting, processing, presenting and interpreting data, using ICT where appropriate; draw conclusions and identify further questions to ask (**End of year objective**).

Note to teacher:

Before giving the children a copy of the table 'Waste Audit' from the Excel spreadsheet, cover up the contents of line 33 which gives the answer to the first question. The second key question is quite complicated and has many steps. These are broken down below for children who need the support, but higher ability children may enjoy just being given the question to work through themselves. The answer is on the report so make sure you don't share this with the children first!

Key Question: What percentage of the total waste is currently being recycled and composted?
To solve this problem, you'll need to follow these steps:
A.   Record the following totals from the table:
1.   Total waste including landfill, recycling and composting: _____ (A1)
2.   Total recycling and composting: _____ (A2)
3.   Total landfill waste: _____ (A3)
B.   To find the percentage of recycled and composted waste, use the following calculation:
A2/A1 x 100 = _____ (B)
Key Question: What percentage of the total waste <u>could</u> have been recycled and composted?
C.   Add together all of the waste categories which <u>could</u> have been recycled and composted; include the cooked food:
_____=_____ (C)
D.   Add the recycling and composting total to the waste which <u>could</u> have been recycled or composted:
A2 + C = _____ (D)
E.   To find the percentage of your total waste that could have been recycled or composted, do the calculation:
D / A1 x 100 = _____% WOW!

Name:_____

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D / A1 x 100 = _____%   WOW!