



Paper clips – Simon and Nancy

Objectives

The relevant framework objectives are:

- identify and use appropriate operations (including combinations of operations) to solve word problems involving numbers and quantities (key objective);
- convert smaller to larger units (eg cm to m) and vice versa;
- develop calculator skills and use a calculator effectively.

Activity description

The pupils attempted a question from a past key stage 2 test paper.

Commentary

Nancy and Simon have used their calculators effectively, identifying the correct operations. Their work shows that they understand that the calculator does not give the complete answer and that this must be rounded appropriately to answer the question posed.

Nancy has correctly converted 10m into 1000cm, appreciating the need to use a common unit when calculating. She has gone beyond what is asked in the question by also calculating the amount of wire that would be left over. This work is typical of performance at level 5 in Ma2.

By identifying the necessary information from the question doing the correct rounding Nancy and Simon have demonstrated their understanding of the task. This indicates performance at level 5 in this aspect of Ma1.

Items of work

Simon uses his calculator effectively, rounding the display in order to answer the question

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Every day a machine makes 100000 paper clips which go into boxes.



A full box has 120 paper clips.

How many full boxes can be made from 100000 paper clips?

Show your method.
You may get a mark.

on calculator

$$100,000 \div 120 = 833 \frac{1}{3}$$

it says full boxes
so the answer is 833

Nancy uses her calculator effectively, rounding the display in order to answer the question

Each paper clip is made from 9.2 centimetres of wire.



What is the greatest number of paper clips that can be made from 10 metres of wire?

✎

Show your method.
You may get a mark.

$$1000 \div 9.2 = 108.69565$$

$$= 108 \text{ clips}$$

I would have 6.4 cm of wire left.



About this entry

Subject: mathematics

Year: 6

Key stage: 2

NC programme of study: Ma2p1a, Ma2p3k, Ma2p4a, Ma2p4b, Ma3p4a

Attainment target: Ma1, Ma2

Evidence for: level 5

Framework for teaching mathematics – objectives:

- Identify and use appropriate operations (including combinations of operations) to solve word problems involving numbers and quantities.